



3GPP TSG-RAN3 Meeting #46  
Scottsdale, Arizona, USA, 14th – 18th February 2005

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CR-Form-v7.1

## CHANGE REQUEST

⌘ 25.423 CR 1034 ⌘ rev 1 ⌘ Current version: 6.4.1 ⌘

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

Proposed change affects: UICC apps  ME  Radio Access Network  Core Network

<b>Title:</b>	⌘ Correction of RNSAP E-DCH IEs	
<b>Source:</b>	⌘ RAN3	
<b>Work item code:</b>	⌘ EDCH-lurlub	<b>Date:</b> ⌘ 14/02/2005
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b> ⌘ Rel-6
	Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
	<b>F</b> (correction)	Ph2 (GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)	R96 (Release 1996)
	<b>B</b> (addition of feature),	R97 (Release 1997)
	<b>C</b> (functional modification of feature)	R98 (Release 1998)
	<b>D</b> (editorial modification)	R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Rel-4 (Release 4)
		Rel-5 (Release 5)
		Rel-6 (Release 6)
		Rel-7 (Release 7)

<b>Reason for change:</b> ⌘	- alignment between RNSAP and NBAP - alignment with current RAN1 status - correction of editorials and obvious protocol errors
<b>Summary of change:</b> ⌘	- IEs <i>Signature Number for RGCH / Signature Number for HICH</i> was changed to <i>E-RGCH Signature Sequence / HICH Signature Sequence</i> to align with RAN1 terminology. - <i>UL DPDCH Indicator for E-DCH operation</i> IE removed from RADIO LINK RECONFIGURATION PREPARE / REQUEST - Introduction of Cause Value "E-DCH not supported" - Correction of Serving E-DCH RL Indication to support serving E-DCH RL change scenarios where more than one DRNSs are involved - Payload CRC Presence Indicator removed from <i>E-DCH MAC-d Flow Information</i> IE in <i>E-DCH FDD Information to Modify</i> IE. - <i>MAC-e Guaranteed Bit Rate</i> IE renamed to <i>MAC-ed Guaranteed Bit Rate</i> - Modification to highlight that unlike for HS-DSCH, not only the Serving E-DCH Radio Link may be affected when E-DCH MAC-d flows are added. - <i>MAC-d Flows To Delete</i> IE moved from <i>RL Information</i> IE to top level of RADIO LINK RECONFIGURATION PREPARE / REQUEST message. - Clarification in Radio Link Parameter Update procedure text that update parameters may be related to E-DCH as well - new <i>Serving E-DCH RL</i> IE defined, references updated in concerned messages - new IE section for <i>E-TFCS</i> , new IE defined for <i>E-TTI</i> and <i>UL DPDCH Indicator for E-DCH operation</i> IE

		<ul style="list-style-type: none"> <li>- <i>E-DCH MAC-d Flows Information</i> IE renamed to <i>RL specific E-DCH Information</i> IE, as it contains TNL specific parameters only.</li> <li>- Serving E-DCH RL added to RL RECONFIG REQUEST message</li> <li>- new <i>E-DCH MAC-d Flows Information</i> IE (IEs moved from <i>E-DCH FDD Information</i> IE for better IE structure)</li> <li>- new constant maxnoofEDCHMACdFlows to distinguish from HS-DSCH</li> <li>- correct "[FDD]" tagging for E-DCH specific changes</li> </ul>								
<b>Consequences if not approved:</b>	⌘	Incorrect specification of E-DCH functionality								
<b>Clauses affected:</b>	⌘	8.3.1, 8.3.2, 8.3.4, 8.3.5, 8.3.21, 9.1.3.1, 9.1.4.1, 9.1.5.1, 9.1.6.1, 9.1.7.1, 9.1.8.1, 9.1.11.1, 9.1.12.1, 9.1.16.1, 9.1.17.1, 9.1.41, 9.1.42, 9.2.1.5, 9.2.1.30OC, 9.2.1.30OD, 9.2.1.30OH, 9.2.1.30OE, 9.2.2.4B, 9.2.2.4C, 9.2.2.4D, 9.2.2.4F, 9.2.1.30Ox (new), 9.2.2.x1 (new), 9.2.2.x2 (new), 9.2.2.x3(new), 9.2.2.x4(new), 9.2.2.45C (new)								
<b>Other specs affected:</b>	<table border="1"> <tr> <td>Y</td> <td>N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> </table>	Y	N	X			X		X	Other core specifications ⌘ 25.433 Rel-6 Test specifications O&M Specifications
Y	N									
X										
	X									
	X									
<b>Other comments:</b>	⌘									

**How to create CRs using this form:**

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>.

Below is a brief summary:

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

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## 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 23.003: "Numbering, addressing and identification".
- [2] 3GPP TS 25.413: "UTRAN Iu Interface RANAP Signalling".
- [3] 3GPP TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Layer Signalling for DCH Data Streams".
- [4] 3GPP TS 25.427: "UTRAN Iur and Iub Interface User Plane Protocols for DCH Data Streams".
- [5] 3GPP TS 25.435: "UTRAN Iub interface User Plane Protocols for Common Transport Channel Data Streams".
- [6] 3GPP TS 25.104: "UTRA (BS) FDD; Radio transmission and Reception".
- [7] 3GPP TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception".
- [8] 3GPP TS 25.211: "Physical Channels and Mapping of Transport Channels onto Physical Channels (FDD)".
- [9] 3GPP TS 25.212: "Multiplexing and Channel Coding (FDD)".
- [10] 3GPP TS 25.214: "Physical Layer Procedures (FDD)".
- [11] 3GPP TS 25.215: "Physical Layer – Measurements (FDD)".
- [12] 3GPP TS 25.221: "Physical Channels and Mapping of Transport Channels onto Physical Channels (TDD)".
- [13] 3GPP TS 25.223: "Spreading and Modulation (TDD)".
- [14] 3GPP TS 25.225: "Physical Layer – Measurements (TDD)".
- [15] 3GPP TS 25.304: "UE Procedures in Idle Mode"
- [16] 3GPP TS 25.331: "RRC Protocol Specification".
- [17] 3GPP TS 25.402: "Synchronisation in UTRAN, Stage 2".
- [18] ITU-T Recommendation X.680 (07/2002): "Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".
- [19] ITU-T Recommendation X.681 (07/2002): "Information technology - Abstract Syntax Notation One (ASN.1): Information object specification".
- [20] ITU-T Recommendation X.691 (07/2002): "Information technology - ASN.1 encoding rules - Specification of Packed Encoding Rules (PER)".
- [21] 3GPP TS 25.213: "Spreading and modulation (FDD)".

- [22] 3GPP TS 25.224: "Physical Layer Procedures (TDD)".
- [23] 3GPP TS 25.133: "Requirements for support of Radio Resource management (FDD)".
- [24] 3GPP TS 25.123: "Requirements for support of Radio Resource management (TDD)".
- [25] 3GPP TS 23.032: "Universal Graphical Area Description (GAD)".
- [26] 3GPP TS 25.302: "Services Provided by the Physical Layer".
- [27] 3GPP TS 25.213: "Spreading and modulation (FDD)".
- [28] 3GPP TR 25.921: "Guidelines and Principles for Protocol Description and Error Handling".
- [29] GSM TS 05.05: "Digital cellular telecommunications system (Phase 2+); Radio transmission and reception".
- [30] ICD-GPS-200: "Navstar GPS Space Segment/Navigation User Interface".
- [31] RTCM-SC104: "RTCM Recommended Standards for Differential GNSS Service (v.2.2)".
- [32] 3GPP TS 25.425: "UTRAN Iur and Iub Interface User Plane Protocols for Common Transport Channel data streams".
- [33] IETF RFC 2460 "Internet Protocol, Version 6 (IPv6) Specification".
- [34] IETF RFC 768 "User Datagram Protocol", (8/1980)
- [35] 3GPP TS 25.424: "UTRAN Iur Interface Data Transport & Transport Signalling for Common Transport Channel Data Streams".
- [36] 3GPP TS 44.118: "Mobile radio interface layer 3 specification; Radio Resource Control (RRC) Protocol Iu mode".
- [37] 3GPP TR 43.930: "Iur-g interface; Stage 2".
- [38] 3GPP TS 48.008: "Mobile-services Switching Centre - Base Station System (MSC - BSS) interface; Layer 3 specification".
- [39] 3GPP TS 43.051: "GSM/EGDE Radio Access Network; Overall description - Stage 2".
- [40] 3GPP TS 25.401: "UTRAN Overall Description".
- [41] 3GPP TS 25.321: "MAC protocol specification".
- [42] 3GPP TS 25.306: "UE Radio Access capabilities".
- [43] 3GPP TS 25.101: "User Equipment (UE) radio transmission and reception (FDD)".
- [44] IETF RFC 2474 "Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers".
- [45] IETF RFC 2475 "An Architecture for Differentiated Services".
- [46] 3GPP TS 25.222: "Multiplexing and Channel Coding (TDD)".
- [47] 3GPP TS 44.060: "General Packet Radio Service (GPRS); Mobile Station (MS) - Base Station System (BSS) interface; Radio Link Control/Medium Access Control (RLC/MAC) protocol".
- [48] 3GPP TS 32.421: "Subscriber and equipment trace: Trace concepts and requirements".
- [49] 3GPP TS 32.422: "Subscriber and equipment trace: Trace control and Configuration Management".
- [50] 3GPP TS 25.346: "Introduction of the Multimedia Broadcast Multicast Service (MBMS) in the Radio Access Network (Stage-2)".
- [51] 3GPP TS 23.246: "Multimedia Broadcast Multicast Service; Architecture and Functional Description".

[52] 3GPP TS 25.309: "FDD Enhanced Uplink; Overall description; Stage 2".3Definitions, Symbols and Abbreviations

## 8.3 Dedicated Procedures

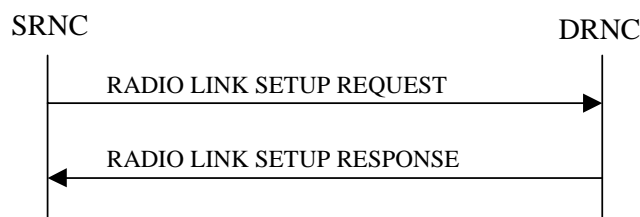
### 8.3.1 Radio Link Setup

#### 8.3.1.1 General

This procedure is used for establishing the necessary resources in the DRNS for one or more radio links.

The connection-oriented service of the signalling bearer shall be established in conjunction with this procedure.

#### 8.3.1.2 Successful Operation



**Figure 5: Radio Link Setup procedure: Successful Operation**

When the SRNC makes an algorithmic decision to add the first cell or set of cells from a DRNS to the active set of a specific UE-UTRAN connection, the RADIO LINK SETUP REQUEST message is sent to the corresponding DRNC to request establishment of the radio link(s). The Radio Link Setup procedure is initiated with this RADIO LINK SETUP REQUEST message sent from the SRNC to the DRNC.

Upon receipt of the RADIO LINK SETUP REQUEST message, the DRNS shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

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

If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request for a time period not to exceed the value of the *Allowed Queuing Time* IE before starting to execute the request.

#### Transport Channels Handling:

##### DCH(s):

[TDD - If the *DCH Information* IE is present in the RADIO LINK SETUP REQUEST message, the DRNS shall configure the new DCHs according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, then the DRNS shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs.

If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.

[TDD - If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]

[FDD - For each DCH which do not belong to a set of co-ordinated DCHs, and which includes a *QE-Selector* IE set to "selected", the DRNS shall use the Transport channel BER from that DCH for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical

channel BER for the QE, ref. [4]. If the *QE-Selector* IE is set to "non-selected", the DRNS shall use the Physical channel BER for the QE in the UL data frames, ref. [4].]

For a set of co-ordinated DCHs, the DRNS shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" for the QE in the UL data frames, ref. [4]. [FDD - If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, ref. [4]. If all DCHs have *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the QE, ref. [4].] [TDD - If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, ref. [4].]

The DRNS shall use the included *UL DCH FP Mode* IE for a DCH or a set of co-ordinated DCHs as the DCH FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs.

The DRNS shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs as the Time of Arrival Window Startpoint in the user plane for the DCH or the set of co-ordinated DCHs.

The DRNS shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs as the Time of Arrival Window Endpoint in the user plane for the DCH or the set of co-ordinated DCHs.

The *Frame Handling Priority* IE defines the priority level that should be used by the DRNS to prioritise between different frames of the data frames of the DCHs in the downlink on the radio interface in congestion situations once the new RL(s) have been activated.

The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE indicates the value "RRC".

If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related DCH or set of co-ordinated DCHs.

If the *DCH Information* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:

- If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the Guaranteed Rate in the uplink of this DCH. The DRNS may decide to request the SRNC to limit the user rate of the uplink of the DCH at any point in time. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to only reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCH Information* IE does not include the *Guaranteed UL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.
- If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the Guaranteed Rate in the downlink of this DCH. The DRNS may decide to request the SRNC to limit the user rate of the downlink of the DCH at any point in time. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to only reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCH Information* IE does not include the *Guaranteed DL Rate* IE, the DRNS shall not limit the user rate of the downlink of the DCH.

#### **DSCH(s):**

If the *DSCH Information* IE is included in the RADIO LINK SETUP REQUEST message, the DRNC shall establish the requested DSCHs [FDD - on the RL indicated by the PDSCH RL ID IE]. If the *Transport Layer Address* IE and *Binding ID* IE are included in the *DSCH Information* IE the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the DSCH. In addition, the DRNC shall send a valid set of *DSCH Scheduling Priority* IE and *MAC-c/sh SDU Length* IE parameters to the SRNC in the RADIO LINK SETUP RESPONSE message. If the *PDSCH RL ID* IE indicates a radio link in the DRNS, then the DRNC shall allocate a DSCH-RNTI to the UE Context and include the *DSCH-RNTI* IE in the RADIO LINK SETUP RESPONSE message.

If the *DSCH Information* IE is included in the RADIO LINK SETUP REQUEST message, the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related DSCHs.

The DRNC shall include the *DSCH Initial Window Size* IE in the RADIO LINK SETUP RESPONSE message for each DSCH, if the DRNS allows the SRNC to start transmission of MAC-c/sh SDUs before the DRNS has allocated capacity on user plane as described in [32].

**[TDD - USCH(s)]:**

[TDD - The DRNS shall use the list of RB Identities in the *RB Info* IE in the *USCH information* IE to map each *RB Identity* IE to the corresponding USCH. If the *Transport Layer Address* IE and *Binding ID* IE are included in the *USCH Information* IE the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the USCH.]

[TDD - If the *USCH Information* IE is included in the RADIO LINK SETUP REQUEST message, the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related USCHs.]

[TDD - If the *USCH Information* IE is included in the RADIO LINK SETUP REQUEST message and contains the *TNL QoS* IE, and if ALCAP is not used, the DRNS may use the *TNL QoS* IE to determine the transport bearer characteristics to apply in the uplink for the related USCH.]

[TDD - If the *USCH Information* IE is included in the RADIO LINK SETUP REQUEST message, the DRNS shall establish the requested USCHs, and the DRNC shall provide the [3.84 Mcps TDD - *USCH Information Response* IE] [1.28 Mcps TDD - *USCH Information Response LCR* IE] in the RADIO LINK SETUP RESPONSE message.]

**[TDD - CCTrCH Handling]:**

[TDD - If the *UL CCTrCH Information* IE is present in the RADIO LINK SETUP REQUEST message, the DRNS shall configure the new UL CCTrCH(s) according to the parameters given in the message.]

[1.28Mcps TDD - If the *UL CCTrCH Information LCR* IE includes the *TDD TPC Uplink Step Size* IE, the DRNS shall configure the uplink TPC step size according to the parameters given in the message.]

[TDD - If the *DL CCTrCH Information* IE is present in the RADIO LINK SETUP REQUEST message, the DRNS shall configure the new DL CCTrCH(s) according to the parameters given in the message.]

[TDD - If the *TPC CCTrCH List* IE is present in the RADIO LINK SETUP REQUEST message, the DRNS shall configure the identified UL CCTrCHs with TPC according to the parameters given in the message.]

**HS-DSCH:**

If the *HS-DSCH Information* IE is present in the RADIO LINK SETUP REQUEST message, then:

- The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The DRNC shall include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message.
- The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK SETUP RESPONSE message.
- The DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every HS-DSCH MAC-d flow being established.
- If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *HS-DSCH Information* IE for an HS-DSCH MAC-d flow, then the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow.
- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the RADIO LINK SETUP REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then



the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.

- If the RADIO LINK SETUP REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message for every HS-DSCH MAC-d flow being established, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in [32].
- [FDD - If the RADIO LINK SETUP REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD - The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD - The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [TDD - The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD - *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [TDD - The DRNC shall include the [3.84 Mcps TDD - *HS-PDSCH Timeslot Specific Information* IE] [1.28 Mcps TDD - *HS-PDSCH Timeslot Specific Information LCR* IE] in the *HS-DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD - The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD – If the RADIO LINK SETUP REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated HARQ Preamble Mode as described in [10].]

#### **[FDD - E-DCH:]**

**[FDD -** If the *E-DCH FDD Information* IE is present in the RADIO LINK SETUP REQUEST message and the *RL Information* IE contains the *RL specific E-DCH Information* IE for one Radio Link then:

- The DRNS shall setup the requested E-DCH resources on the Radio Link indicated by the *RL ID* IE in the *RL Information* IE.
- The RADIO LINK SETUP REQUEST message shall contain in the *RL Information* IE for every RL the *E-DCH RL Indication* IE indicates whether this RL has configured E-DCH resources.
- If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *RL specific E-DCH Information* IE for an E-DCH MAC-d flow, then the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.
- The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the RADIO LINK SETUP REQUEST message includes the *MAC-e<sub>s</sub> Guaranteed Bit Rate* IE for a E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the *E-DCH FDD Information* IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK SETUP REQUEST message includes the *Maximum Number of Retransmissions for E-DCH* IE for a E-DCH MAC-d flow in the *E-DCH MAC-d Flow Specific Information* IE in the

*E-DCH FDD Information* IE, then the DRNS shall use this information to report if the maximum number of retransmissions has elapsed.

- If the *TNL QoS* IE is included for a E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.
- The DRNC shall include the *E-AGCH* and *E-RGCH* and *E-HICH FDD Scrambling Code* IE and the *E-RGCH* and *E-HICH Channelisation Code* IE and the corresponding ~~Sequence Number for E-RGCH~~ *Signature Sequence* IE and the ~~Sequence Number for E-HICH~~ *Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK SETUP RESPONSE message.
- If the RADIO LINK SETUP REQUEST message contains the *Serving E-DCH RL-ID* IE then the DRNC shall allocate an E-RNTI and include this E-RNTI and the Channelisation Code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *RL Information* IE for the indicated RL in the RADIO LINK SETUP RESPONSE message.]

### Physical Channels Handling:

#### [FDD - Compressed Mode]:

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

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

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

[FDD - If the *Downlink Compressed Mode Method* IE in one or more Transmission Gap Pattern Sequence is set to "SF/2" in the RADIO LINK SETUP REQUEST message, the DRNS shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK SETUP RESPONSE message indicating for each DL Channelisation Code whether the alternative scrambling code shall be used or not.]

#### [FDD - DL Code Information]:

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

#### [FDD – Phase Reference Handling]:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *UE Support Of Dedicated Pilots For Channel Estimation* IE, the DRNC shall assume that dedicated pilots may be used for channel estimation for DCH or DSCH.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *UE Support Of Dedicated Pilots For Channel Estimation Of HS-DSCH* IE, the DRNC shall assume that dedicated pilots may be used for channel estimation for HS-DSCH.]

[FDD – If Primary CPICH is not to be used as a Phase Reference for this Radio Link, the DRNC shall include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the RADIO LINK SETUP RESPONSE message.]

[FDD – If Secondary CPICH may be used as a Phase Reference for this Radio Link, the DRNC shall include the *Secondary CPICH Information* IE in the RADIO LINK SETUP RESPONSE message.]

#### **General:**

[FDD - If the *Propagation Delay* IE is included, the DRNS may use this information to speed up the detection of UL synchronisation on the Uu interface.]

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

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

[FDD - If the RADIO LINK SETUP REQUEST message includes *Split Type* IE, then the DRNS shall apply this information to the new configuration of TFCI.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Length of TFCI2* IE, the DRNS shall apply this information to the length of TFCI(field 2).]

[TDD - If the RADIO LINK SETUP REQUEST message includes the *Maximum Number of DL Physical Channels per Timeslot* IE the DRNC shall take this value into account when allocating physical resources, otherwise the DRNC can assume that this UE capability is consistent with the other signalled UE capabilities.]

[1.28Mcps TDD - If the RADIO LINK SETUP REQUEST message includes the *Support for 8PSK* IE within the *DL Physical Channel Information* IE or *UL Physical Channel Information* IE, the DRNC shall take this into account in the specified direction when allocating physical resources, otherwise the DRNC can assume that this UE does not support 8PSK resource allocation.]

#### **[FDD - E-DPCH Handling:]**

~~[FDD - If the *E-DPCH Information* IE is included, the *UL DPDCH Indicator for E-DCH operation* IE in the *UL DPCH Information* shall be present as well.~~ If the *UL DPDCH Indicator for E-DCH operation* IE is included in the *UL DPCH Information* IE and set to "UL-DPDCH not present" the *Min UL Channelisation Code Length* IE, the *Puncture Limit* IE and the *TFCI* IE, within the *UL DPCH Information* IE shall be ignored.]

#### **Radio Link Handling:**

##### **Diversity Combination Control:**

[FDD - The *Diversity Control Field* IE indicates for each RL except for the first RL whether the DRNS shall combine the RL with any of the other RLs or not.

- If the *Diversity Control Field* IE is set to "May" (be combined with another RL), the DRNS shall decide for any of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the DRNS shall combine the RL with one of the other RL.
- If the *Diversity Control Field* IE is set to "Must not", the DRNS shall not combine the RL with any other existing RL.

When an RL is to be combined, the DRNS shall choose which RL(s) to combine it with.]

[FDD - The *Diversity Control Field* IE is only applicable for DCHs, in case of E-DCH it shall always be assumed to be set to "May".]

[FDD - In the RADIO LINK SETUP RESPONSE message, the DRNC shall indicate for each RL with the Diversity Indication in the *RL Information Response* IE whether the RL is combined or not.]

- [FDD - In case of not combining with a RL previously listed in the RADIO LINK SETUP RESPONSE message or for the first RL in the RADIO LINK SETUP RESPONSE message, the DRNC shall
  - in case of requested DCHs, include in the *DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.
  - in case of a requested E-DCH, include in the ~~E-DCH FDD Information Response~~ *E-DCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and the *Transport Layer Address* IE for the establishment of transport bearers for every E-DCH MAC-d flow being established.]
- [FDD - Otherwise in case of combining, the *RL ID* IE indicates (one of) the RL(s) previously listed in this RADIO LINK SETUP RESPONSE message with which the concerned RL is combined.]

[TDD - The DRNC shall always include in the RADIO LINK SETUP RESPONSE message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH, DSCH and USCH of the RL.]

In the case of a set of co-ordinated DCHs requiring a new transport bearer the *Binding ID* IE and the *Transport Layer Address* IE shall be included in the RADIO LINK SETUP RESPONSE message for only one of the DCHs in the set of co-ordinated DCHs.

#### [FDD - Transmit Diversity]:

[FDD - If the cell in which the RL is being set up is capable to provide Close loop Tx diversity, the DRNC shall include the *Closed Loop Timing Adjustment Mode* IE in the RADIO LINK SETUP RESPONSE message indicating the configured Closed loop timing adjustment mode of the cell.]

[FDD - When the *Diversity Mode* IE is set to "STTD", "Closed loop mode1", or "Closed loop mode2", the DRNC shall activate/deactivate the Transmit Diversity for each Radio Link in accordance with the *Transmit Diversity Indicator* IE].

#### DL Power Control:

[FDD - If both the *Initial DL TX Power* IE and *Uplink SIR Target* IE are included in the message, the DRNS shall use the indicated DL TX Power and Uplink SIR Target as initial value. If the value of the *Initial DL TX Power* IE is outside the configured DL TX power range, the DRNS shall apply these constrains when setting the initial DL TX power. The DRNS shall also include the configured DL TX power range defined by *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK SETUP RESPONSE message. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH of the RL except during compressed mode, when the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[FDD - If both the *Initial DL TX Power* and the *Uplink SIR Target* IEs are not included in the RADIO LINK SETUP REQUEST message, then DRNC shall determine the initial Uplink SIR Target and include it in the *Uplink SIR Target* IE in the RADIO LINK SETUP RESPONSE message.]

[TDD - The DRNC shall use the *Uplink SIR Target CCTrCH* IEs in the RADIO LINK SETUP RESPONSE message to indicate for any UL CCTrCH an Uplink SIR Target value in case this is deviating from the value included in the *Uplink SIR Target* IE specified for the Radio Link. If in any [3.84Mcps TDD - *UL CCTrCH Information* IE] [1.28Mcps TDD - *UL CCTrCH Information LCR* IE] the *Uplink SIR Target CCTrCH* IE is not included, the value of the *Uplink SIR Target* IE shall apply to the respective UL CCTrCH.]

[FDD - If the *Primary CPICH Ec/No* IE is present, the DRNC should use the indicated value when deciding the Initial DL TX Power. If the *Enhanced Primary CPICH Ec/No* IE is present, the DRNC should use the indicated value when deciding the Initial DL Tx Power.]

[TDD - If [3.84Mcps TDD - the *DL Time Slot ISCP Info* IE] [1.28Mcps TDD - the *DL Time Slot ISCP Info LCR* IE] is present, the DRNS should use the indicated value when deciding the Initial DL TX Power for the Radio Link. The DRNS shall use the indicated DL Timeslot ISCP when determining the initial DL power per timeslot as specified in [22], i.e. it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged.]

[TDD - If the *Primary CCPCH RSCP Delta* IE is included, the DRNS should assume that the reported value for Primary CCPCH RSCP is in the negative range as per [24], and the value is equal to the *Primary CCPCH RSCP Delta* IE. If the *Primary CCPCH RSCP Delta* IE is not included and the *Primary CCPCH RSCP* IE is included, the DRNS should assume that the reported value is in the non-negative range as per [24], and the value is equal to the *Primary CCPCH RSCP* IE. The DRNS should use the indicated value when deciding the Initial DL TX Power for the Radio Link.]

[3.84 Mcps TDD - The DL TX power upper and lower limit is configured in the following way: The DRNC shall include the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK SETUP RESPONSE message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power* IE and *CCTrCH Minimum DL TX Power* IE. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE/*CCTrCH Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE/*CCTrCH Minimum DL TX Power* IE on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD - The DL TX power upper and lower limit is configured in the following way: The DRNC shall include the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE in the RADIO LINK SETUP RESPONSE message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the value(s) for that timeslot in the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE within the *DL Timeslot Information LCR* IE. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power* IE or lower than indicated by the appropriate *Minimum DL TX Power* IE on any DL DPCH within each timeslot of the RL.]

[1.28McpsTDD - If the *TSTD Support Indicator* IE is present, the DRNS shall apply this information when configuring the transmit diversity for the new radio link.]

[FDD - The DRNS shall start any DL transmission using the indicated DL TX power level (if received) or the decided DL TX power level on each DL channelisation code of a RL until UL synchronisation is achieved on the Uu interface for the concerned RLS or Power Balancing is activated. No inner loop power control or power balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10] subclause 5.2.1.2) and the power control procedure (see 8.3.15).]

[TDD - The DRNS shall start any DL transmission using the decided DL TX power level on each DL channelisation code and on each Time Slot of a RL until UL synchronisation is achieved on the Uu interface for the concerned RL. No inner loop power control shall be performed during this period. Then after UL synchronisation, the DL power shall vary according to the inner loop power control (see ref. [22] subclause 4.2.3.3).]

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

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *DL Power Balancing Information* IE and the *Power Adjustment Type* IE is set to "Common" or "Individual", the DRNS shall activate the power balancing, if activation of power balancing by the RADIO LINK SETUP REQUEST message is supported, according to subclause 8.3.15, using the *DL Power Balancing Information* IE. If the DRNS starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing i.e.  $P_{init}$  shall be set to the power level indicated by the *Initial DL TX Power* IE (if received) or the decided DL TX power level on each DL channelisation code of a RL based on the *Primary CPICH Ec/No* IE or the *Enhanced Primary CPICH Ec/No* IE.]

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

#### Neighbouring Cell Handling:

If there are UMTS neighbouring cell(s) to the cell in which a Radio Link was established then:

- The DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Neighbouring FDD Cell Information* IE and/or *Neighbouring TDD Cell Information* IE in the *Neighbouring UMTS Cell Information* IE for each neighbouring FDD cell and/or TDD cell respectively. In addition, if the information is available, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Frame Offset* IE, *Primary CPICH Power* IE, *Cell Individual Offset* IE, *STTD Support Indicator* IE, *Closed Loop Mode1 Support Indicator* IE, *Closed Loop Mode2 Support Indicator* IE, *Coverage Indicator* IE, *Antenna Co-location Indicator* IE and *HCS Prio* IE in the *Neighbouring FDD Cell Information* IE, and the *Frame Offset* IE, *Cell Individual Offset* IE, *DPCH Constant Value* IE, the *PCCPCH Power* IE, *Coverage Indicator* IE, *Antenna Co-location Indicator* IE and *HCS Prio* IE in the *Neighbouring TDD Cell Information* IE or the *Neighbouring TDD Cell Information LCR* IE. If the *Neighbouring TDD Cell Information* IE includes the *Sync Case* IE for the set to "Case1", the DRNC shall include the *Time Slot For SCH* IE in the *Neighbouring TDD Cell Information* IE. If the *Neighbouring TDD Cell Information* IE includes *Sync Case* IE set to "Case2", the DRNC shall include the *SCH Time Slot* IE in the *Neighbouring TDD Cell Information* IE.
- If a UMTS neighbouring cell is not controlled by the same DRNC, the DRNC shall also include in the RADIO LINK SETUP RESPONSE message the *CN PS Domain Identifier* IE and/or *CN CS Domain Identifier* IE which are the identifiers of the CN nodes connected to the RNC controlling the UMTS neighbouring cell.
- If the information is available, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *DPC Mode Change Support Indicator* IE for each neighbour cell in the *Neighbouring FDD Cell Information* IE
- The DRNC shall include the *Cell Capability Container FDD* IE, the *Cell Capability Container TDD* IE and/or the *Cell Capability Container TDD LCR* IE if the DRNC is aware that the neighbouring cell supports any functionality listed in 9.2.2.D, 9.2.3.1a and 9.2.3.1b.
- For the UMTS neighbouring cells which are controlled by the DRNC, the DRNC shall report in the RADIO LINK SETUP RESPONSE message the restriction state of those cells, otherwise the *Restriction StateIndicator* IE may be absent. The DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Restriction StateIndicator* IE for the neighbouring cells which are controlled by the DRNC in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.
- If available, the DRNC shall include the *SNA Information* IE for the concerned neighbouring cells in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.

If there are GSM neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Neighbouring GSM Cell Information* IE for each of the GSM neighbouring cells. If available the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Cell Individual Offset* IE, and if the *Cell Individual Offset* IE alone cannot represent the value of the offset, the DRNC shall also include the *Extended GSM Cell Individual Offset* IE in the *Neighbouring GSM Cell Information* IE. If available the DRNC shall also include in the RADIO LINK SETUP RESPONSE message the *Coverage Indicator* IE, *Antenna Co-location Indicator* IE and *HCS Prio* IE in the *Neighbouring GSM Cell Information* IE. If available, the DRNC shall also include the *SNA Information* IE for the concerned neighbouring cells in the *Neighbouring GSM Cell Information* IE.

When receiving the *SNA Information* IE in the RADIO LINK SETUP RESPONSE message, the SRNC should use it to restrict cell access based on SNA information. See also [40] for a broader description of the SNA access control.

If there are GERAN neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include the *GERAN Cell Capability* IE in the *Neighbouring GSM Cell Information* IE that is included in the RADIO LINK SETUP RESPONSE message for each of the GERAN cells.



If there are GERAN Iu-mode neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include, if available, the *GERAN Classmark* IE in the *Neighbouring GSM Cell Information* IE that is included in the RADIO LINK SETUP RESPONSE message for each of the GERAN Iu-mode neighbouring cells. Ref. [39] defines when the transmission of the *GERAN Classmark* IE will be required at the initiation of the Relocation Preparation procedure.

**[1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:**

[If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC shall use the indicated values of *Uplink synchronisation stepsize* IE and *Uplink synchronisation frequency* IE when evaluating the timing of the UL synchronisation.]

**[1.28Mcps TDD - Uplink Timing Advance Control LCR]:**

[1.28Mcps TDD - The DRNC shall include the *Uplink Timing Advance Control LCR* IE in the RADIO LINK SETUP RESPONSE message.]

**MBMS Handling:**

If the *MBMS Bearer Service List* IE is included in the RADIO LINK SETUP REQUEST message, the DRNC shall perform the UE Linking as specified in [50], section 5.1.6.

**General:**

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

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Qth Parameter* IE in addition to the *SSDT Cell Identity* IE, the DRNS shall use the *Qth Parameter* IE, if Qth signalling is supported, when SSDT is activated in the concerned new RL.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *SSDT Cell Identity for EDSCHPC* IE, the DRNS shall activate enhanced DSCH power control, if supported, using the *SSDT Cell Identity for EDSCHPC* IE and *SSDT Cell Identity Length* IE as well as *Enhanced DSCH PC* IE in accordance with ref. [10] subclause 5.2.2. If the RADIO LINK SETUP REQUEST message includes both *SSDT Cell Identity* IE and *SSDT Cell Identity for EDSCHPC* IE, then the DRNS shall ignore the *SSDT Cell Identity for EDSCHPC* IE. If the enhanced DSCH power control is activated and the *TFCI PC Support Indicator* IE is set to "TFCI PC Mode 2 Supported", the primary/secondary status determination in the enhanced DSCH power control shall be applied to the TFCI power control in DSCH hard split mode.]

[FDD - If the *DRAC Control* IE is set to "requested" in the RADIO LINK SETUP REQUEST message for at least one DCH and if the DRNS supports the DRAC, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Secondary CCPCH Info* IE for the FACH in which the DRAC information is sent, for each Radio Link established in a cell where DRAC is active. If the DRNS does not support DRAC, the DRNC shall not provide these IEs in the RADIO LINK SETUP RESPONSE message.]

If no *D-RNTI* IE was included in the RADIO LINK SETUP REQUEST message, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *D-RNTI* IE, the *CN PS Domain Identifier* IE and/or the *CN CS Domain Identifier* IE for the CN domains (using LAC and RAC of the current cell) to which the DRNC is connected.

[FDD - If the *D-RNTI* IE was included in the RADIO LINK SETUP REQUEST message the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Primary Scrambling Code* IE, the *UL UARFCN* IE and the *DL UARFCN* IE.]

[TDD - If the *D-RNTI* IE was included in the RADIO LINK SETUP REQUEST message the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *UARFCN* IE, the *Cell Parameter ID* IE and the *SCTD Indicator* IE.]

[3.84Mcps TDD - If the *D-RNTI* IE was included in the RADIO LINK SETUP REQUEST message the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Sync Case* IE and if the *Sync Case* IE is set to "Case 2", the DRNC shall also include the *SCH Time Slot* IE in the RADIO LINK SETUP RESPONSE message. If the included *Sync Case* IE is set to "Case1", the DRNC shall also include the *Time Slot For SCH* IE.]

[3.84Mcps TDD - The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK SETUP RESPONSE message if at least one *DSCH Information Response* IE or *USCH Information Response* IE is included in the message and at least one DCH is configured for the radio link. The DRNC shall also include the *Secondary CCPCH Info TDD* IE in the RADIO LINK SETUP RESPONSE message if at least one *DSCH Information Response* IE or *USCH Information Response* IE is included in the message and the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[1.28 Mcps TDD - The DRNC shall include the *Secondary CCPCH Info TDD LCR* IE in the RADIO LINK SETUP RESPONSE message if at least one *DSCH Information Response LCR* IE or *USCH Information Response LCR* IE is included in the message and at least one DCH is configured for the radio link. The DRNC shall also include the *Secondary CCPCH Info TDD LCR* IE in the RADIO LINK SETUP RESPONSE message if at least one *DSCH Information Response LCR* IE or *USCH Information Response LCR* IE is included in the message and the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

For each Radio Link established in a cell in which at least one URA Identity is being broadcast, the DRNC shall include in the *URA Information* IE within the RADIO LINK SETUP RESPONSE message URA Information for this cell including the *URA ID* IE, the *Multiple URAs Indicator* IE indicating whether or not multiple URA Identities are being broadcast in the cell, and the *RNC-ID* IEs of all other RNCs that have at least one cell within the URA identified by the *URA ID* IE.

Depending on local configuration in the DRNS, the DRNC may include in the RADIO LINK SETUP RESPONSE message the *UTRAN Access Point Position* IE and the geographical co-ordinates of the cell, represented either by the *Cell GAI* IE or by the *Cell GA Additional Shapes* IE. If the DRNC includes the *Cell GA Additional Shapes* IE in the RADIO LINK SETUP RESPONSE message, it shall also include the *Cell GAI* IE.

If the DRNS need to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) when starting to utilise a new Radio Link, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

If the DRNS need to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) when starting to utilise a new Radio Link, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

If the *Permanent NAS UE Identity* IE is included in the RADIO LINK SETUP REQUEST message, the DRNS shall store the information for the considered UE Context for the life-time of the UE Context.

If the RADIO LINK SETUP REQUEST message includes the *Permanent NAS UE Identity* IE and a *C-ID* IE corresponding to a cell reserved for operator use, the DRNS shall use this information to determine whether it can set up a Radio Link on this cell or not for the considered UE Context.

If the HCS priority information is available in the DRNS, it shall include the *HCS Prio* IE for each of the established RLs in the RADIO LINK SETUP RESPONSE message.

[FDD - If the accessed cell supports TFCI power control, the DRNC shall include the *TFCI PC Support Indicator* IE in the RADIO LINK SETUP RESPONSE message.]

The DRNS shall start receiving on the new RL(s) after the RLs are successfully established.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Cell Portion ID* IE, the DRNS shall use this information when it decides to use beamforming for the new RL.]



**[FDD - Radio Link Set Handling]:**

[FDD - The *First RLS Indicator* IE indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The DRNS shall use the *First RLS Indicator* IE to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.

[FDD - For each RL not having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign to the RL a unique value for the *RL Set ID* IE which uniquely identifies the RL as an RL Set within the UE Context.]

[FDD - For all RLs having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign to each RL the same value for the *RL Set ID* IE which uniquely identifies these RLs as members of the same RL Set within the UE Context.]

[FDD -The UL out-of-sync algorithm defined in ref. [10] shall, for each of the established RL Set(s), use the maximum value of the parameters *N\_OUTSYNC\_IND* and *T\_RLFFAILURE* that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters *N\_INSYNC\_IND* that are configured in the cells supporting the radio links of the RL Set.]

[FDD - For all RLs having a common generation of E-RGCH and E-HICH related information with another RL, the DRNS shall assign to each RL the same value for the *E-DCH RL Set ID* IE which uniquely identifies these RLs as members of the same E-DCH RL Set within the UE Context.]

**Response Message:**

Upon receipt of the RADIO LINK SETUP REQUEST message, the DRNS allocates the requested type of channelisation codes and other physical channel resources for each RL and assigns a binding identifier and a transport layer address for each DCH, for each set of co-ordinated DCHs and for each DSCH [TDD - and USCH]. This information shall be sent to the SRNC in the RADIO LINK SETUP RESPONSE message when all the RLs have been successfully established.

After sending the RADIO LINK SETUP RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation on the Uu interface and start reception on the new RL.

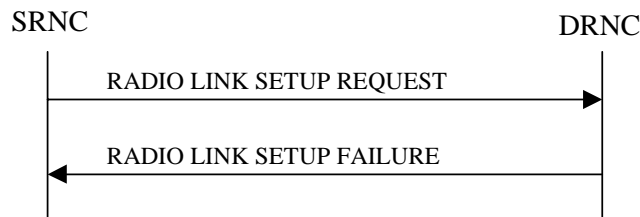
For each RL for which the *Delayed Activation* IE is not included in the RADIO LINK SETUP REQUEST message the DRNS shall:

- [FDD - start transmission on the DL DPDCH(s) of the new RL as specified in ref. [4].]
- [TDD - start transmission on the new RL immediately as specified in ref. [4].]

For each RL for which the *Delayed Activation* IE is included in the RADIO LINK SETUP REQUEST message, the DRNS shall:

- if the *Delayed Activation* IE indicates "Separate Indication":
  - not start any DL transmission for the concerned RL on the Uu interface;
- if the *Delayed Activation* IE indicates "CFN":
  - [FDD - start transmission on the DL DPDCH(s) of the new RL as specified in ref. [4], however never before the CFN indicated in the *Activation CFN* IE.]
  - [TDD - start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in ref. [4].]

### 8.3.1.3 Unsuccessful Operation



**Figure 6: Radio Link Setup procedure: Unsuccessful Operation**

If the establishment of at least one radio link is unsuccessful, the DRNC shall respond with a RADIO LINK SETUP FAILURE message. The DRNC shall include in the RADIO LINK SETUP FAILURE message a general *Cause IE* or a *Cause IE* for each failed radio link. The *Cause IE* indicates the reason for failure.

[FDD - If some radio links were established successfully, the DRNC shall indicate this in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message.]

[FDD - If the RL identified by the *PDSCH RL ID IE* is a radio link in the DRNS and this RL is successfully established, then the DRNC shall allocate a DSCH-RNTI to the UE Context and include the *DSCH-RNTI IE* in the RADIO LINK SETUP FAILURE message.]

If the RADIO LINK SETUP REQUEST message includes a *C-ID IE* corresponding to a cell reserved for operator use and the *Permanent NAS UE Identity IE* is not present, the DRNC shall reject the procedure and send the RADIO LINK SETUP FAILURE message.

[FDD - If the accessed cell supports TFCI power control, the DRNC shall include the *TFCI PC Support Indicator IE* in the RADIO LINK SETUP FAILURE message.]

[FDD - If the RL identified by the *HS-PDSCH RL ID IE* is a radio link in the DRNS and this RL is successfully established, then the DRNC shall allocate a HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI IE* and the *HS-DSCH FDD Information Response IE* in the RADIO LINK SETUP FAILURE message.]

Typical cause values are:

#### Radio Network Layer Causes:

- [FDD - UL Scrambling Code Already in Use];
- DL Radio Resources not Available;
- UL Radio Resources not Available;
- [FDD - Combining Resources not available];
- Combining not Supported
- Requested Configuration not Supported;
- Cell not Available;
- [FDD - Requested Tx Diversity Mode not Supported];
- Power Level not Supported;
- Number of DL codes not supported;
- Number of UL codes not supported;
- Dedicated Transport Channel Type not Supported;
- DL Shared Channel Type not Supported;
- [TDD - UL Shared Channel Type not Supported];

- [FDD - UL Spreading Factor not Supported];
- [FDD - DL Spreading Factor not Supported];
- CM not Supported;
- [FDD - DPC mode change not Supported];
- Cell reserved for operator use;
- Delayed Activation not supported;
- [FDD - HARQ Preamble Mode not supported];
- [FDD – E-DCH not supported].

#### Transport Layer Causes:

- Transport Resource Unavailable.

#### Miscellaneous Causes:

- Control Processing Overload;
- HW Failure;
- Not enough User Plane Processing Resources.

### 8.3.1.4 Abnormal Conditions

If the DRNC receives either an S-RNTI or a D-RNTI which already has RL(s) established the DRNC shall send the RADIO LINK SETUP FAILURE message to the SRNC, indicating the reason for failure.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Active Pattern Sequence Information* IE, but the *Transmission Gap Pattern Sequence Information* IE is not present, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes both the *Initial DL TX Power* IE and the *Primary CPICH Ec/No* IE or does not include either of these IEs, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD - or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"] the DRNC shall reject the Radio Link Setup procedure and shall respond with a RADIO LINK SETUP FAILURE message.

[FDD - If only the *Initial DL TX Power* IE or the *Uplink SIR Target* IE is included in the RADIO LINK SETUP REQUEST message, then DRNC shall reject the Radio Link Setup procedure and shall respond with the RADIO LINK SETUP FAILURE message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCH Information* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Enhanced Primary CPICH Ec/No* IE, but not the *Primary CPICH Ec/No* IE, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message does not include the *Split Type* IE but includes *TFCI Signalling Mode* IE set to "Split", then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message does not include the *Length of TFCI2* IE but the *Split type* IE is set to "Logical", then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Split Type* IE set to the value "Hard" and the *Length Of TFCI2* IE set to the value "1", "2", "5", "8", "9" or "10", then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message does not include the *Split Type* IE but includes the *Length of TFCI2* IE, then the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE included in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "Must", the DRNC shall reject the Radio Link Setup procedure and the DRNC shall respond with the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport bearer intended to be established, the DRNC shall reject the Radio Link Setup procedure and the DRNC shall respond with the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes an *HS-PDSCH RL-ID* IE not referring to one of the radio links to be established, the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message contains the *HS-DSCH Information* IE and if the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the DRNC shall reject the procedure using the RADIO LINK SETUP FAILURE message.

## 8.3.2 Radio Link Addition

### 8.3.2.1 General

This procedure is used for establishing the necessary resources in the DRNS for one or more additional RLs towards a UE when there is already at least one RL established to the concerned UE via this DRNS.

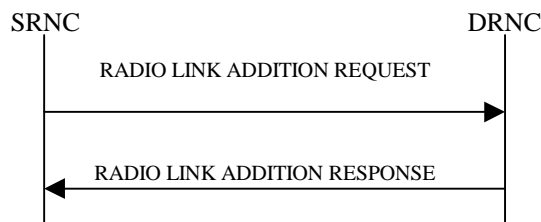
This procedure shall use the signalling bearer connection for the relevant UE Context.

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

[FDD - The Radio Link Addition procedure serves to establish one or more new Radio Links which do not contain the DSCH. If the DSCH shall be moved into a new Radio Link, the Radio Link reconfiguration procedure shall be applied.]

[TDD - The Radio Link Addition procedure serves to establish a new Radio Link with the DSCH and USCH included, if they existed before.]

### 8.3.2.2 Successful Operation



**Figure 7: Radio Link Addition procedure: Successful Operation**

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the SRNC to the DRNC.

Upon receipt, the DRNS shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

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

#### **Transport Channel Handling:**

[3.84 Mcps TDD - The DRNC shall include the *UL/DL DPCH Information* IE within the *UL/DL CCTrCH Information* IE for each CCTrCH that requires DPCHs.]

[1.28 Mcps TDD - The DRNC shall include the *UL/DL DPCH Information LCR* IE within the *UL/DL CCTrCH Information LCR* IE for each CCTrCH that requires DPCHs.]

#### **DSCH:**

[3.84 Mcps TDD - If the radio link to be added includes a DSCH, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a *DSCH Information Response* IE for each DSCH.]

[1.28 Mcps TDD - If the radio link to be added includes a DSCH, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a *DSCH Information Response LCR* IE for each DSCH.]

#### **[TDD - USCH:]**

[3.84 Mcps TDD - If the radio link to be added includes any USCHs, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a *USCH Information Response* IE for each USCH.]

[1.28 Mcps TDD - If the radio link to be added includes any USCHs, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a *USCH Information Response LCR* IE for each USCH.]

### **Physical Channels Handling:**

#### **[FDD -Compressed Mode]:**

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

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

FDD - If the *Active Pattern Sequence Information* IE is not included, the DRNS shall not activate the ongoing compressed mode pattern in the new RLs, but the ongoing pattern in the existing RL shall be maintained.]

[FDD - If some Transmission Gap Pattern sequences using SF/2 method are initialised in the DRNS, the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the *DL Code Information* IE in the RADIO LINK ADDITION RESPONSE message to indicate the Scrambling code change method that it selects for each channelisation code.]

#### **[FDD - DL Code Information]:**

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

#### **[TDD - CCTrCH Handling]:**

[TDD - If the *UL CCTrCH Information* IE is present, the DRNS shall configure the new UL CCTrCH(s) according to the parameters given in the message.]

[1.28Mcps TDD - If the *UL CCTrCH Information* IE includes the *TDD TPC Uplink Step Size* IE, the DRNS shall configure the uplink TPC step size according to the parameters given in the message, otherwise it shall use the step size configured in other radio link.]

[TDD - If the *DL CCTrCH Information* IE is present, the DRNS shall configure the new DL CCTrCH(s) according to the parameters given in the message.]

[TDD - If the *DL CCTrCH Information* IE includes the *TDD TPC Downlink Step Size* IE, the DRNS shall configure the downlink TPC step size according to the parameters given in the message, otherwise it shall use the step size configured in other radio link.]

**[FDD – Phase Reference Handling]:**

[FDD – If Primary CPICH is not to be used as a Phase Reference for this Radio Link, the DRNC shall include the *Primary CPICH Usage For Channel Estimation* IE set to the value "Primary CPICH shall not be used" in the RADIO LINK ADDITION RESPONSE message.]

**General:**

[FDD - The DRNS shall use the provided Uplink SIR Target value as the current target for the inner-loop power control.]

**Radio Link Handling:**

**Diversity Combination Control:**

The *Diversity Control Field* IE indicates for each RL whether the DRNS shall combine the new RL with existing RL(s) or not on the Iur.

- If the *Diversity Control Field* IE is set to "May" (be combined with another RL), the DRNS shall decide for any of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the DRNS shall combine the RL with one of the other RL. When a new RL is to be combined the DRNS shall choose which RL(s) to combine it with.
- If the *Diversity Control Field* IE is set to "Must not", the DRNS shall not combine the RL with any other existing RL.

[FDD - The *Diversity Control Field* IE is only applicable for DCHs, in case of E-DCH it shall always be assumed to be set to "May".]

In the case of not combining a RL with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or a RL previously listed in the RADIO LINK ADDITION RESPONSE message, the DRNC shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that no combining is done. In this case the DRNC shall include in the *DCH Information Response* IE both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH of the RL in the RADIO LINK ADDITION RESPONSE message.

[FDD - In case of combining E-DCH, the ~~E-DCH FDD Information Response~~ *E-DCH FDD Information Response* IE shall be included in the RADIO LINK ADDITION RESPONSE message containing the *Binding ID* IE and the *Transport Layer Address* IE for the establishment of transport bearers for every E-DCH MAC-d flow being established.]

In the case of combining with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or with a RL previously listed in this RADIO LINK ADDITION RESPONSE message, the DRNC shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that the RL is combined. In this case, the *RL ID* IE indicates (one of) the previously established RL(s) or a RL previously listed in this RADIO LINK ADDITION RESPONSE message with which the new RL is combined.

[TDD - The DRNC shall always include in the RADIO LINK ADDITION RESPONSE message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH and USCH of the RL.]

In the case of a set of co-ordinated DCHs, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Binding ID IE* and the *Transport Layer Address IE* for only one of the DCHs in the set of co-ordinated DCHs.

If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) when starting to utilise a new Radio Link, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Allowed UL Rate IE* in the *DCH Information Response IE* for this Radio Link.

If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) when starting to utilise a new Radio Link, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Allowed DL Rate IE* in the *DCH Information Response IE* for this Radio Link.

**[FDD - Transmit Diversity]:**

[FDD - The DRNS shall activate any feedback mode diversity according to the received settings.]

[FDD - If the cell in which the RL is being added is capable to provide Close loop Tx diversity, the DRNC shall indicate the Closed loop timing adjustment mode of the cell by including the *Closed Loop Timing Adjustment Mode IE* in the RADIO LINK ADDITION RESPONSE message.]

[FDD - When the *Transmit Diversity Indicator IE* is present the DRNS shall activate/deactivate the Transmit Diversity for each new Radio Link in accordance with the *Transmit Diversity Indicator IE* using the diversity mode of the existing Radio Link(s).]

**DL Power Control:**

[FDD - If the *Primary CPICH Ec/No IE* or the *Primary CPICH Ec/No IE* and the *Enhanced Primary CPICH Ec/No IE* measured by the UE are included for an RL in the RADIO LINK ADDITION REQUEST message, the DRNS shall use this in the calculation of the Initial DL TX Power for this RL. If the *Primary CPICH Ec/No IE* is not present, the DRNS shall set the Initial DL TX Power based on the power relative to the Primary CPICH power used by the existing RLs.]

[TDD - If [3.84Mcps TDD - the *DL Time Slot ISCP Info IE*] [1.28Mcps TDD - the *DL Time Slot ISCP Info LCR IE*] is included in the RADIO LINK ADDITION REQUEST message, the DRNS shall use it in the calculation of the Initial DL TX Power.]

[TDD - If the *Primary CCPCH RSCP Delta IE* is included, the DRNS shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per [24], and the value is equal to the *Primary CCPCH RSCP Delta IE*. If the *Primary CCPCH RSCP Delta IE* is not included and the *Primary CCPCH RSCP IE* is included, the DRNS shall assume that the reported value is in the non-negative range as per [24], and the value is equal to the *Primary CCPCH RSCP IE*. The DRNS shall use it in the calculation of the Initial DL TX Power.]

[TDD - If the *Primary CCPCH RSCP IE*, *Primary CCPCH RSCP Delta IE*, [3.84Mcps TDD - and the *DL Time Slot ISCP Info IE*] [1.28Mcps TDD - and the *DL Time Slot ISCP Info LCR IE*] are not present, the DRNS shall set the Initial DL TX Power based on the power relative to the Primary CCPCH power used by the existing RL.]

[FDD - The Initial DL TX Power shall be applied until UL synchronisation is achieved on the Uu interface for that RLS or Power Balancing is activated. No inner loop power control or power balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref. [10] subclause 5.2.1.2) and the power control procedure (see 8.3.7).]

[TDD - The Initial DL TX Power shall be applied until UL synchronisation is achieved on the Uu interface for that RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref. [22] subclause 4.2.3.3).]

[3.84 Mcps TDD - The DL TX power upper and lower limit is configured in the following way: The DRNC shall include the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* in the RADIO LINK ADDITION RESPONSE message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power IE* and *CCTrCH Minimum DL TX Power*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power IE/CCTrCH Maximum DL TX Power IE* or lower than

indicated by the appropriate *Minimum DL TX Power IE/CCTrCH Minimum DL TX Power IE* on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD - The DL TX power upper and lower limit is configured in the following way: The DRNC shall include the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* in the RADIO LINK ADDITION RESPONSE message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the value(s) for that timeslot in the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* within the *DL Timeslot Information LCR IE*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power IE* or lower than indicated by the appropriate *Minimum DL TX Power IE* on any DL DPCH within each timeslot of the RL.]

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

The DRNC shall provide the configured *Maximum DL TX Power IE* and *Minimum DL TX Power IE* for every new RL to the SRNC in the RADIO LINK ADDITION RESPONSE message. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power IE* or lower than indicated by the *Minimum DL TX Power IE* on any DL DPCH of the RL [FDD - except during compressed mode, when the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Individual" in the existing RL(s) and the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power IE*, the DRNS shall activate the power balancing and use the *DL Reference Power IE* for the power balancing procedure in the new RL(s), if activation of power balancing by the RADIO LINK ADDITION REQUEST message is supported by the DRNS, according to subclause 8.3.15. In this case, the DRNC shall include the *DL Power Balancing Activation Indicator IE* in the *RL Information Response IE* in the RADIO LINK ADDITION RESPONSE message. If the DRNS starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing, i.e.  $P_{init}$  shall be set to the power level which is calculated based on the *Primary CPICH Ec/No IE* or the *Enhanced Primary CPICH Ec/No IE* (if received), or to the power level which is calculated based on the power relative to the Primary CPICH power used by the existing RLs.]

#### **UL Power Control:**

The DRNC shall also provide the configured UL Maximum SIR and UL Minimum SIR for every new RL to the SRNC in the RADIO LINK ADDITION RESPONSE message. These values are taken into consideration by DRNS admission control and shall be used by the SRNC as limits for the UL inner-loop power control target.

#### **Neighbouring Cell Handling:**

If there are UMTS neighbouring cell(s) to the cell in which a Radio Link was established then:

- The DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Neighbouring FDD Cell Information IE* and/or *Neighbouring TDD Cell Information IE* in the *Neighbouring UMTS Cell Information IE* for each neighbouring FDD cell and/or TDD cell respectively. In addition, if the information is available, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Frame Offset IE*, *Primary CPICH Power IE*, *Cell Individual Offset IE*, *STTD Support Indicator IE*, *Closed Loop Mode1 Support Indicator IE*, *Closed Loop Mode2 Support Indicator IE*, *Coverage Indicator IE*, *Antenna Co-location Indicator IE* and *HCS Prio IE* in the *Neighbouring FDD Cell Information IE*, and the *Frame Offset IE*, *Cell Individual Offset IE*, *DPCH Constant Value IE* and the *PCCPCH Power IE*, *Coverage Indicator IE*, *Antenna Co-location Indicator IE* and *HCS Prio IE* in the *Neighbouring TDD Cell Information IE* or the *Neighbouring TDD Cell Information LCR IE*. If the *Neighbouring TDD Cell Information IE* includes the *Sync Case IE* set to "Case1", the DRNC shall include the *Time Slot For SCH IE* in the *Neighbouring TDD Cell Information IE*. If the *Neighbouring TDD Cell Information IE* includes the *Sync Case IE* set to "Case2", the DRNC shall include the *SCH Time Slot IE* in the *Neighbouring TDD Cell Information IE*.
- If a UMTS neighbouring cell is not controlled by the same DRNC, the DRNC shall also include in the RADIO LINK ADDITION RESPONSE message the *CN PS Domain Identifier IE* and/or *CN CS Domain*



*Identifier* IE which are the identifiers of the CN nodes connected to the RNC controlling the UMTS neighbouring cell.

- [FDD - The DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *DPC Mode Change Support Indicator* IE for each neighbour cell in the *Neighbouring FDD Cell Information* IE if this information is available.]
- The DRNC shall include the *Cell Capability Container FDD* IE, the *Cell Capability Container TDD* IE and/or the *Cell Capability Container TDD LCR* IE if the DRNC is aware that the neighbouring cell supports any functionality listed in 9.2.2.D, 9.2.3.1a and 9.2.3.1b.
- For the UMTS neighbouring cells which are controlled by the DRNC, the DRNC shall report in the RADIO LINK SETUP RESPONSE message the restriction state of those cells, otherwise *Restriction State Indicator* IE may be absent. The DRNC shall include the *Restriction State Indicator* IE for the neighbouring cells which are controlled by the DRNC in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.
- If available, the DRNC shall include the *SNA Information* IE for the concerned neighbouring cells in the *Neighbouring FDD Cell Information* IE, the *Neighbouring TDD Cell Information* IE and the *Neighbouring TDD Cell Information LCR* IE.

If there are GSM neighbouring cells to the cell(s) in which a radio link is established, the DRNC shall include the *Neighbouring GSM Cell Information* IE in the RADIO LINK ADDITION RESPONSE message for each of the GSM neighbouring cells. If available the DRNC shall include the *Cell Individual Offset* IE, and if the *Cell Individual Offset* IE alone cannot represent the value of the offset, the DRNC shall also include the *Extended GSM Cell Individual Offset* IE in the *Neighbouring GSM Cell Information* IE. If available the DRNC shall also include the *Coverage Indicator* IE, *Antenna Co-location Indicator* IE and *HCS Prio* IE in the *Neighbouring GSM Cell Information* IE. If available, the DRNC shall also include the *SNA Information* IE for the concerned neighbouring cells in the *Neighbouring GSM Cell Information* IE.

When receiving the *SNA Information* IE in the RADIO LINK ADDITION RESPONSE message, the SRNC should use it to restrict cell access based on SNA information. See also [40] for a broader description of the SNA access control.

If there are GERAN neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include the *GERAN Cell Capability* IE in the *Neighbouring GSM Cell Information* IE that is included in the RADIO LINK ADDITION RESPONSE message for each of the GERAN cells.

If there are GERAN Iu-mode neighbouring cells to the cell(s) where a radio link is established, the DRNC shall include, if available, the *GERAN Classmark* IE in the *Neighbouring GSM Cell Information* IE that is included in the RADIO LINK ADDITION RESPONSE message for each of the GERAN Iu-mode neighbouring cells. Ref. [39] defines when the transmission of the *GERAN Classmark* IE will be required at the initiation of the Relocation Preparation procedure.

#### **[1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:**

[1.28Mcps TDD - If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC shall use the indicated values of *Uplink synchronisation stepsize* IE and *Uplink synchronisation frequency* IE when evaluating the timing of the UL synchronisation.]

#### **[1.28Mcps TDD - Uplink Timing Advance Control LCR]:**

[1.28Mcps TDD - The DRNC shall include the *Uplink Timing Advance Control LCR* IE in the RADIO LINK ADDITION RESPONSE message.]

#### **General:**

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

[FDD - If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity* IE, the DRNC shall, if supported, activate SSDT for the concerned new RL using the indicated SSDT Cell Identity.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Qth Parameter* IE in addition to the *SSDT Cell Identity* IE, the DRNS shall use the *Qth Parameter* IE, if Qth signalling is supported, when SSDT is activated in the concerned new RL.]

Depending on local configuration in the DRNS, the DRNC may include in the RADIO LINK ADDITION RESPONSE message the *UTRAN Access Point Position* IE and the geographical co-ordinates of the cell, represented either by the *Cell GAI* IE or by the *Cell GA Additional Shapes* IE. If the DRNC includes the *Cell GA Additional Shapes* IE in the RADIO LINK ADDITION RESPONSE message, it shall also include the *Cell GAI* IE.

For each Radio Link established in a cell in which at least one URA Identity is being broadcast, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message a URA Information for this cell including the *URA ID* IE, the *Multiple URAs Indicator* IE indicating whether or not multiple URA Identities are being broadcast in the cell, and the *RNC-ID* IEs of all other RNCs that have at least one cell within the URA identified by the *URA ID* IE.

[FDD - If the UE has been allocated one or several DCH controlled by DRAC and if the DRNS supports the DRAC, the DRNC shall include in the RADIO LINK ADDITION RESPONSE message the *Secondary CCPCH Info* IE for the FACH in which the DRAC information is sent, for each Radio Link established in a cell in which DRAC is active. If the DRNS does not support DRAC, the DRNC shall not provide these IEs in the RADIO LINK ADDITION RESPONSE message.]

[3.84Mcps TDD - The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK ADDITION RESPONSE message if at least one *DSCH Information Response* IE or *USCH Information Response* IE is included in the message and at least one DCH is configured for the radio link. The DRNC shall also include the *Secondary CCPCH Info TDD* IE in the RADIO LINK ADDITION RESPONSE message if at least one *DSCH Information Response* IE or *USCH Information Response* IE is included in the message and the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[1.28 Mcps TDD - The DRNC shall include the *Secondary CCPCH Info TDD LCR* IE in the RADIO LINK ADDITION RESPONSE message if at least one *DSCH Information Response LCR* IE or *USCH Information Response LCR* IE is included in the message and at least one DCH is configured for the radio link. The DRNC shall also include the *Secondary CCPCH Info TDD LCR* IE in the RADIO LINK ADDITION RESPONSE message if at least one *DSCH Information Response LCR* IE or *USCH Information Response LCR* IE is included in the message and the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

If the *Permanent NAS UE Identity* IE is present in the RADIO LINK ADDITION REQUEST message, the DRNS shall store the information for the considered UE Context for the lifetime of the UE Context.

If the RADIO LINK ADDITION REQUEST message includes a *C-ID* IE corresponding to a cell reserved for operator use and the Permanent NAS UE Identity is available in the DRNC for the considered UE Context, the DRNC shall use this information to determine whether it can add the Radio Link on this cell or not.

If the HCS priority information is available in the DRNS, it shall include the *HCS Prio* IE for each of the established RLs in the RADIO LINK ADDITION RESPONSE message.

[FDD - If the accessed cell supports TFCI power control, the DRNC shall include the *TFCI PC Support Indicator* IE in the RADIO LINK ADDITION RESPONSE message.]

The DRNS shall start receiving on the new RL(s) after the RLs are successfully established.

#### [FDD - Radio Link Set Handling]:

[FDD - For each RL not having a common generation of the TPC commands in the DL with another RL, the DRNS shall assign to the RL a unique value for the *RL Set ID* IE which uniquely identifies the RL as an RL Set within the UE Context.]

[FDD - For all RLs having a common generation of the TPC commands in the DL with another new or existing RL, the DRNS shall assign to each RL the same value for the *RL Set ID* IE which uniquely identifies these RLs as members of the same RL Set within the UE Context.]

[FDD - After addition of the new RL(s), the UL out-of-sync algorithm defined in ref. [10] shall, for each of the previously existing and newly established RL Set(s), use the maximum value of the parameters

N\_OUTSYNC\_IND and T\_RLFAILURE that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters N\_INSYNC\_IND that are configured in the cells supporting the radio links of the RL Set.]

[FDD - For all RLs having a common generation of E-RGCH and E-HICH related information with another RL, the DRNS shall assign to each RL the same value for the *E-DCH RL Set ID* IE which uniquely identifies these RLs as members of the same E-DCH RL Set within the UE Context.]

#### [FDD - E-DCH:]

[FDD - If the *RL Information* IE in the RADIO LINK ADDITION REQUEST message contains the *RL specific E-DCH Information* IE for one Radio Link then:

- The DRNS shall setup the requested E-DCH resources on the Radio Link indicated by the *RL ID* IE in the *RL Information* IE.
- If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *RL specific E-DCH Information* IE for an E-DCH MAC-d flow, then the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.
- The DRNC shall include the *E-AGCH and E-RGCH and E-HICH FDD Scrambling Code* IE and the *E-RGCH and E-HICH Channelisation Code* IE and the corresponding ~~Sequence Number for E-RGCH~~ *Signature Sequence* IE and the ~~Sequence Number for E-HICH~~ *Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK ADDITION RESPONSE message.

[FDD - If the RADIO LINK ADDITION REQUEST message contains the *Serving E-DCH RL-ID* IE, [indicating that the Serving E-DCH RL is in this DRNS](#), then the DRNC shall allocate an E-RNTI and include this E-RNTI and the Channelisation Code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the *RL Information* IE for the indicated RL in the RADIO LINK ADDITION RESPONSE message.]

#### Response message:

If all requested RLs are successfully added, the DRNC shall respond with a RADIO LINK ADDITION RESPONSE message.

After sending the RADIO LINK ADDITION RESPONSE message the DRNS shall continuously attempt to obtain UL synchronisation on the Uu interface.

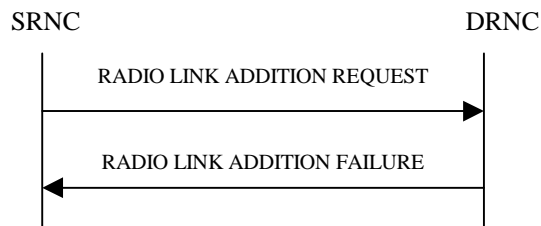
For each RL for which the *Delayed Activation* IE is not included in the RADIO LINK ADDITION REQUEST message the DRNS shall:

- [FDD -start transmission on the DL DPDCH(s) of the new RL as specified in ref. [4].]
- [TDD - start transmission on the new RL immediately as specified in ref. [4].]

For each RL for which the *Delayed Activation* IE is included in the RADIO LINK ADDITION REQUEST message, the DRNS shall:

- if the *Delayed Activation* IE indicates "Separate Indication":
  - not start any DL transmission for the concerning RL on the Uu interface;
- if the *Delayed Activation* IE indicates "CFN":
  - [FDD - start transmission on the DL DPDCH(s) of the new RL as specified in ref. [4], however never before the CFN indicated in the *Activation CFN* IE.]
  - [TDD - start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in ref. [4].]

### 8.3.2.3 Unsuccessful Operation



**Figure 8: Radio Link Addition procedure: Unsuccessful Operation**

If the establishment of at least one RL is unsuccessful, the DRNC shall respond with a RADIO LINK ADDITION FAILURE message. DRNC shall include in the RADIO LINK ADDITION FAILURE message a general *Cause IE* or a *Cause IE* for each failed radio link. The *Cause IE* indicates the reason for failure.

[FDD - If some RL(s) were established successfully, the DRNC shall indicate this in the RADIO LINK ADDITION FAILURE message in the same way as in the RADIO LINK ADDITION RESPONSE message.]

[FDD - If the accessed cell supports TFCI power control, the DRNC shall include the *TFCI PC Support Indicator IE* in the RADIO LINK ADDITION FAILURE message.]

Typical cause values are:

#### Radio Network Layer Causes:

- DL Radio Resources not Available;
- UL Radio Resources not Available;
- Combining Resources not Available;
- Combining not Supported
- Cell not Available;
- [FDD - Requested Tx Diversity Mode not Supported];
- Power Level not Supported;
- CM not Supported;
- Reconfiguration CFN not Elapsed;
- Number of DL Codes not Supported;
- Number of UL codes not Supported;
- [FDD - DPC mode change not Supported];
- Cell reserved for operator use;
- Delayed Activation not supported.

#### Transport Layer Causes:

- Transport Resource Unavailable.
- [\[FDD – E-DCH not supported\]](#).

#### Miscellaneous Causes:

- Control Processing Overload;
- HW Failure;

- Not enough User Plane Processing Resources.

### 8.3.2.4 Abnormal Conditions

If the RADIO LINK ADDITION REQUEST message includes a *C-ID* IE corresponding to a cell reserved for operator use and the Permanent NAS UE Identity is not available in the DRNC for the considered UE Context, the DRNC shall reject the procedure for this particular Radio Link and send the RADIO LINK ADDITION FAILURE message.

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Transmission Gap Pattern Sequence Status* IEs in the *Active Pattern Sequence Information* IE and it does not address exactly all ongoing compressed mode patterns the DRNS shall reject the Radio Link Addition procedure and shall respond with a RADIO LINK ADDITION FAILURE message with the *Cause* IE value "Invalid CM settings".]

[FDD - If the RADIO LINK ADDITION REQUEST message is used to establish a new RL without compressed mode when compressed mode is active for the existing RL(s) (as specified in subclause 8.3.2.2), and if at least one of the new RLs is to be established in a cell that has the same UARFCN (both UL and DL) as at least one cell with an already existing RL, the DRNS shall reject the Radio Link Addition procedure and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Invalid CM settings".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Individual" in the existing RL(s) and if the *DL Reference Power* IEs are included in the *RL Information* IE but the *DL Reference Power* IE is not present for each RL in the *RL Information* IE, the DRNC shall reject the Radio Link Addition procedure and shall respond with a RADIO LINK ADDITION FAILURE message.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power* IEs in the *RL Information* IE but the power balancing is not active in the existing RL(s) or the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Common" in the existing RL(s), the DRNC shall reject the Radio Link Addition procedure and shall respond with a RADIO LINK ADDITION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Enhanced Primary CPICH Ec/No* IE, but not the *Primary CPICH Ec/No* IE, then the DRNC shall reject the procedure using the RADIO LINK ADDITION FAILURE message.]

If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE included in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "Must", the DRNC shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.

If the RADIO LINK ADDITION REQUEST message includes the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport bearer intended to be established, the DRNC shall reject the Radio Link Addition procedure and respond with the RADIO LINK ADDITION FAILURE message.

## 8.3.3 Radio Link Deletion

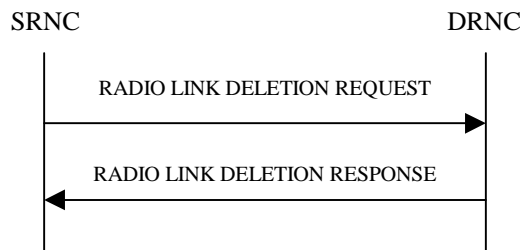
### 8.3.3.1 General

The Radio Link Deletion procedure is used to release the resources in a DRNS for one or more established radio links towards a UE.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The Radio Link Deletion procedure may be initiated by the SRNC at any time after establishing a Radio Link.

### 8.3.3.2 Successful Operation



**Figure 9: Radio Link Deletion procedure, Successful Operation**

The procedure is initiated with a RADIO LINK DELETION REQUEST message sent from the SRNC to the DRNC.

Upon receipt of this message, the DRNS shall delete the radio link(s) identified by the *RL ID* IE(s) in the message, shall release all associated resources and shall respond to the SRNC with a RADIO LINK DELETION RESPONSE message.

If the radio link(s) to be deleted represent the last radio link(s) for the UE in the DRNS and if the UE is not using any common resources in the DRNS, then the DRNC shall release the UE Context.

[FDD - After deletion of the RL(s), the UL out-of-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the maximum value of the parameters *N\_OUTSYNC\_IND* and *T\_RLFailure* that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in ref. [10] shall for each of the remaining RL Set(s) use the minimum value of the parameters *N\_INSYNC\_IND* that are configured in the cells supporting the radio links of the RL Set.]

### 8.3.3.3 Unsuccessful Operation

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### 8.3.3.4 Abnormal Conditions

If the RL indicated by the *RL ID* IE does not exist, the DRNC shall respond with the RADIO LINK DELETION RESPONSE message.

## 8.3.4 Synchronised Radio Link Reconfiguration Preparation

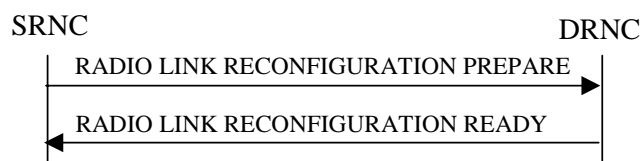
### 8.3.4.1 General

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

This procedure shall use the signalling bearer connection for the relevant UE Context.

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

### 8.3.4.2 Successful Operation



**Figure 10: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation**

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the DRNC.

Upon receipt, the DRNS 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.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allowed Queuing Time* IE the DRNS may queue the request the time corresponding to the value of the *Allowed Queuing Time* IE before starting to execute the request.

The DRNS 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, the DRNS shall treat them each as follows:

- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs then the DRNS shall treat the DCHs in the *DCHs To Modify* IE as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Frame Handling Priority* IE for a DCH to be modified, the DRNS 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 DRNS once the new configuration has been activated.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Traffic Class* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE indicates the value "RRC".
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS 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 *TNL QoS* IE for a DCH or a set of co-ordinated DCHs to be modified and if ALCAP is not used, the DRNS may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply in the uplink for the related DCH or set of co-ordinated DCHs.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- [FDD - If the *DCHs To Modify* IE contains a *DRAC Control* IE set to "requested" and if the DRNS supports the DRAC, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE for the FACH in which the DRAC information is sent, for each Radio Link established in a cell in which DRAC is active. If the DRNS does not support DRAC, DRNC shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]

- [TDD - If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the UL, the DRNS shall map the DCH onto the referenced UL CCTrCH in the new configuration.]
- [TDD - If the *DCHs To Modify* IE includes the *CCTrCH ID* IE for the DL, the DRNS shall map the DCH onto the referenced DL CCTrCH in the new configuration.]
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.

#### DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs To Add* IEs, the DRNS shall treat them each as follows:

- The DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.
- If the *DCH Information* IE includes a *DCHs To Add* IE with multiple *DCH Specific Info* IEs, the DRNS shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.
- [TDD - If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]
- [FDD - For each DCH which do not belong to a set of co-ordinated DCHs and which includes a *QE-Selector* IE set to "selected", the DRNS shall use the Transport channel BER from that DCH for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, ref. [4]. If the *QE-Selector* IE is set to "non-selected", the DRNS shall use the Physical channel BER for the QE in the UL data frames, ref. [4].]
- For a set of co-ordinated DCHs, the DRNS shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" for the QE in the UL data frames, ref. [4]. [FDD - If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, ref. [4]. If all DCHs have the *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the QE, ref. [4]. [TDD - If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, ref. [4].]
- The DRNS 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 Uu interface in congestion situations within the DRNS once the new configuration has been activated.
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the DRNS may use this information to determine the transport bearer characteristics to apply for the uplink for the related DCH or set of co-ordinated DCHs.



- The DRNS should store the *Traffic Class* IE received for a DCH to be added in the new configuration. The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE indicates the value "RRC".
- The DRNS 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 DRNS 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 Startpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The DRNS 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 Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD - The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if at least one DSCH or USCH exists in the new configuration.]
- [FDD - If the *DRAC Control* IE is set to "requested" in the *DCH Specific Info* IE for at least one DCH and if the DRNS supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE for the FACH in which the DRAC information is sent, for each radio link supported by a cell in which DRAC is active. If the DRNS does not support DRAC, the DRNC shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]
- If the *DCHs To Add* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCHs To Add* IE does not include the *Guaranteed UL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCHs To Add* IE does not include the *Guaranteed DL Rate* IE, the DRNS shall not limit the user rate of the downlink of the DCH.
- [TDD - The DRNS shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD - The DRNS 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 *DCH To Delete*, the DRNS shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the DRNS shall not include this set of co-ordinated DCHs in the new configuration.

#### **Physical Channel Modification:**

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE, the DRNS shall apply the parameters to the new configuration as follows:]

- [FDD - If the *UL DPCH Information IE* includes the *Uplink Scrambling Code IE*, the DRNS 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 DRNS shall apply the new Min UL Channelisation Code Length in the new configuration. The DRNS 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 *TFCS IE*, the DRNS shall use the *TFCS IE* for the UL when reserving resources for the uplink of the new configuration. The DRNS 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 DRNS shall apply the new Uplink DPCCH Slot Format to the new configuration.]
- [FDD - If the *UL DPCH Information IE* includes the *UL SIR Target IE*, the DRNS 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 DRNS shall apply the value in the uplink of the new configuration.]
- [FDD - If the *UL DPCH Information IE* includes the *Diversity Mode IE*, the DRNS 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 DRNS shall apply the values in the new configuration.]

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

- [FDD - If the *DL DPCH Information IE* includes the *Number of DL Channelisation Codes IE*, the DRNS shall allocate given number of Downlink Channelisation Codes per Radio Link and apply the new Downlink Channelisation Code(s) to the new configuration. Each Downlink Channelisation Code allocated for the new configuration shall be included in the RADIO LINK RECONFIGURATION READY message within the *DL Code Information IE* as a *FDD DL Channelisation Code Number IE* when sent to the SRNC. If some Transmission Gap Pattern sequences using "SF/2" method are already initialised in the DRNS, DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information IE* in the RADIO LINK RECONFIGURATION READY message in case the DRNS selects to change the Scrambling code change method for one or more DL Channelisation Code.]
- [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 *DL DPCH Information IE* includes the *TFCS IE*, the DRNS shall use the *TFCS IE* for the DL when reserving resources for the downlink of the new configuration. The DRNS shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD - If the *DL DPCH Information IE* includes the *DL DPCH Slot Format IE*, the DRNS shall apply the new slot format used in DPCH in DL.]
- [FDD - If the *DL DPCH Information IE* includes the *TFCI Signalling Mode IE*, the DRNS shall apply the new signalling mode of the TFCI.]
- [FDD - If the *DL DPCH Information IE* includes the *Multiplexing Position IE*, the DRNS shall apply the new parameter to define whether fixed or flexible positions of transport channels shall be used in the physical channel.]
- [FDD - If the *DL DPCH Information IE* includes the *Limited Power Increase IE* set to "Used", the DRNS shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD - If the *DL DPCH Information IE* includes the *Limited Power Increase IE* set to "Not Used", the DRNS shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Length of TFCI2* IE and the *Split type* IE is present with the value "Hard", then the DRNS shall assume the length of the TFCI (field 2) is 5 bits.]
- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes *Split Type* IE, then the DRNS shall apply this information to the new configuration of TFCI.]
- [FDD - If the *DL DPCH Information* IE includes the *Length of TFCI2* IE, the DRNS shall apply this information to the length of TFCI(field 2) in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE, the DRNS shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. Any Transmission Gap Pattern Sequences already existing in the previous Compressed Mode Configuration are replaced by the new sequences once the new Compressed Mode Configuration has been activated. This new Compressed Mode Configuration shall be valid in the DRNS until the next Compressed Mode Configuration is configured in the DRNS or until the last Radio Link is deleted.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE and the *Downlink Compressed Mode Method* IE in one or more Transmission Gap Pattern Sequence within the *Transmission Gap Pattern Sequence Information* IE is set to "SF/2", the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK RECONFIGURATION READY message indicating for each Channelisation Code whether the alternative scrambling code shall be used or not].

~~[FDD - E-DPCH Handling: If the *E-DPCH Information* IE is included, the *UL-DPDCH Indicator for E-DCH operation* IE in the *UL-DPCH Information* shall be present as well. If the *UL-DPDCH Indicator for E-DCH operation* IE is set to "UL-DPDCH not present" the *Min UL Channelisation Code Length* IE, the *Puncture Limit* IE and the *TFCS* IE, within the *UL-DPCH Information* IE shall be ignored.]~~

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DPCH Information* IE, the DRNS shall apply the parameters to the new configuration as follows:]

- [FDD - If the *E-DPCH Information* IE includes the *Min UL Channelisation Code Length for EDCH FDD* IE, the DRNS shall apply the new Min UL Channelisation Code Length in the new configuration. The DRNS shall apply the contents of the *Max Number of E-DPDCHs* IE (if it is included) in the new configuration.]
- [FDD - If the *E-DPCH Information* IE includes the *Puncture Limit* IE, the DRNS shall apply the value in the uplink of the new configuration]
- [FDD - If the *E-DPCH Information* IE includes the *E-TFCS* IE, the DRNS shall use the *E-TFCS* IE for the E-DCH when reserving resources for the uplink of the new configuration. The DRNS shall apply the new TFCS in the uplink of the new configuration.]
- ~~[FDD - If the *E-DPCH Information* IE includes the *E-DPCCH Slot Format* IE, the DRNS shall apply the new *E-DPCCH Slot Format* to the new configuration.]~~
- [FDD - If the *E-DPCH Information* IE includes the *E-TTI* IE, the DRNS shall use the value when the new configuration is being used.]

#### [TDD - UL/DL CCTrCH Modification]

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

- [TDD - If any of the *UL CCTrCH To Modify* IEs or *DL CCTrCH To Modify* IEs includes any of the *TFCS* IE, *TFCI coding* IE, *Puncture limit* IE, or *TPC CCTrCH ID* IEs the DRNS shall apply these as the new values, otherwise the previous values specified for this CCTrCH are still applicable.]
- [TDD - If any of the following listed DPCH information IEs are modified in the new prepared configuration, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the IEs indicating the new values: *Repetition Period* IE, *Repetition Length* IE, *TDD DPCH Offset* IE, [3.84Mcps TDD - *UL Timeslot Information* IE,] [1.28Mcps TDD - *UL Timeslot Information LCR* IE,] [3.84Mcps TDD - *DL Timeslot Information* IE,] [1.28Mcps TDD - *DL Timeslot Information LCR* IE,] [3.84Mcps TDD - *Midamble Shift And Burst Type* IE,] [1.28Mcps TDD - *Midamble Shift LCR* IE,] *TFCI Presence* IE, [3.84Mcps TDD - *TDD Channelisation Code* IE,] [1.28Mcps TDD - and/or *TDD Channelisation Code LCR* IE,] [1.28Mcps TDD - *TDD UL DPCH Time Slot Format LCR* IE or *TDD DL DPCH Time Slot Format LCR* IE].]

- [1.28Mcps TDD - If the *UL CCH To Modify* IE includes the *UL SIR Target* IE, the DRNS shall use the value for the UL inner loop power control according [12] and [22] in the new configuration.]
- [TDD - If any of the *DL CCH To Modify* IEs includes any *TPC CCH ID* IEs, the DRNS shall apply these as the new values, otherwise the previous values specified for this CCH are still applicable.]
- [1.28Mcps TDD - If the *UL CCH to Modify* IE includes the *TDD TPC Uplink Step Size* IE, the DRNS shall apply this value to the uplink TPC step size in the new configuration.]
- [TDD - If the *DL CCH to Modify* IE includes the *TDD TPC Downlink Step Size* IE, the DRNS shall apply this value to the downlink TPC step size in the new configuration.]

#### [TDD - UL/DL CCH Addition]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCH To Add* IEs or *DL CCH To Add* IEs, the DRNS shall include this CCH in the new configuration.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the DPCH information in [3.84Mcps TDD - *UL DPCH to be Added* IE/*DL DPCH to be Added* IEs] [1.28Mcps TDD - *UL DPCH to be Added LCR* IE/*DL DPCH to be Added LCR* IEs] [3.84Mcps TDD - If no UL DPCH is active before a reconfiguration which adds an UL DPCH, and if a valid Rx Timing Deviation measurement is known in DRNC, then the DRNC shall include the *Rx Timing Deviation* IE in the RADIO LINK RECONFIGURATION READY message].]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *TDD TPC Downlink Step Size* IE within a *DL CCH To Add* IE, the DRNS shall set the TPC step size of that CCH to that value, otherwise the DRNS shall use the same value as the lowest numbered DL CCH in the current configuration.]

[1.28Mcps TDD - The DRNS shall use the *UL SIR Target* IE in the *UL CCH To Add* IE as the UL SIR value for the inner loop power control for this CCH according [12] and [22] in the new configuration.]

[TDD - If any of the *DL CCH To Add* IEs includes any *TPC CCH ID* IEs, the DRNS shall configure the identified UL CCHs with TPC according to the parameters given in the message.]

[1.28Mcps TDD - If the *UL CCH To Add* IE includes *TDD TPC Uplink Step Size* IE, the DRNS shall apply the uplink TPC step size in the new configuration.]

#### [TDD - UL/DL CCH Deletion]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCH To Delete* IEs or *DL CCH To Delete* IEs, the DRNS shall remove this CCH in the new configuration, and the DRNC shall include in the RADIO LINK RECONFIGURATION READY message corresponding *UL DPCH to be Deleted* IEs and *DL DPCH to be Deleted* IEs.]

#### SSDT Activation/Deactivation:

- [FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", then in the new configuration the DRNS shall activate SSDT, if supported, using the *SSDT Cell Identity* IE in *RL Information* IE, and the *SSDT Cell Identity Length* IE in *UL DPCH Information* IE.]
- [FDD - If the *RL Information* IE includes the *Qth Parameter* IE and the *SSDT Indication* IE set to "SSDT Active in the UE", the DRNS shall use the *Qth Parameter* IE, if Qth signalling is supported, when SSDT is activated in the new configuration.]
- [FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the DRNS shall deactivate SSDT in the new configuration.]

#### DL Power Control:

- [FDD - If the *RL Information* IE includes the *DL Reference Power* IEs and power balancing is active, DRNS shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported, at the CFN in the RADIO LINK RECONFIGURATION COMMIT message, according to subclause 8.3.15, using the *DL Reference Power* IE. If the CFN modulo the value of the *Adjustment Period* IE is not equal to 0, the power balancing continues with the old reference power until the end of the current adjustment period, and the updated reference power shall be used from the next adjustment period.]

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported by the DRNS, the DRNC shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION READY message.]

#### **DSCH Addition/Modification/Deletion:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Add*, *DSCH To Modify* or *DSCH To Delete* IEs, then the DRNS 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.

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Add* IE, then the DRNS shall use the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE and *TrCH Source Statistics Descriptor* IE to define a set of DSCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.

The DRNC 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 added DSCH.

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Add* IE, then the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related DSCHs.

[FDD - If the *DSCHs To Add* IE includes the *Enhanced DSCH PC* IE, the DRNS shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:]

- [FDD - the *SSDT Cell Identity for EDSCHPC* IE in the *RL Information* IE, if the *SSDT Cell Identity* IE is not included in the *RL Information* IE or]
- [FDD - the *SSDT Cell Identity* IE in the *RL Information* IE, if both the *SSDT Cell Identity* IE and the *SSDT Cell Identity for EDSCHPC* are included in the *RL Information* IE.]

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

[FDD - If the enhanced DSCH power control is activated and the TFCI PC Mode 2 is supported, the primary/secondary status determination in the enhanced DSCH power control shall be applied to the TFCI power control in DSCH hard split mode.]

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Modify* IE, then the DRNS shall treat them each as follows:

- The DRNC shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for any new transport bearer to be established for each modified DSCH.
- [FDD - If the *DSCH To Modify* IE includes any *DSCH Info* IEs, then the DRNS shall treat them each as follows:]
  - [FDD - If the *DSCH Info* IE includes any of the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE or *TrCH Source Statistics Descriptor* IE, the DRNS shall use them to update the set of DSCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.]
  - [FDD - If the *DSCH Info* IE includes any of the *Transport Format Set* IE or *BLER* IE, the DRNS shall apply the parameters to the new configuration.]
  - [FDD - If the *DSCH Info* IE includes the *Traffic Class* IE, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related DSCHs.]
- [FDD - If the *DSCH To Modify* IE includes the *PDSCH RL ID* IE, then the DRNS shall use it as the new DSCH RL identifier.]
- [FDD - If the indicated PDSCH RL ID is in the DRNS and there was no DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a DSCH-RNTI to the UE Context and include the *DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD - If the indicated PDSCH RL ID is in the DRNS and there was a DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a new DSCH-RNTI to the UE Context, release the old DSCH-RNTI and include the *DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.]

- [FDD - If the indicated PDSCH RL ID is not in the DRNS and there was a DSCH-RNTI allocated to the UE Context, the DRNC shall release this DSCH-RNTI.]
- [FDD - If the *DSCH To Modify* IE includes the *Transport Format Combination Set* IE, then the DRNS shall use it as the new Transport Format Combination Set associated with the DSCH.]
- [TDD - If the *DSCHs To Modify* IE includes the *CCTrCH ID* IE, then the DRNS shall map the DSCH onto the referenced DL CCTrCH.]
- [TDD - If the *DSCHs To Modify* IE includes any of the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE or *TrCH Source Statistics Descriptor* IE, the DRNS shall use them to update the set of DSCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.]
- [TDD - If the *DSCHs To Modify* IE includes any of the *Transport Format Set* IE or *BLER* IE, the DRNS shall apply the parameters to the new configuration.]
- [TDD - If the *DSCHs To Modify* IE includes the *Traffic Class* IE, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related DSCHs.]
- [FDD - If the *DSCHs To Modify* IE includes the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC Active in the UE ", the DRNS shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:
  - [FDD - the *SSDT Cell Identity for EDSCHPC* IE in *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* 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 *DSCHs To Modify* IE includes the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC not Active in the UE", the DRNS shall deactivate enhanced DSCH power control in the new configuration.]

[FDD - If the enhanced DSCH power control is activated and the TFCI PC Mode 2 is supported, the primary/secondary status determination in the enhanced DSCH power control shall be applied to the TFCI power control in DSCH hard split mode.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DSCHs To Delete* IE requesting the deletion of all DSCH resources for the UE Context, then the DRNC shall release the DSCH-RNTI allocated to the UE Context, if there was one.]

[3.84 Mcps TDD - The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if a DSCH is added and at least one DCH exists in the new configuration. The DRNC shall also include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[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 DRNS shall deactivate enhanced DSCH power control in the new configuration.]

If the requested modifications are allowed by the DRNS and the DRNS has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the SRNC with the RADIO LINK RECONFIGURATION READY message.

The DRNC shall include the *DSCH Initial Window Size* IE in the RADIO LINK RECONFIGURATION READY message for each DSCH, if the DRNS allows the SRNC to start transmission of MAC-c/sh SDUs before the DRNS has allocated capacity on user plane as described in [32].

#### [TDD USCH Addition/Modification/Deletion]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *USCH To Modify*, *USCH To Add* or *USCH To Delete* IEs, then the DRNS 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 - If the RADIO LINK RECONFIGURATION PREPARE message includes any *USCH To Add* IE, then, the DRNS shall use the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE and *TrCH Source Statistics Descriptor* IE to define a set of USCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *USCH To Add* IE, then the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related USCHs.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *USCH To Add* IE, if the *TNL QoS* IE is included and if ALCAP is not used, the DRNS may use the *TNL QoS* IE to determine the transport bearer characteristics to apply for the related USCHs.]

[TDD - The DRNC 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 added USCH.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *USCH To Modify* IE, then the DRNS shall treat them each as follows:]

- [TDD - If the *USCH To Modify* IE includes any of the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE or *TrCH Source Statistics Descriptor* IE, the DRNS shall use them to update the set of USCH Priority classes.]
- [TDD - If the *USCH To Modify* IE includes any of the *CCTrCH ID* IE, *Transport Format Set* IE, *BLER* IE or *RB Info* IE, the DRNS shall apply the parameters to the new configuration.]
- [TDD - If the *USCHs To Modify* IE includes the *Traffic Class* IE, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related USCHs.]
- [TDD - The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if a USCH is added and at least one DCH exists in the new configuration. The DRNC shall also include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]
- [TDD – if the *TNL QoS* IE is included and if ALCAP is not used, the DRNS may use the *TNL QoS* IE to determine the transport bearer characteristics to apply for the related USCHs.]
- [TDD - The DRNC shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for any new transport bearer to be established for each modified USCH.]

#### **RL Information:**

[FDD - If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the DRNS shall adjust the timing of the radio link accordingly in the new configuration.]

#### **HS-DSCH Setup:**

If the *HS-DSCH Information* IE is present in the RADIO LINK RECONFIGURATION PREPARE message, then:

- The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The DRNC shall include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.
- The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.
- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the

DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.

- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being established, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in [32].
- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD - The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD - The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD - The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD - *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD - The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated HARQ Preamble Mode as described in [10].]

#### **Intra-DRNS Serving HS-DSCH Radio Link Change:**

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- The DRNS shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.
- The DRNC may include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.
- The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.
- If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION READY message.
- [FDD - The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD - The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD - The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD - *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]



- [TDD - The DRNC shall include the [3.84 Mcps TDD - *HS-PDSCH Timeslot Specific Information IE*] [1.28 Mcps TDD - *HS-PDSCH Timeslot Specific Information LCR IE*] in the *HS-DSCH Information Response IE* in the RADIO LINK SETUP RESPONSE message.]
- [FDD - The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code IE* in the *HS-DSCH FDD Information Response IE* in the RADIO LINK RECONFIGURATION READY message.]

#### HS-DSCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify IE*, then:

- The DRNC shall include the *HS-DSCH Initial Capacity Allocation IE* for each HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in [32].
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Traffic Class IE* in the *HS-DSCH Information To Modify IE* for a specific HS-DSCH MAC-d flow, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate IE* in the *HS-DSCH Information To Modify IE*, the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer IE* in the *HS-DSCH Information IE*, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Window Size IE* or *TI IE* in the *HS-DSCH Information To Modify IE*, then the DRNS shall use the indicated values in the new configuration for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-d PDU Size Index IE* in the *Modify Priority Queue* choice, the DRNS shall delete the previous list of MAC-d PDU Size Index values for the related HSDPA Priority Queue and use the MAC-d PDU Size Index values indicated in the *MAC-d PDU Size Index IE* in the new configuration.
- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *CQI Feedback Cycle k IE*, the *CQI Repetition Factor IE*, the *ACK-NACK Repetition Factor IE*, the *ACK Power Offset IE*, the *NACK Power Offset IE* or the *CQI Power Offset IE* in the *HS-DSCH Information To Modify IE*, then the DRNS shall use the indicated CQI Feedback Cycle k value, the CQI Repetition Factor or the ACK-NACK Repetition Factor, ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD - If the *HS-SCCH Power Offset IE* is included in the *HS-DSCH Information To Modify IE*, the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TDD ACK NACK Power Offset IE* in the *HS-DSCH Information To Modify IE*, the DRNS shall use the indicated power offset in the new configuration.]
- [FDD - If the *HS-DSCH Information To Modify IE* includes the *HS-SCCH Code Change Grant IE*, then the DRNS may modify the HS-SCCH codes corresponding to the HS-DSCH. The DRNC shall then report the codes which are used in the new configuration specified in the *HS-SCCH Specific Information Response IE* in the RADIO LINK RECONFIGURATION READY message.]
- [TDD - If the *HS-DSCH Information To Modify IE* includes the *HS-SCCH Code Change Grant IE*, then the DRNS may modify the HS-SCCH parameters corresponding to the HS-DSCH. The DRNC shall then report the values for the parameters which are used in the new configuration specified in the [3.84Mcps TDD - *HS-SCCH Specific Information Response IE*] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR IE*] in the RADIO LINK RECONFIGURATION READY message.]

- [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated HARQ Preamble Mode in the new configuration as described in [10].]

#### HS-DSCH MAC-d Flow Addition/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs, then the DRNS shall use this information to add/delete the indicated HS-DSCH MAC-d flows on the Serving HS-DSCH Radio Link. When an HS-DSCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH MAC-d Flows To Delete* IE requesting the deletion of all remaining HS-DSCH MAC-d flows for the UE Context, then the DRNC shall delete the HS-DSCH configuration from the UE Context and release the HS-PDSCH resources.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d Flows To Add* IE, then:

- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.
- The DRNC shall include the *HS-DSH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being added, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in [32].
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- The DRNC may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION READY message.

#### FDD - E-DCH Setup:

FDD - If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION PREPARE message and the *RL Information* IE contains the *RL specific E-DCH Information* IE for one Radio Link then:

- The DRNS shall setup the requested E-DCH resources on the Radio Link indicated by the *RL ID* IE in the *RL Information* IE.
- The RADIO LINK RECONFIGURATION PREPARE message shall contain in the *RL Information* IE for every RL the *E-DCH RL Indication* IE indicates whether this RL has configured E-DCH resources.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE for an E-DCH MAC-d flow in the *E-DCH FDD Information* IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Maximum Number of Retransmissions for E-DCH* IE for a E-DCH MAC-d flow in the *E-DCH FDD Information* IE, then the DRNS shall use this information to report if the maximum number of retransmissions has been exceeded.
- The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the *TNL QoS* IE is included for a E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.
- The DRNC shall include the *E-AGCH* and *E-RGCH* and *E-HICH FDD Scrambling Code* IE and the *E-RGCH* and *E-HICH Channelisation Code* IE and the corresponding ~~Sequence number for E-RGCH~~ *Signature Sequence*

IE and the ~~Sequence number for E-HICH Signature Sequence~~ IE in the E-DCH FDD DL Control Channel Information IE in the RADIO LINK RECONFIGURATION READY message.]

~~If the RADIO LINK RECONFIGURATION PREPARE message contains the Serving E-DCH RL ID IE the DRNC shall allocate an E-RNTI and include this E-RNTI and the Channelisation Code of the corresponding E-AGCH in the E-DCH FDD DL Control Channel Information IE in the RL Information IE for the indicated RL in the RADIO LINK RECONFIGURATION READY message.]~~

#### **FDD - Serving E-DCH Radio Link Change:**

FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the Serving E-DCH RL ID IE, this indicates the new Serving E-DCH Radio Link:

- If the old Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link.
- If the new Serving E-DCH RL is within this DRNS, the DRNS shall allocate an E-RNTI identifier for the new Serving E-DCH Radio Link and include this identifier along with the channelisation code of the corresponding E-AGCH in the E-DCH FDD DL Control Channel Information IE in the RL Information Response IE for the indicated RL in the RADIO LINK RECONFIGURATION READY message.]

#### **FDD - E-DCH Modification:**

FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH FDD Information To Modify IE, then:

- ~~If the E-DCH MAC-d Flow Information IE includes the Payload CRC Presence Indicator IE the DRNS shall apply the payload indicator in the Uplink of the user plane for the E-DCH in the new configuration.~~
- If the E-DCH FDD Information To Modify IE contains a E-DCH MAC-d Flow Information IE which includes the Allocation/Retention Priority IE, the DRNS shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.
- If the TNL QoS IE is included for a E-DCH MAC-d flow and if ALCAP is not used, the TNL QoS IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the Data Description Indicator IE, the DRNC shall use the DDI values indicated in the Data Description Indicator IE in the new configuration.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the MAC-es Guaranteed Bit Rate IE in the E-DCH FDD Information To Modify IE, the DRNS shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the Maximum Number of Retransmissions for E-DCH IE for a E-DCH MAC-d flow in the E-DCH FDD Information To Modify IE, then the DRNS shall use this information to report if the maximum number of retransmissions has been exceeded.
- The DRNC shall include the E-AGCH and E-RGCH and E-HICH FDD Scrambling Code IE and the E-RGCH and E-HICH Channelisation Code IE and the corresponding E-RGCH Signature Sequence IE and E-HICH Signature Sequence ~~number~~ IE in the E-DCH FDD DL Control Channel Information IE in the RADIO LINK RECONFIGURATION READY message.]

~~If the RL Information IE contains the Serving E-DCH RL ID IE for one RL then the DRNC shall allocate an E-RNTI and include this E-RNTI and the Channelisation Code of the corresponding E-AGCH in the E-DCH FDD DL Control Channel Information IE in the RL Information IE for the indicated RL in the RADIO LINK RECONFIGURATION READY message.]~~

#### **FDD - E-DCH MAC-d Flow Addition/~~Deletion~~:**

FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any E-DCH MAC-d Flows To Add IE or E-DCH MAC-d Flows To Delete IEs in the RL Information IE, then the DRNS shall use this information to add/delete the indicated E-DCH MAC-d flows ~~on the Serving E-DCH Radio Link. When an E-DCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.~~

~~If the RADIO LINK RECONFIGURATION PREPARE message includes an E-DCH MAC-d Flows To Delete IE requesting the deletion of all remaining E-DCH MAC-d flows for the UE Context, then the DRNC shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.~~

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the E-DCH MAC-d Flows To Add IE, then:

- The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-e<sub>s</sub> Guaranteed Bit Rate* IE in the E-DCH MAC-d Flows To Add IE, the DRNS shall use this information to optimise MAC-e scheduling decisions.]

#### [FDD - E-DCH MAC-d Flow Deletion:]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an E-DCH MAC-d Flows To Delete IEs, then the DRNS shall use this information to delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes an E-DCH MAC-d Flows To Delete IE requesting the deletion of all remaining E-DCH MAC-d flows for the UE Context, then the DRNC shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.]

#### [1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:

[1.28Mcps TDD -If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC shall use the indicated values of *Uplink synchronisation stepsize* IE and *Uplink synchronisation frequency* IE when evaluating the timing of the UL synchronisation.]

#### [1.28Mcps TDD - Uplink Timing Advance Control LCR]:

[1.28Mcps TDD - The DRNC shall include the *Uplink Timing Advance Control LCR* IE in the RADIO LINK RECONFIGURATION READY message, if the Uplink Timing Advance Control parameters have been changed.]

#### [TDD] DSCH RNTI Addition/Deletion

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the PDSCH RL ID IE, then the DRNS shall use it as the new RL identifier for PDSCH and PUSCH.]

- [TDD - If the indicated PDSCH RL ID is in the DRNS and there was no DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a DSCH-RNTI to the UE Context and include the DSCH-RNTI IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD - If the indicated PDSCH RL ID is in the DRNS and there was a DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a new DSCH-RNTI to the UE Context, release the old DSCH-RNTI and include the DSCH-RNTI IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD - If the indicated PDSCH RL ID is not in the DRNS and there was a DSCH-RNTI allocated to the UE Context, the DRNC shall release this DSCH-RNTI.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a DSCHs to Delete IE and/or USCHs to Delete IE which results in the deletion of all DSCH and USCH resources for the UE Context, then the DRNC shall release the DSCH-RNTI allocated to the UE Context, if there was one.]

#### [FDD – Phase Reference Handling]:

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *UE Support Of Dedicated Pilots For Channel Estimation* IE, the DRNC shall assume that dedicated pilots may be used for channel estimation for DCH or DSCH.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *UE Support Of Dedicated Pilots For Channel Estimation Of HS-DSCH* IE, the DRNC shall assume that dedicated pilots may be used for channel estimation for HS-DSCH.]

[FDD – If Primary CPICH usage for channel estimation information has been reconfigured, the DRNC shall include the *Primary CPICH Usage For Channel Estimation IE* in the RADIO LINK RECONFIGURATION READY message.]

[FDD – If Secondary CPICH information for channel estimation has been reconfigured, the DRNC shall include the *Secondary CPICH Information Change IE* in the RADIO LINK RECONFIGURATION READY message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes *Phase Reference Update Indicator IE*, DRNC shall modify the channel estimation information according to [10] subclause 4.3.2.1 and set the value(s) in *Primary CPICH Usage For Channel Estimation IE* and/or *Secondary CPICH Information Change IE* in the RADIO LINK RECONFIGURATION READY message accordingly.]

### General

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

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address IE* and *Binding ID IE* in the *DSCHs To Modify IE*, *DSCHs To Add IE*, [TDD - *USCHs To Modify IE*, *USCHs To Add IE*], *HS-DSCH Information IE*, *HS-DSCH Information To Modify IE*, *HS-DSCH MAC-d Flows To Add IE*, [FDD - *E-DCH MAC-d Flows to Add*,] or in the *RL Specific DCH Information IEs*, the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d flow] being added, or any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d flow] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*.

The DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address IE* and the *Binding ID IE* for any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d flow being added,] or any Transport Channel, HS-DSCH MAC-d flow [FDD - or E-DCH MAC-d flow] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*. In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iur interface, the *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* shall be included for only one of the DCHs in the set of co-ordinated DCHs.

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

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Allowed UL Rate IE* in the *DCH Information Response IE* for this Radio Link.

Any allowed rate for the downlink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Allowed DL Rate IE* in the *DCH Information Response IE* for this Radio Link.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum Uplink SIR IE* and *Minimum Uplink SIR IE* for each Radio Link when these values are changed.

[FDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* respectively. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power IE* or lower than indicated by the *Minimum DL TX Power IE* on any DL DPCH of the RL -except during compressed mode, when the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[3.84 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* in the RADIO LINK RECONFIGURATION READY message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the new value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power IE* and *CCTrCH*

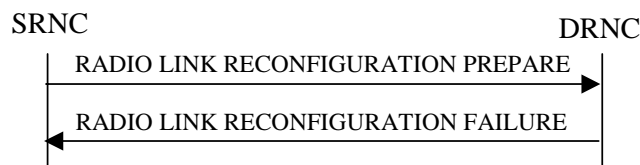
*Minimum DL TX Power.* The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power IE/CCTrCH Maximum DL TX Power IE* or lower than indicated by the appropriate *Minimum DL TX Power IE/CCTrCH Minimum DL TX Power IE* on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* in the RADIO LINK RECONFIGURATION READY message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the new value(s) for that timeslot in the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* within the *DL Timeslot Information LCR IE*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power IE* or lower than indicated by the appropriate *Minimum DL TX Power IE* on any DL DPCH within each timeslot of the RL.]

[TDD - If the [3.84Mcps TDD - *DL Time Slot ISCP Info IE*][1.28Mcps TDD - *DL Time Slot ISCP Info LCR IE*] is present, the DRNS should use the indicated values when deciding the Initial DL TX Power.]

[TDD - If the *Primary CCPCH RSCP Delta IE* is included, the DRNS shall assume that the reported value for Primary CCPCH RSCP is in the negative range as per [24], and the value is equal to the *Primary CCPCH RSCP Delta IE*. If the *Primary CCPCH RSCP Delta IE* is not included and the *Primary CCPCH RSCP IE* is included, the DRNS shall assume that the reported value is in the non-negative range as per [24], and the value is equal to the *Primary CCPCH RSCP IE*. The DRNS shall use the indicated values when deciding the Initial DL TX Power.]

### 8.3.4.3 Unsuccessful Operation



**Figure 11: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation**

If the DRNS cannot reserve the necessary resources for all the new DCHs of a set of co-ordinated DCHs requested to be added, it shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed.

If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLs, the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC, indicating the reason for failure for each failed radio link in a *Cause IE*.

Typical cause values are:

#### Radio Network Layer Causes:

- UL Scrambling Code Already in Use;
- DL Radio Resources not Available;
- UL Radio Resources not Available;
- Requested Configuration not Supported;
- Number of DL Codes not Supported;
- Number of UL Codes not Supported;
- Dedicated Transport Channel Type not Supported;
- DL Shared Channel Type not Supported;
- [TDD - UL Shared Channel Type not Supported];
- [FDD - UL Spreading Factor not Supported];
- [FDD - DL Spreading Factor not Supported];
- CM not Supported;



- RL Timing Adjustment not Supported;
- [FDD - HARQ Preamble Mode not supported].
- [FDD – E-DCH not supported].

#### Miscellaneous Causes:

- Control Processing Overload;
- Not enough User Plane Processing Resources.

### 8.3.4.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD - or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"] the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure and the DRNC shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE" and SSDT is not active in the current configuration, the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure if the *UL DPCH Information* IE does not include the *SSDT Cell Identity Length* IE. The DRNC shall then respond with a RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the *DSCHs To Add* IE includes the *Enhanced DSCH PC* IE and the *DSCH To Modify* IE include the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC not Active in the UE", then the DRNS shall deactivate enhanced DSCH power control in the new configuration.]

[FDD - If both the *DSCHs To Add* IE and the *DSCH To Modify* IE include *Enhanced DSCH PC* IE, then the DRNS shall ignore the *Enhanced DSCH PC* IE in the *DSCH To Add* IE.]

If the RADIO LINK RECONFIGURATION PREPARE message includes a *DCHs To Modify* IE or *DCHs To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs To Modify* IE or *DCHs To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *DL Reference Power* IE, but the power balancing is not active in the indicated RL(s), the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the DRNC shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Common" in the existing RL(s) but the RADIO LINK RECONFIGURATION PREPARE message includes more than one *DL Reference Power* IE, the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the DRNC shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Split Type* IE but includes *TFCI Signalling Mode* IE set to "Split", then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Length of TFCI2* IE but the *Split type* IE is set to "Logical", then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Split Type* IE set to the value "Hard" and the *Length Of TFCI2* IE set to the value "1", "2", "5", "8", "9" or "10", then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Split Type* IE but includes the *Length of TFCI2* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE., and not both are present for a transport bearer intended to be established, the DRNC shall reject the Synchronised Radio Link Reconfiguration Preparation procedure and the DRNC shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the DRNS, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify* IE deleting the last remaining Priority Queue of an HS-DSCH MAC-d Flow, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the UE Context, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

## 8.3.5 Synchronised Radio Link Reconfiguration Commit

### 8.3.5.1 General

This procedure is used to order the DRNS to switch to the new configuration for the Radio Link(s) within the DRNS, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

### 8.3.5.2 Successful Operation



**Figure 12: Synchronised Radio Link Reconfiguration Commit procedure, Successful Operation**

The DRNS shall switch to the new configuration previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure at the next coming CFN with a value equal to the value requested by the SRNC in the *CFN* IE (see ref.[17] subclause 9.4) when receiving the RADIO LINK RECONFIGURATION COMMIT message from the SRNC.



[FDD - If the *Active Pattern Sequence Information* IE is included in the RADIO LINK RECONFIGURATION COMMIT message, the *CM Configuration Change CFN* IE in the *Active Pattern Sequence Information* IE shall be ignored by the DRNS.]

When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

In the case of a transport channel modification for which a new transport bearer was requested and established, the switch to the new transport bearer shall also take place at the indicated CFN. The detailed frame protocol handling during transport bearer replacement is described in [4], subclause 5.10.1 and in [32], subclause 5.3.1.

[FDD - If the RADIO LINK RECONFIGURATION COMMIT includes the *Active Pattern Sequence Information* IE, the DRNS shall deactivate all the ongoing Transmission Gap Pattern Sequences at the *CFN* IE. From that moment on all Transmission Gap Pattern Sequences included in *Transmission Gap Pattern Sequence Status* IE repetitions shall be started when the indicated *TGCFN* IE elapses. The *CFN* IE and *TGCFN* IE for each sequence refer to the next coming CFN with that value. If the values of the *CFN* IE and the *TGCFN* IE are equal, the concerned Transmission Gap Pattern Sequence shall be started immediately at the CFN with a value equal to the value received in the *CFN* IE.]

### 8.3.5.3 Abnormal Conditions

If a new transport bearer is required for the new configuration and it is not available at the requested CFN, the DRNS shall initiate the Radio Link Failure procedure.

## 8.3.6 Synchronised Radio Link Reconfiguration Cancellation

### 8.3.6.1 General

This procedure is used to order the DRNS to release the new configuration for the Radio Link(s) within the DRNS, previously prepared by the Synchronised Radio Link Reconfiguration Preparation procedure.

This procedure shall use the signalling bearer connection for the relevant UE Context.

### 8.3.6.2 Successful Operation



**Figure 13: Synchronised Radio Link Reconfiguration Cancellation procedure, Successful Operation**

Upon receipt of the RADIO LINK RECONFIGURATION CANCEL message from the SRNC, the DRNS shall release the new configuration ([FDD - including the new Transmission Gap Pattern Sequence parameters (if existing)]) previously prepared by the Synchronised RL Reconfiguration Preparation procedure and continue using the old configuration. When this procedure has been completed the Prepared Reconfiguration does not exist any more, see subclause 3.1.

### 8.3.6.3 Abnormal Conditions

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## 8.3.7 Unsynchronised Radio Link Reconfiguration

### 8.3.7.1 General

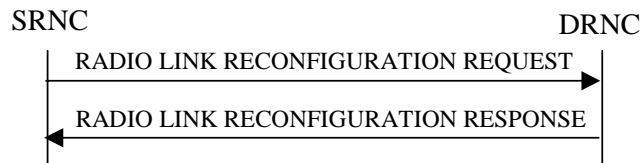
The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a DRNS.

The procedure is used when there is no need to synchronise the time of the switching from the old to the new radio link configuration in the cells used by the UE-UTRAN connection within the DRNS.

This procedure shall use the signalling bearer connection for the relevant UE Context.

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

### 8.3.7.2 Successful Operation



**Figure 14: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation**

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the DRNC.

Upon receipt, the DRNS shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request the time corresponding to the value of the *Allowed Queuing Time* IE before starting to execute the request.

The DRNS shall prioritise resource allocation for the RL to be modified according to Annex A.

#### **DCH Modification:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Modify* IEs, then the DRNS shall treat them as follows:

- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs, then the DRNS shall treat the DCHs as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be modified, the DRNS shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes a *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes a *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Frame Handling Priority* IE, the DRNS 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 DRNS once the new configuration has been activated.
- If the *DCH Specific Info* IE includes the *Traffic Class* IE, the DRNC may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated

DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE indicates the value "RRC".

- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the DRNS may use this information to determine the transport bearer characteristics to apply for the uplink for the related DCH or set of co-ordinated DCHs.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- [FDD - If the *DRAC Control* IE is present and set to "requested" in *DCHs To Modify* IE for at least one DCH, and if the DRNS supports the DRAC, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE for the FACH in which the DRAC information is sent, for each Radio Link supported by a cell in which DRAC is active.]
- [TDD - If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *CCTrCH ID* IE for the UL, the DRNS shall map the DCH onto the referenced UL CCTrCH in the new configuration.]
- [TDD - If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *CCTrCH ID* IE for the DL, the DRNS shall map the DCH onto the referenced DL CCTrCH in the new configuration.]
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user in the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.

#### **DCH Addition:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Add* IEs, then the DRNS shall treat them each as follows:

- The DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.
- If the *DCHs To Add* IE includes multiple *DCH Specific Info* IEs then the DRNS shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if all of them can be in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.
- [TDD - If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the DRNS shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]
- [FDD - For each DCH which does not belong to a set of co-ordinated DCHs, and which includes a *QE-Selector* IE set to "selected", the DRNS shall use the Transport channel BER from that DCH for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, ref. [4]. If the *QE-Selector* IE is set to "non-selected", the DRNS shall use the Physical channel BER for the QE in the UL data frames, ref. [4].]

- For a set of co-ordinated DCHs, the DRNS shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" for the QE in the UL data frames, ref. [4]. [FDD - If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, ref. [4]. If all DCHs have the *QE-Selector* IE set to "non-selected", the DRNS shall use the Physical channel BER for the QE, ref. [4].] [TDD - If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, ref. [4].]
- The DRNS 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 Uu interface in congestion situations within the DRNS once the new configuration has been activated.
- The *Traffic Class* IE may be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs. The DRNC should ignore the *Traffic Class* IE if the *TrCH Source Statistics Descriptor* IE indicates the value "RRC".
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the DRNS may use this information to determine the transport bearer characteristics to apply for the uplink for the related DCH or set of co-ordinated DCHs.
- The DRNS 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 DRNS 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 Startpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The DRNS 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 Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [FDD - If the *DRAC Control* IE is set to "requested" in *DCH Specific Info* IE for at least one DCH, and if the DRNS supports the DRAC, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Secondary CCPCH Info* IE for the FACH in which the DRAC information is sent, for each Radio Link supported by a cell in which DRAC is active. If the DRNS does not support DRAC, the DRNC shall not provide these IEs in the RADIO LINK RECONFIGURATION RESPONSE message.]
- If the *DCH Specific Info* IE includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCH Information* IE does not include the *Guaranteed UL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.
  - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCH Information* IE does not include the *Guaranteed DL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.

#### **DCH Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Delete* IEs, the DRNS shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the DRNS shall not include this set of co-ordinated DCHs in the new configuration.

**[FDD - Physical Channel Modification:]**

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *UL DPCH Information IE*, then the DRNS shall apply the parameters to the new configuration as follows: ]

- [FDD - If the *UL DPCH Information IE* includes the *TFCS IE* for the UL, the DRNS shall apply the new TFCS in the Uplink of the new configuration.]

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

- [FDD - If the *DL DPCH Information IE* includes the *TFCS IE* for the DL, the DRNS 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* for the DL, the DRNS shall apply the new TFCI Signalling Mode in the Downlink of the new configuration.]
- [FDD - If the *DL DPCH Information IE* includes the *Limited Power Increase IE* and the IE is set to "Used", the DRNS shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD - If the *DL DPCH Information IE* includes the *Limited Power Increase IE* and the IE is set to "Not Used", the DRNS shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information IE*, the DRNS shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode configuration. Any Transmission Gap Pattern Sequences already existing in the previous Compressed Mode Configuration are replaced by the new sequences once the new Compressed Mode Configuration has been activated. This new Compressed Mode Configuration shall be valid in the DRNS until the next Compressed Mode Configuration is configured in the DRNS or last Radio Link is deleted.]

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information IE*, and if the *Downlink Compressed Mode Method* in one or more Transmission Gap Pattern Sequence within the *Transmission Gap Pattern Sequence Information IE* is set to "SF/2", the DRNC shall include the *DL Code Information IE* in the RADIO LINK RECONFIGURATION RESPONSE message, without changing any of the DL Channelisation Codes or DL Scrambling Codes, indicating for each DL Channelisation Code whether the alternative scrambling code shall be used or not.]

~~[FDD - E-DPCH Handling: If the *E-DPCH Information IE* is included, the *UL-DPDCH Indicator for E-DCH operation IE* in the *UL-DPCH Information IE* shall be present as well. If the *UL-DPDCH Indicator for E-DCH operation IE* is set to "UL-DPDCH not present" the *Min-UL-Channelisation Code Length IE*, the *Puncture Limit IE* and the *TFCS IE*, within the *UL-DPCH Information IE* shall be ignored.]~~

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DPCH Information IE* which contains the *E-TFCS IE*, the DRNS shall use the *E-TFCS IE* for the E-DCH when reserving resources for the uplink of the new configuration. The DRNS shall apply the new TFCS in the uplink of the new configuration.]

**[TDD - UL/DL CCTrCH Modification]**

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Modify IE* or *DL CCTrCH To Modify IE*, the DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH Information To Modify IEs* or *DL CCTrCH Information To Modify IEs* which contain a *TFCS IE*, the DRNS shall apply the included *TFCS IE* as the new value(s) to the referenced CCTrCH. Otherwise the DRNS shall continue to apply the previous value(s) specified for this CCTrCH.]

[1.28Mcps TDD - If the *UL CCTrCH To Modify IE* includes *UL SIR Target IE*, the DRNS shall apply this value as the new configuration and use it for the UL inner loop power control according [12] and [22].]

**[TDD - UL/DL CCTrCH Deletion]**

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH Information To Delete* IEs or *DL CCTrCH Information To Delete* IEs, the DRNS shall not include the referenced CCTrCH in the new configuration.]

#### **DL Power Control:**

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *DL Reference Power Information* IE and the power balancing is active, the DRNS shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported, using the *DL Reference Power Information* IE in the RADIO LINK RECONFIGURATION REQUEST message. The updated reference power shall be used from the next adjustment period.]

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the DRNS, the DRNC shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### **[1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:**

[1.28Mcps TDD - If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC shall use the indicated values of *Uplink synchronisation stepsize* IE and *Uplink synchronisation frequency* IE when evaluating the timing of the UL synchronisation.]

#### **[1.28Mcps TDD - Uplink Timing Advance Control LCR]:**

[1.28Mcps TDD - The DRNC shall include the *Uplink Timing Advance Control LCR* IE in the RADIO LINK RECONFIGURATION RESPONSE message, if the Uplink Timing Advance Control parameters have been changed.]

#### **[FDD – Phase Reference Handling]:**

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *UE Support Of Dedicated Pilots For Channel Estimation* IE, the DRNC shall assume that dedicated pilots may be used for channel estimation for DCH or DSCH.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *UE Support Of Dedicated Pilots For Channel Estimation Of HS-DSCH* IE, the DRNC shall assume that dedicated pilots may be used for channel estimation for HS-DSCH.]

#### **HS-DSCH Setup:**

If the *HS-DSCH Information* IE is present in the RADIO LINK RECONFIGURATION REQUEST message, then:

- The DRNS shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The DRNC shall include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.
- The DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK

RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being established, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in [32].

- [FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD - The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD - The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD - *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD - The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the DRNS shall use the indicated HARQ Preamble Mode as described in [10].]

#### **Intra-DRNS Serving HS-DSCH Radio Link Change:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- The DRNS shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.
- The DRNC may include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.
- The DRNC shall allocate a new HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- If a reset of the MAC-hs is not required the DRNS shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION RESPONSE message.
- [FDD - The DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD - The DRNS shall allocate HS-SCCH codes corresponding to the HS-DSCH and the DRNC shall include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD - The DRNS shall allocate HS-SCCH parameters corresponding to the HS-DSCH and the DRNC shall include the [3.84Mcps TDD - *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD - The DRNC shall include the [3.84 Mcps TDD - *HS-PDSCH Timeslot Specific Information* IE] [1.28 Mcps TDD - *HS-PDSCH Timeslot Specific Information LCR* IE] in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [FDD - The DRNC shall include the *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### **HS-DSCH Modification:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information To Modify Unsynchronised* IE, then:

- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE for each HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in [32].
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Traffic Class* IE in the *HS-DSCH Information To Modify Unsynchronised* IE for a specific HS-DSCH MAC-d flow, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- [FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, then the DRNS shall use the indicated ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD - If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To Modify Unsynchronised* IE, the DRNS may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, the DRNS shall use the indicated power offset in the new configuration.]
- [FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To Modify Unsynchronised* IE, then the DRNS shall use the indicated HARQ Preamble Mode in the new configuration as described in [10].]

#### HS-DSCH MAC-d Flow Addition/Deletion:

If the RADIO LINK RECONFIGURATION REQUEST message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs, then the DRNS shall use this information to add/delete the indicated HS-DSCH MAC-d flows on the Serving HS-DSCH Radio Link. When an HS-DSCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.

If the RADIO LINK RECONFIGURATION REQUEST message includes an *HS-DSCH MAC-d Flows To Delete* IE requesting the deletion of all remaining HS-DSCH MAC-d flows for the UE Context, then the DRNC shall delete the HS-DSCH configuration from the UE Context and release the HS-PDSCH resources.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d Flows To Add* IE, then:

- The DRNS may use the *Traffic Class* IE for a specific HS-DSCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Traffic Class* IE in the *HS-DSCH MAC-d Flows To Add* IE for a specific HS-DSCH MAC-d flow, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B.
- The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being added, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in [32].
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the DRNS shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.



If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE in the *HS-DSCH Information* IE, then the DRNS shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.

#### **[FDD - E-DCH Setup:]**

**[FDD -** If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION REQUEST message and the *RL Information* IE contains the *RL specific E-DCH Information* IE for one Radio Link then:

- The DRNS shall setup the requested E-DCH resources on the Radio Link indicated by the *RL ID* IE in the *RL Information* IE.
- The RADIO LINK RECONFIGURATION REQUEST message shall contain in the *RL Information* IE for every RL the *E-DCH RL Indication* IE indicates whether this RL has configured E-DCH resources.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE for an E-DCH MAC-d flow in the *E-DCH FDD Information* IE, then the DRNS shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum Number of Retransmissions for E-DCH* IE for a E-DCH MAC-d flow in the *E-DCH FDD Information* IE, then the DRNS shall use this information to report if the maximum number of retransmissions has been exceeded.
- The DRNS may use the *Traffic Class* IE for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the *TNL QoS* IE is included for a E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.
- The DRNC shall include the *E-AGCH and E-RGCH and E-HICH FDD Scrambling Code* IE and the *E-RGCH and E-HICH Channelisation Code* IE and the corresponding ~~Sequence number for E-RGCH~~ *Signature Sequence* IE and the ~~Sequence number for E-HICH~~ *Signature Sequence* IE in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### **[FDD - Serving E-DCH Radio Link Change:]**

**[FDD -** If the RADIO LINK RECONFIGURATION PREPARE message includes the *Serving E-DCH RL* IE, this indicates the new Serving E-DCH Radio Link:

- If the old Serving E-DCH RL is within this DRNS, the DRNS shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link.
- If the new Serving E-DCH RL is within this DRNS, the DRNS shall allocate an E-RNTI identifier for the new Serving E-DCH Radio Link and include this identifier along with the channelisation code of the corresponding E-AGCH in the E-DCH FDD DL Control Channel Information IE in the RL Information Response IE for the indicated RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### **[FDD - E-DCH Modification:]**

**[FDD -** If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information To Modify* IE, then:

- ~~— If the *E-DCH MAC-d Flow Information* IE includes the *Payload CRC Presence Indicator* IE the DRNS shall apply the payload indicator in the Uplink of the user plane for the E-DCH in the new configuration.~~
- If the *E-DCH FDD Information To Modify* IE contains a *E-DCH MAC-d Flow Information* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this E-DCH in the new configuration according to Annex A.
- If the *TNL QoS* IE is included for a E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the DRNS to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Data Description Indicator* IE, the DRNC shall use the DDI values indicated in the *Data Description Indicator* IE in the new configuration.

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate IE* in the *E-DCH FDD Information To Modify IE*, the DRNS shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum Number of Retransmissions for E-DCH IE* for a E-DCH MAC-d flow in the *E-DCH FDD Information To Modify IE*, then the DRNS shall use this information to report if the maximum number of retransmissions has been exceeded.
- The DRNC shall include the *E-AGCH and E-RGCH and E-HICH FDD Scrambling Code IE* and the *E-RGCH and E-HICH Channelisation Code IE* and the corresponding ~~Sequence number for E-RGCH~~ *Signature Sequence IE* and the ~~Sequence number for E-HICH~~ *Signature Sequence IE* in the *E-DCH FDD DL Control Channel Information IE* in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### **FDD - E-DCH MAC-d Flow Addition/Deletion:**

FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *E-DCH MAC-d Flows To Add or E-DCH MAC-d Flows To Delete IEs*, then the DRNS shall use this information to add/delete the indicated E-DCH MAC-d flows on the Serving E-DCH Radio Link. When an E-DCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.]

~~If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete IE* requesting the deletion of all remaining E-DCH MAC-d flows for the UE Context, then the DRNC shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.~~

FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flows To Add IE*, then:

- The DRNS may use the *Traffic Class IE* for a specific E-DCH MAC-d flow to determine the transport bearer characteristics to apply between DRNC and Node B.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate IE* in the *E-DCH MAC-d Flows To Add IE*, the DRNS shall use this information to optimise MAC-e scheduling decisions.]

#### **FDD - E-DCH MAC-d Flow Deletion:**

FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete IEs*, then the DRNS shall use this information to delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.]

FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete IE* requesting the deletion of all remaining E-DCH MAC-d flows for the UE Context, then the DRNC shall delete the E-DCH configuration from the UE Context and release the E-DCH resources.]

#### **General:**

If the requested modifications are allowed by the DRNS, and if the DRNS has successfully allocated the required resources and changed to the new configuration, the DRNC shall respond to the SRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Specific DCH Information IE*, *HS-DSCH Information IE*, *HS-DSCH Information To Modify Unsynchronised IE*, *HS-DSCH MAC-d Flows To Add IE*, FDD - or E-DCH MAC-d Flows to Add IE], the DRNC may use the transport layer address and the binding identifier received from the SRNC when establishing a transport bearer for any Transport Channel, HS-DSCH MAC-d flow FDD - or E-DCH MAC-d flow] being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*.

The DRNC shall include the *Transport Layer Address IE* and the *Binding ID IE* in the RADIO LINK RECONFIGURATION RESPONSE message for any Transport Channel, HS-DSCH MAC-d flow FDD - or E-DCH MAC-d] flow being added, or any Transport Channel, HS-DSCH MAC-d flow FDD - or E-DCH MAC-d flow] being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*. The detailed frame protocol handling during transport bearer replacement is described in [4], subclause 5.10.1.

In the case of a set of co-ordinated DCHs requiring a new transport bearer on the Iur interface, the DRNC shall include the *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* only for one of the DCHs in the set of co-ordinated DCHs.

In the case of a Radio Link being combined with another Radio Link within the DRNS, the DRNC shall include the *Transport Layer Address IE* and the *Binding ID IE* in the *DCH Information Response IE* in the RADIO LINK RECONFIGURATION RESPONSE message for only one of the combined Radio Links.

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Allowed UL Rate IE* in the *DCH Information Response IE* for this Radio Link.

Any allowed rate for the downlink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Allowed DL Rate IE* in the *DCH Information Response IE* for this Radio Link.

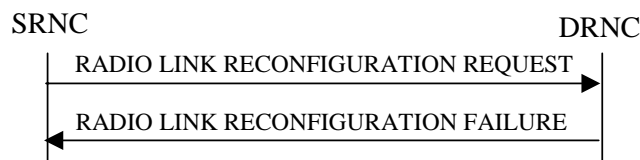
The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s), and the DRNC shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Maximum Uplink SIR IE* and *Minimum Uplink SIR IE* for each Radio Link when these values are changed.

[FDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* in the RADIO LINK RECONFIGURATION RESPONSE message. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power IE* or lower than indicated by the *Minimum DL TX Power IE* on any DL DPCH of the RL except during compressed mode, when the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[3.84 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* in the RADIO LINK RECONFIGURATION RESPONSE message. If the maximum or minimum power needs to be different for particular DCH type CCTrCHs, the DRNC shall include the new value(s) for that CCTrCH in the *CCTrCH Maximum DL TX Power IE* and *CCTrCH Minimum DL TX Power IE*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power IE/CCTrCH Maximum DL TX Power IE* or lower than indicated by the appropriate *Minimum DL TX Power IE/CCTrCH Minimum DL TX Power IE* on any DL DPCH within each CCTrCH of the RL.]

[1.28 Mcps TDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include the new value(s) in the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* in the RADIO LINK RECONFIGURATION RESPONSE message. If the maximum or minimum power needs to be different for particular timeslots within a DCH type CCTrCH, the DRNC shall include the new value(s) for that timeslot in the *Maximum DL TX Power IE* and *Minimum DL TX Power IE* within the *DL Timeslot Information LCR IE*. The DRNS shall not transmit with a higher power than indicated by the appropriate *Maximum DL TX Power IE* or lower than indicated by the appropriate *Minimum DL TX Power IE* on any DL DPCH within each timeslot of the RL.]

### 8.3.7.3 Unsuccessful Operation



**Figure 15: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation**

If the DRNS cannot allocate the necessary resources for all the new DCHs in a set of co-ordinated DCHs requested to be added, it shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsynchronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s), the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC, indicating the reason for failure.

Typical cause values are:

**Radio Network Layer Causes:**

- UL Scrambling Code Already in Use;
- DL Radio Resources not Available;
- UL Radio Resources not Available;
- Requested Configuration not Supported;
- CM not Supported;
- [FDD - HARQ Preamble Mode not supported].
- [\[FDD – E-DCH not supported\].](#)

**Miscellaneous Causes:**

- Control Processing Overload;
- Not enough User Plane Processing Resources.

### 8.3.7.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed, and the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD - or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure, and the DRNC shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes a *DCHs To Modify* IE or *DCHs To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs To Modify* IE or *DCHs To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *DL Reference Power Information* IE, but the power balancing is not active in the indicated RL(s), the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed and the DRNC shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Common" in the existing RL(s) but the *DL Reference Power Information* IE includes the *Individual DL Reference Power Information* IE, the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed and the DRNC shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Individual" in the existing RL(s) but the *DL Reference Power Information* IE includes the *Common DL Reference Power* IE, the DRNS shall reject the Unsynchronised Radio Link Reconfiguration procedure as having failed and the DRNC shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE., and not both are present for a transport bearer intended to be established, the DRNC shall reject the Unsynchronised Radio Link Reconfiguration procedure, and the DRNC shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the DRNS, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the UE Context, the DRNS shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

## 8.3.8 Physical Channel Reconfiguration

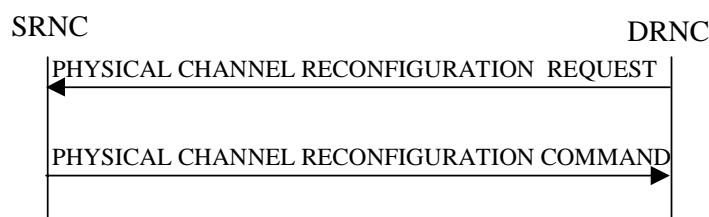
### 8.3.8.1 General

The Physical Channel Reconfiguration procedure is used by the DRNS to request the SRNC to reconfigure one of the configured physical channels.

This procedure shall use the signalling bearer connection for the relevant UE Context.

The DRNS shall not initiate the Physical Channel Reconfiguration procedure if a Prepared Reconfiguration exists as defined in subclause 3.1, or if a Synchronised Radio Link Reconfiguration Preparation procedure, Unsynchronised Radio Link Reconfiguration procedure or Radio Link Deletion procedure is ongoing for the relevant UE context.

### 8.3.8.2 Successful Operation



**Figure 16: Physical Channel Reconfiguration procedure, Successful Operation**

When the DRNC detects the need to modify one of its physical channels, it shall send a PHYSICAL CHANNEL RECONFIGURATION REQUEST to the SRNC.

The PHYSICAL CHANNEL RECONFIGURATION REQUEST message contains the new value(s) of the physical channel parameter(s) of the radio link for which the DRNC is requesting the reconfiguration.

[FDD - If compressed mode is prepared or active and at least one of the downlink compressed mode methods is "SF/2", the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the *DL Code Information* IE in the PHYSICAL CHANNEL RECONFIGURATION REQUEST message indicating for each DL Channelisation Code whether the alternative scrambling code will be used or not if the downlink compressed mode methods "SF/2" is activated.]

[TDD - The SRNC shall apply the new values for any of [3.84Mcps TDD - *UL Code Information* IE, *Midamble Shift And Burst Type* IE,], [1.28Mcps TDD - *UL Code Information LCR* IE, *Midamble Shift LCR* IE], *TDD DPCH Offset* IE,

*Repetition Period IE, Repetition Length IE, or TFCI presence IE* included in the *UL DPCH Information IE* within the *PHYSICAL CHANNEL RECONFIGURATION REQUEST* message, otherwise the previous values specified for this DPCH shall still apply.]

[TDD - The SRNC shall apply the new values for any of [3.84Mcps TDD - *DL Code Information IE, Midamble Shift And Burst Type IE,*] [1.28Mcps TDD - *DL Code Information LCR IE, Midamble Shift LCR IE,*] *TDD DPCH Offset IE Repetition Period IE, Repetition Length IE, or TFCI presence IE* included in the *DL DPCH Information IE* within the *PHYSICAL CHANNEL RECONFIGURATION REQUEST* message, otherwise the previous values specified for this DPCH shall still apply.]

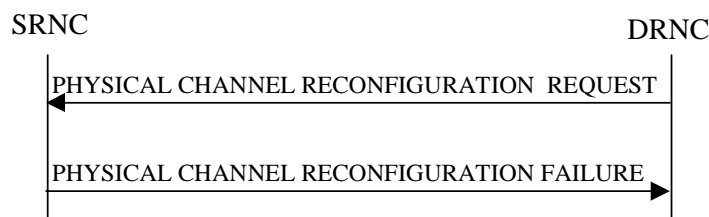
[3.84 Mcps TDD - If the *PHYSICAL CHANNEL RECONFIGURATION REQUEST* includes *HS-PDSCH Timeslot Specific Information IE* the SRNC shall apply the values of the *Midamble Shift And Burst Type IE* for each HS-PDSCH timeslot.]

[1.28 Mcps TDD - If the *PHYSICAL CHANNEL RECONFIGURATION REQUEST* includes *HS-PDSCH Timeslot Specific Information LCR IE* the SRNC shall apply the values of the *Midamble Shift LCR IE* for each HS-PDSCH timeslot.]

Upon receipt of the *PHYSICAL CHANNEL RECONFIGURATION REQUEST*, the SRNC shall decide an appropriate execution time for the change. The SRNC shall respond with a *PHYSICAL CHANNEL RECONFIGURATION COMMAND* message to the DRNC that includes the *CFN IE* indicating the execution time.

At the *CFN*, the DRNS shall switch to the new configuration that has been requested, and release the resources related to the old physical channel configuration.

### 8.3.8.3 Unsuccessful Operation



**Figure 17: Physical Channel Reconfiguration procedure, Unsuccessful Operation**

If the SRNC cannot accept the reconfiguration request it shall send the *PHYSICAL CHANNEL RECONFIGURATION FAILURE* message to the DRNC, including the reason for the failure in the *Cause IE*.

Typical cause values are:

#### Radio Network Layer Causes:

- Reconfiguration not Allowed.

### 8.3.8.4 Abnormal Conditions

While waiting for the *PHYSICAL CHANNEL RECONFIGURATION COMMAND* message, if the DRNC receives any of the *RADIO LINK RECONFIGURATION PREPARE*, *RADIO LINK RECONFIGURATION REQUEST*, or *RADIO LINK DELETION REQUEST* messages, the DRNC shall abort the Physical Channel Reconfiguration procedure. These messages thus override the DRNC request for physical channel reconfiguration.

When the SRNC receives a *PHYSICAL CHANNEL RECONFIGURATION REQUEST* message while a Synchronised Radio Link Reconfiguration procedure, Unsynchronised Radio Link Reconfiguration procedure or Radio Link Deletion procedure is ongoing, the SRNC shall ignore the request message and assume that receipt of any of the messages *RADIO LINK RECONFIGURATION PREPARE*, *RADIO LINK RECONFIGURATION REQUEST* or *RADIO LINK DELETION REQUEST* by the DRNC has terminated the Physical Channel Reconfiguration procedure. In this case the SRNC shall not send a *PHYSICAL CHANNEL RECONFIGURATION FAILURE* message to the DRNC.

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## 8.3.18 Radio Link Pre-emption

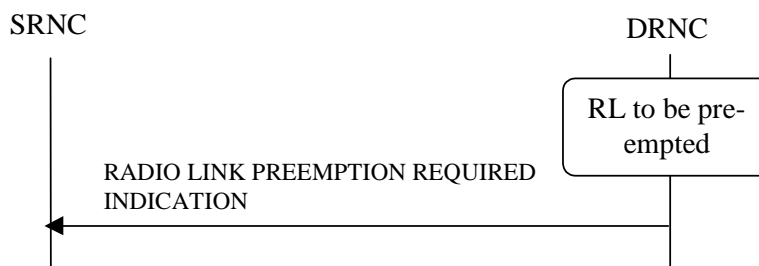
### 8.3.18.1 General

This procedure is started by the DRNS when resources need to be freed.

This procedure shall use the signalling bearer connection for the UE Context associated with the RL to be pre-empted.

The DRNS may initiate the Radio Link Pre-emption procedure at any time after establishing a Radio Link.

### 8.3.18.2 Successful Operation



**Figure 26B: Radio Link Pre-emption procedure, Successful Operation**

When DRNC detects that one or more Radio Link(s) should be pre-empted (see Annex A), it shall send the RADIO LINK PREEMPTION REQUIRED INDICATION message to the SRNC. If all Radio Links for a UE Context should be pre-empted, the *RL Information IE* shall not be included in the message. If one or several but not all Radio Link(s) should be pre-empted for an UE Context, the Radio Link(s) that should be pre-empted shall be indicated in the *RL Information IE*. The Radio Link(s) that should be pre-empted, should be deleted by the SRNC.

[FDD – If only the E-DCH traffic on a Radio Link should be pre-empted, the DRNC shall indicate the EDCH MAC-d flows that should be pre-empted by including the *E-DCH MAC-d Flow Specific Information IE* in the RADIO LINK PREEMPTION REQUIRED INDICATION message.]

When only the HS-DSCH traffic on a Radio Link should be pre-empted, the DRNC shall indicate the HS-DSCH MAC-d flow(s) that should be pre-empted by including the *HS-DSCH MAC-d Flow Specific Information IE* in the RADIO LINK PREEMPTION REQUIRED INDICATION message.

### 8.3.18.3 Abnormal Conditions

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## 8.3.19 Radio Link Congestion

### 8.3.19.1 General

This procedure is started by the DRNS when resource congestion is detected and the rate of one or more DCHs, corresponding to one or more radio links, is preferred to be limited in the UL and/or DL. This procedure is also used by the DRNC to indicate to the SRNC any change of the UL/DL resource congestion situation, affecting these radio links. This procedure shall use the signalling bearer connection for the relevant UE Context.

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



### 8.3.19.2 Successful Operation



**Figure 26C: Radio Link Congestion procedure, Successful Operation**

#### Start of an UL/DL Resource Congestion Situation

When the DRNC detects the start of a UL/DL resource congestion situation and prefers the rate of one or more DCHs for one or more Radio Link(s) to be limited below the maximum rate currently configured in the UL/DL TFS, it shall send the RADIO LINK CONGESTION INDICATION message to the SRNC. The DRNC shall indicate the cause of the congestion in the *Congestion Cause* IE and shall indicate all the Radio Links for which the rate of a DCH needs to be reduced. For each DCH within the RL with UL congestion, the DRNC shall indicate the desired maximum UL data rate with the *Allowed UL Rate* IE in the *Allowed Rate Information* IE. For each DCH within the RL with DL congestion, the DRNC shall indicate the desired maximum DL data rate with the *Allowed DL Rate* IE in the *Allowed Rate Information* IE.

[FDD – For each E-DCH MAC-d flow within the RL with UL congestion, the DRNC shall indicate all the MAC-d flows for which the rate cannot be fulfilled.]

When receiving the RADIO LINK CONGESTION INDICATION message the SRNC should reduce the rate in accordance with the *Congestion Cause* IE and the indicated *Allowed DL Rate* IE and/or *Allowed UL Rate* IE for a DCH.

#### Change of UL/DL Resource Congestion Situation

The DRNC shall indicate any change of the UL/DL resource congestion situation by sending the RADIO LINK CONGESTION INDICATION message in which the new allowed rate(s) of the DCHs are indicated by the *Allowed Rate Information* IE. In the case that for at least one DCH the new allowed rate is lower than the previously indicated allowed rate for that DCH, the *Congestion Cause* IE, indicating the cause of the congestion, shall also be included.

When receiving a RADIO LINK CONGESTION INDICATION message indicating a further rate decrease on any DCH(s) on any RL, the SRNC should reduce the rate in accordance with the indicated congestion cause and the indicated allowed rate(s) for the DCH(s).

#### End of UL/DL Resource Congestion Situation

The end of an UL resource congestion situation, affecting a specific RL, shall be indicated by including the TF corresponding to the highest data rate in the *Allowed UL Rate* IE in the *Allowed Rate Information* IE for the concerned RL. The end of a DL resource congestion situation, affecting a specific RL, shall be indicated by including the TF with the highest data rate in the *Allowed DL Rate* IE in the *Allowed Rate Information* IE for the concerned RL.

### 8.3.19.3 Abnormal Conditions

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## 8.3.20 Radio Link Activation

### 8.3.20.1 General

This procedure is used to activate or de-activate the DL transmission on the Uu interface regarding selected RLs.

### 8.3.20.2 Successful Operation





**Figure 26D: Radio Link Activation procedure**

This procedure is initiated by sending the RADIO LINK ACTIVATION COMMAND message from the SRNC to the DRNC. This procedure shall use the signalling bearer connection for the relevant UE Context.

Upon receipt, the DRNS shall for each concerned RL:

- if the *Delayed Activation Update* IE indicates "Activate":
  - if the *Activation Type* IE equals "Unsynchronised":
    - [FDD - start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [4].]
    - [TDD - start transmission on the new RL immediately as specified in [4].]
  - if the *Activation Type* IE equals "Synchronised":
    - [FDD - start transmission on the new RL after synchronisation is achieved in the DL user plane as specified in [4], however never before the CFN indicated in the *Activation CFN* IE.]
    - [TDD - start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in [4].]
  - [FDD - the DRNS shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH of the RL when starting transmission until either UL synchronisation on the Uu interface is achieved for the RLS or power balancing is activated. During this period no inner loop power control shall be performed and, unless activated by the DL POWER CONTROL REQUEST message, no power balancing shall be performed. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) and downlink power balancing adjustments (see 8.3.7).]
  - [TDD - the DRNS shall apply the power level indicated in the *Initial DL Tx Power* IE to the transmission on each DL DPCH and on each Time Slot of the RL when starting transmission until the UL synchronisation on the Uu interface is achieved for the RL. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[22], subclause 4.2.3.3).]
  - [FDD - if the *Propagation Delay* IE is included, the DRNS may use this information to speed up the detection of UL synchronisation on the Uu interface.]
  - [FDD - if the *First RLS Indicator* IE is included, it indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the DRNS to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]
- if the *Delayed Activation Update* IE indicates "Deactivate":
  - stop DL transmission immediately if the Deactivation Type IE equals "Unsynchronised", or at the CFN indicated by the Deactivation CFN IE if the Deactivation Type IE equals "Synchronised".

### 8.3.20.3 Abnormal Conditions

[FDD - If the *Delayed Activation Update* IE is included in the RADIO LINK ACTIVATION COMMAND message, it indicates "Activate" and the *First RLS Indicator* IE is not included, the DRNC shall initiate the ERROR INDICATION procedure.]

## 8.3.21 Radio Link Parameter Update

### 8.3.21.1 General

The Radio Link Parameter Update procedure is executed by the DRNS to update parameters related to HS-DSCH [FDD - or E-DCH] on a radio link for a UE-UTRAN connection or to update phase reference on a list of the radio links.

This procedure shall use the signalling bearer connection for the relevant UE context.

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

### 8.3.21.2 Successful Operation



**Figure 26E: Radio Link Parameter Update Indication, Successful Operation**

The Radio Link Parameter Update procedure is initiated by the DRNS by sending the RADIO LINK PARAMETER UPDATE INDICATION message to the SRNC.

#### **HS-DSCH related Parameter(s) Updating:**

If RADIO LINK PARAMETER UPDATE INDICATION message is used to update the parameters related to HS-DSCH, it contains suggested value(s) of the HS-DSCH related parameter(s) that should be reconfigured on the radio link.

If the DRNS needs to update HS-DSCH related parameters, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including [FDD - *HS-DSCH FDD Update Information IE*] [TDD - *HS-DSCH TDD Update Information IE*].

If the DRNS needs to allocate new HS-SCCH Codes, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-SCCH Code Change Indicator IE*.

[FDD - If the DRNS needs to update the CQI Feedback Cycle  $k$ , CQI Repetition Factor, ACK-NACK Repetition Factor, CQI Power Offset, ACK Power Offset and/or NACK Power Offset, the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *CQI Feedback Cycle  $k$  IE*, *CQI Repetition Factor IE*, *ACK-NACK Repetition Factor IE*, *CQI Power Offset IE*, *ACK Power Offset IE* and/or *NACK Power Offset IE*.]

[TDD - If the DRNS needs to update the TDD ACK-NACK Power Offset the DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *TDD ACK-NACK Power Offset IE*.]

#### **[FDD – Phase Reference Handling]:**

[FDD – If DRNS needs to update phase reference for the channel estimation for one or several Radio Links, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *Phase Reference Update Information IE* for the concerned RL(s).]

#### **[FDD – E-DCH Handling]:**

[FDD – If DRNS needs to update E-DCH related parameters, the DRNC shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *E-DCH FDD Update Information IE*.]

8.3.21.3 Abnormal Conditions

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## 9 Elements for RNSAP Communication

### 9.1 Message Functional Definition and Content

## 9.1.3 RADIO LINK SETUP REQUEST

## 9.1.3.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
SRNC-ID	M		RNC-ID 9.2.1.50		YES	reject
S-RNTI	M		9.2.1.53		YES	reject
D-RNTI	O		9.2.1.24		YES	reject
Allowed Queuing Time	O		9.2.1.2		YES	reject
<b>UL DPCH Information</b>		1			YES	reject
>UL Scrambling Code	M		9.2.2.53		–	
>Min UL Channelisation Code Length	M		9.2.2.25		–	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.24		–	
>Puncture Limit	M		9.2.1.46	For the UL.	–	
>TFCS	M		9.2.1.63		–	
>UL DPCH Slot Format	M		9.2.2.52		–	
>Uplink SIR Target	O		Uplink SIR 9.2.1.69		–	
>Diversity mode	M		9.2.2.8		–	
>SSDT Cell Identity Length	O		9.2.2.41		–	
>S Field Length	O		9.2.2.36		–	
>DPC Mode	O		9.2.2.12A		YES	reject
>UL DPDCH Indicator for E-DCH operation	C-EDCHInfo		<a href="#">9.2.2.x1</a> ENUMERATED (UL-DPDCH present, UL-DPDCH not present)		YES	reject
<b>E-DPCH Information</b>		0..1			YES	reject
>Min UL Channelisation Code Length for E-DCH FDD	M		9.2.2.25A		–	
>Max Number of UL E-DPDCHs	C-CodeLenE DCH		9.2.2.24e	more than one E-DPDCHs possible in case of SF=2	–	
>Puncture Limit	M		9.2.1.50		–	
>E-TFCS	M		9.2.1.63A		–	
>E-TTI	M		ENUMERATED (2ms, 40ms)		–	
<b>DL DPCH Information</b>		1			YES	reject
>TFCS	M		9.2.1.63		–	
>DL DPCH Slot Format	M		9.2.2.9		–	
>Number of DL Channelisation Codes	M		9.2.2.26A		–	
>TFCI Signalling Mode	M		9.2.2.46		–	
>TFCI Presence	C-SlotFormat		9.2.1.55		–	
>Multiplexing Position	M		9.2.2.26		–	
<b>&gt;Power Offset Information</b>		1			–	
>>PO1	M		Power Offset 9.2.2.30	Power offset for the TFCI bits.	–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>PO2	M		Power Offset 9.2.2.30	Power offset for the TPC bits.	–	
>>PO3	M		Power Offset 9.2.2.30	Power offset for the pilot bits.	–	
>FDD TPC Downlink Step Size	M		9.2.2.16		–	
>Limited Power Increase	M		9.2.2.21A		–	
>Inner Loop DL PC Status	M		9.2.2.21a		–	
>Split Type	O		9.2.2.39a		YES	reject
>Length of TFCI2	O		9.2.2.21C		YES	reject
DCH Information	M		DCH FDD Information 9.2.2.4A		YES	reject
DSCH Information	O		DSCH FDD Information 9.2.2.13A		YES	reject
<b>RL Information</b>		<i>1...&lt;maxn oofRLs&gt;</i>			EACH	notify
>RL ID	M		9.2.1.49		–	
>C-ID	M		9.2.1.6		–	
>First RLS Indicator	M		9.2.2.16A		–	
>Frame Offset	M		9.2.1.30		–	
>Chip Offset	M		9.2.2.1		–	
>Propagation Delay	O		9.2.2.33		–	
>Diversity Control Field	C – NotFirstRL		9.2.1.20		–	
>Initial DL TX Power	O		DL Power 9.2.1.21A		–	
>Primary CPICH Ec/No	O		9.2.2.32		–	
>SSDT Cell Identity	O		9.2.2.40		–	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.48		–	
>SSDT Cell Identity for EDSCHPC	C- EDSCHPC		9.2.2.40A		YES	ignore
>Enhanced Primary CPICH Ec/No	O		9.2.2.13I		YES	ignore
>RL Specific DCH Information	O		9.2.1.49A		YES	ignore
>Delayed Activation	O		9.2.1.19Aa		YES	reject
>Qth Parameter	O		9.2.2.34a		YES	ignore
>Cell Portion ID	O		9.2.2.E		YES	ignore
>RL specific E-DCH Information	O		<b>E-DCH MAC-d Flows Information</b> 9.2.1.300 C		YES	reject
>E-DCH RL Indication	O		9.2.2.4E		YES	reject
Transmission Gap Pattern Sequence Information	O		9.2.2.47A		YES	reject
Active Pattern Sequence Information	O		9.2.2.A		YES	reject
Permanent NAS UE Identity	O		9.2.1.73		YES	ignore
DL Power Balancing Information	O		9.2.2.10A		YES	ignore
HS-DSCH Information	O		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-PDSCH RL ID	C – InfoHSDS		RL ID 9.2.1.49		YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
	CH					
UE Support Of Dedicated Pilots For Channel Estimation	O		9.2.2.50A		YES	ignore
UE Support Of Dedicated Pilots For Channel Estimation Of HS-DSCH	O		9.2.2.50B		YES	ignore
<b>MBMS Bearer Service List</b>		$0 \dots < \text{maxnoofMBMS} >$			GLOBAL	notify
>TMGI	M		9.2.1.80		-	
<b>E-DPCH Information</b>		<u>0..1</u>			<u>YES</u>	<u>reject</u>
>Min UL Channelisation Code Length for E-DCH FDD	<u>M</u>		<u>9.2.2.25A</u>		<u>=</u>	
>Max Number of UL E-DPDCHs	<u>C-CodeLenEDCH</u>		<u>9.2.2.24e</u>		<u>=</u>	
>Puncture Limit	<u>M</u>		<u>9.2.1.50</u>		<u>=</u>	
>E-TFCS	<u>M</u>		<u>9.2.2.x2</u>		<u>=</u>	
>E-TTI	<u>M</u>		<u>9.2.2.x3</u>		<u>=</u>	
E-DCH FDD Information	O		9.2.2.4B		YES	reject
Serving E-DCH RL <del>ID</del>	C-EDCHInfo		<del>RLID</del> 9.2.1.45C9		YES	reject

Condition	Explanation
CodeLen	The IE shall be present if <i>Min UL Channelisation Code length</i> IE equals to 4
SlotFormat	The IE shall be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
NotFirstRL	The IE shall be present if the RL is not the first one in the <i>RL Information</i> IE.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> IE is not equal to "none".
EDSCHPC	This IE shall be present if <i>Enhanced DSCH PC</i> IE is present in the <i>DSCH Information</i> IE.
InfoHSDSCH	This IE shall be present if <i>HS-DSCH Information</i> IE is present.
EDCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.
CodeLenEDCH	The IE shall be present if <i>Min UL Channelisation Code length for E-DCH FDD</i> IE equals to 2.

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for one UE.
<i>maxnoofMBMS</i>	Maximum number of MBMS bearer services that a UE can join.

## 9.1.4 RADIO LINK SETUP RESPONSE

## 9.1.4.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
D-RNTI	O		9.2.1.24		YES	ignore
CN PS Domain Identifier	O		9.2.1.12		YES	ignore
CN CS Domain Identifier	O		9.2.1.11		YES	ignore
<b>RL Information Response</b>		1..<maxno ofRLs>			EACH	ignore
>RL ID	M		9.2.1.49		–	
>RL Set ID	M		9.2.2.35		–	
>URA Information	O		9.2.1.70B		–	
>SAI	M		9.2.1.52		–	
>Cell GAI	O		9.2.1.5A		–	
>UTRAN Access Point Position	O		9.2.1.70A		–	
>Received Total Wide Band Power	M		9.2.2.35A		–	
>Secondary CCPCH Info	O		9.2.2.37B		–	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		–	
>CHOICE Diversity Indication	M				–	
>>Combining					–	
>>>RL ID	M		9.2.1.49	Reference RL ID for the combining	–	
>>>DCH Information Response	O		9.2.1.16A		YES	ignore
>>>E-DCH FDD Information Response	O		9.2.2.4C		YES	ignore
>>Non Combining or First RL					–	
>>>DCH Information Response	M		9.2.1.16A		–	
>>>E-DCH FDD Information Response	M		9.2.2.4C		YES	ignore
>SSDT Support Indicator	M		9.2.2.43		–	
>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>Minimum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>Closed Loop Timing Adjustment Mode	O		9.2.2.3A		–	
>Maximum Allowed UL Tx Power	M		9.2.1.35		–	
>Maximum DL TX Power	M		DL Power 9.2.1.21A		–	
>Minimum DL TX Power	M		DL Power 9.2.1.21A		–	
>Primary Scrambling Code	O		9.2.1.45		–	
>UL UARFCN	O		UARFCN 9.2.1.66	Corresponds to Nu in ref. [6]	–	
>DL UARFCN	O		UARFCN 9.2.1.66	Corresponds to Nd in ref. [6]	–	
>Primary CPICH Power	M		9.2.1.44		–	
>DSCH Information Response	O		DSCH FDD		YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			Information Response 9.2.2.13B			
>Neighbouring UMTS Cell Information	O		9.2.1.41A		–	
>Neighbouring GSM Cell Information	O		9.2.1.41C		–	
>PC Preamble	M		9.2.2.27a		–	
>SRB Delay	M		9.2.2.39A		–	
>Cell GA Additional Shapes	O		9.2.1.5B		YES	ignore
>DL Power Balancing Activation Indicator	O		9.2.2.10B		YES	ignore
>TFCI PC Support Indicator	O		9.2.2.46A		YES	ignore
>HCS Prio	O		9.2.1.30N		YES	ignore
>Primary CPICH Usage For Channel Estimation	O		9.2.2.32A		YES	ignore
>Secondary CPICH Information	O		9.2.2.38A		YES	ignore
>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	O		9.2.2.4D		YES	ignore
Uplink SIR Target	O		Uplink SIR 9.2.1.69		YES	ignore
Criticality Diagnostics	O		9.2.1.13		YES	ignore
DSCH-RNTI	O		9.2.1.26Ba		YES	ignore
HS-DSCH-RNTI	O		9.2.1.30P		YES	ignore
HS-DSCH Information Response	O		HS-DSCH FDD Information Response 9.2.2.19b		YES	ignore

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for one UE.



## 9.1.5 RADIO LINK SETUP FAILURE

## 9.1.5.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
D-RNTI	O		9.2.1.24		YES	ignore
CN PS Domain Identifier	O		9.2.1.12		YES	ignore
CN CS Domain Identifier	O		9.2.1.11		YES	ignore
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.5		–	
>RL Specific					–	
>>Unsuccessful RL Information Response		1..<maxno ofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.49		–	
>>>Cause	M		9.2.1.5		–	
>>Successful RL Information Response		0..<maxno ofRLs-1>			EACH	ignore
>>>RL ID	M		9.2.1.49		–	
>>>RL Set ID	M		9.2.2.35		–	
>>>URA Information	O		9.2.1.70B		–	
>>>SAI	M		9.2.1.52		–	
>>>Cell GAI	O		9.2.1.5A		–	
>>>UTRAN Access Point Position	O		9.2.1.70A		–	
>>>Received Total Wide Band Power	M		9.2.2.35A		–	
>>>Secondary CCPCH Info	O		9.2.2.37B		–	
>>>DL Code Information	M		FDD DL Code Information 9.2.2.14A		–	
>>>CHOICE Diversity Indication	M				–	
>>>>Combining					–	
>>>>>RL ID	M		9.2.1.49	Reference RL ID for the combining	–	
>>>>>DCH Information Response	O		9.2.1.16A		YES	ignore
>>>>>E-DCH FDD Information Response	O		9.2.2.4C		YES	ignore
>>>>>Non Combining or First RL					–	
>>>>>DCH Information Response	M		9.2.1.16A		–	
>>>>>E-DCH FDD Information Response	O		9.2.2.4C		YES	ignore
>>>SSDT Support Indicator	M		9.2.2.43		–	
>>>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>>>Minimum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>>>Closed Loop Timing Adjustment Mode	O		9.2.2.3A		–	
>>>Maximum Allowed UL Tx Power	M		9.2.1.35		–	
>>>Maximum DL TX Power	M		DL Power 9.2.1.21A		–	
>>>Minimum DL TX Power	M		DL Power 9.2.1.21A		–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>>Primary CPICH Power	M		9.2.1.44		–	
>>>Primary Scrambling Code	O		9.2.1.45		–	
>>>UL UARFCN	O		UARFCN 9.2.1.66	Corresponds to Nu in ref. [6]	–	
>>>DL UARFCN	O		UARFCN 9.2.1.66	Corresponds to Nd in ref. [6]	–	
>>>DSCH Information Response	O		DSCH FDD Information Response 9.2.2.13B		YES	ignore
>>>Neighbouring UMTS Cell Information	O		9.2.1.41A		–	
>>>Neighbouring GSM Cell Information	O		9.2.1.41C		–	
>>>PC Preamble	M		9.2.2.27a		–	
>>>SRB Delay	M		9.2.2.39A		–	
>>>Cell GA Additional Shapes	O		9.2.1.5B		YES	ignore
>>>DL Power Balancing Activation Indicator	O		9.2.2.10B		YES	ignore
>>>TFCI PC Support Indicator	O		9.2.2.46A		YES	ignore
>>>HCS Prio	O		9.2.1.30N		YES	ignore
>>>Primary CPICH Usage For Channel Estimation	O		9.2.2.32A		YES	ignore
>>>Secondary CPICH Information	O		9.2.2.38A		YES	ignore
>>>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.35		YES	ignore
>>>E-DCH FDD DL Control Channel Information	O		9.2.2.4D		YES	ignore
>>DSCH-RNTI	O		9.2.1.26Ba		YES	ignore
>>HS-DSCH-RNTI	O		9.2.1.30P		YES	ignore
>>HS-DSCH Information Response	O		HS-DSCH FDD Information Response 9.2.2.19b		YES	ignore
Uplink SIR Target	O		Uplink SIR 9.2.1.69		YES	ignore
Criticality Diagnostics	O		9.2.1.13		YES	ignore

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for one UE.

## 9.1.6 RADIO LINK ADDITION REQUEST

## 9.1.6.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
Uplink SIR Target	M		Uplink SIR 9.2.1.69		YES	reject
<b>RL Information</b>		<i>1..&lt;maxn oofRLs- 1&gt;</i>			EACH	notify
>RL ID	M		9.2.1.49		–	
>C-ID	M		9.2.1.6		–	
>Frame Offset	M		9.2.1.30		–	
>Chip Offset	M		9.2.2.1		–	
>Diversity Control Field	M		9.2.1.20		–	
>Primary CPICH Ec/No	O		9.2.2.32		–	
>SSDT Cell Identity	O		9.2.2.40			
>Transmit Diversity Indicator	O		9.2.2.48		–	
>DL Reference Power	O		DL Power 9.2.1.21A	Power on DPCH	YES	ignore
>Enhanced Primary CPICH Ec/No	O		9.2.2.13l		YES	ignore
>RL Specific DCH Information	O		9.2.1.49A		YES	ignore
>Delayed Activation	O		9.2.1.19Aa		YES	reject
>Qth Parameter	O		9.2.2.34a		YES	ignore
>RL specific E-DCH Information	O		<b>E-DCH MAC-d Flows Information</b> 9.2.1.300 C		YES	reject
>E-DCH RL Indication	O		9.2.2.4E		YES	reject
Active Pattern Sequence Information	O		9.2.2A	Either all the already active Transmission Gap Sequence(s) are addressed (Transmission Gap Pattern sequence shall overlap with the existing one) or none of the transmission gap sequences is activated.	YES	reject
DPC Mode	O		9.2.2.12A		YES	reject
Permanent NAS UE Identity	O		9.2.1.73		YES	ignore
Serving E-DCH RL ID	C- EDCHInfo		<b>RL ID</b> 9.2.1.45C9		YES	reject

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of radio links for one UE.

Condition	Explanation
EDCHInfo	This IE shall be present if <i>RL specific E-DCH Information</i> IE is present for at least one RL indicated in the message.

## 9.1.7 RADIO LINK ADDITION RESPONSE

## 9.1.7.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
<b>RL Information Response</b>		<i>1..&lt;maxnoof RLS-1&gt;</i>			EACH	ignore
>RL ID	M		9.2.1.49		–	
>RL Set ID	M		9.2.2.35		–	
>URA Information	O		9.2.1.70B		–	
>SAI	M		9.2.1.52		–	
>Cell GAI	O		9.2.1.5A		–	
>UTRAN Access Point Position	O		9.2.1.70A		–	
>Received Total Wide Band Power	M		9.2.2.35A		–	
>Secondary CCPCH Info	O		9.2.2.37B		–	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		YES	ignore
>CHOICE <i>Diversity Indication</i>	M				–	
>> <i>Combining</i>					–	
>>>RL ID	M		9.2.1.49	Reference RL ID	–	
>>>DCH Information Response	O		9.2.1.16A		YES	ignore
>>>E-DCH FDD Information Response	O		9.2.2.4C		YES	ignore
>> <i>Non Combining</i>					–	
>>>DCH Information Response	M		9.2.1.16A		–	
>>>E-DCH FDD Information Response	O		9.2.2.4C		YES	ignore
>SSDT Support Indicator	M		9.2.2.43		–	
>Minimum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>Closed Loop Timing Adjustment Mode	O		9.2.2.3A		–	
>Maximum Allowed UL Tx Power	M		9.2.1.35		–	
>Maximum DL TX Power	M		DL Power 9.2.1.21A		–	
>Minimum DL TX Power	M		DL Power 9.2.1.21A		–	
>Neighbouring UMTS Cell Information	O		9.2.1.41A		–	
>Neighbouring GSM Cell Information	O		9.2.1.41C		–	
>PC Preamble	M		9.2.2.27a		–	
>SRB Delay	M		9.2.2.39A		–	
>Primary CPICH Power	M		9.2.1.44		–	
>Cell GA Additional Shapes	O		9.2.1.5B		YES	ignore
>DL Power Balancing Activation Indicator	O		9.2.2.10B		YES	ignore
>TFCI PC Support Indicator	O		9.2.2.46A		YES	ignore
>HCS Prio	O		9.2.1.30N		YES	ignore
>Primary CPICH Usage	O		9.2.2.32A		YES	ignore

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
For Channel Estimation						
>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	O		9.2.2.4D		YES	ignore
Criticality Diagnostics	O		9.2.1.13		YES	ignore

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of radio links for one UE.

## 9.1.8 RADIO LINK ADDITION FAILURE

## 9.1.8.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.5		–	
>RL Specific					–	
>>Unsuccessful RL Information Response		1..<maxnoof RLS-1>			EACH	ignore
>>>RL ID	M		9.2.1.49		–	
>>>Cause	M		9.2.1.5		–	
>>Successful RL Information Response		0..<maxnoof RLS-2>			EACH	ignore
>>>RL ID	M		9.2.1.49		–	
>>>RL Set ID	M		9.2.2.35		–	
>>>URA Information	O		9.2.1.70B		–	
>>>SAI	M		9.2.1.52		–	
>>>Cell GAI	O		9.2.1.5A		–	
>>>UTRAN Access Point Position	O		9.2.1.70A		–	
>>>Received Total Wide Band Power	M		9.2.2.35A		–	
>>>Secondary CCPCH Info	O		9.2.2.37B		–	
>>>DL Code Information	M		FDD DL Code Information 9.2.2.14A		YES	ignore
>>>CHOICE Diversity Indication	M				–	
>>>>Combining					–	
>>>>>RL ID	M		9.2.1.49	Reference RL ID	–	
>>>>>DCH Information Response	O		9.2.1.16A		YES	ignore
>>>>>E-DCH FDD Information Response	M		9.2.2.4C		YES	ignore
>>>>>Non Combining					–	
>>>>>DCH Information Response	M		9.2.1.16A		–	
>>>>>E-DCH FDD Information Response	M		9.2.2.4C		YES	ignore
>>>SSDT Support Indicator	M		9.2.2.43		–	
>>>Minimum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>>>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>>>Closed Loop Timing Adjustment Mode	O		9.2.2.3A		–	
>>>Maximum Allowed UL Tx Power	M		9.2.1.35		–	
>>>Maximum DL TX Power	M		DL Power 9.2.1.21A		–	
>>>Minimum DL TX Power	M		DL Power 9.2.1.21A		–	
>>>Neighbouring	O		9.2.1.41A		–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
UMTS Cell Information						
>>>Neighbouring GSM Cell Information	O		9.2.1.41C		–	
>>>Primary CPICH Power	M		9.2.1.44		–	
>>>PC Preamble	M		9.2.2.27a		–	
>>>SRB Delay	M		9.2.2.39A		–	
>>>Cell GA Additional Shapes	O		9.2.1.5B		YES	ignore
>>>DL Power Balancing Activation Indicator	O		9.2.2.10B		YES	ignore
>>>TFCI PC Support Indicator	O		9.2.2.46A		YES	ignore
>>>HCS Prio	O		9.2.1.30N		YES	ignore
>>>Primary CPICH Usage For Channel Estimation	O		9.2.2.32A		YES	ignore
>>>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.35		YES	ignore
>>>E-DCH FDD DL Control Channel Information	O		9.2.2.4D		YES	ignore
Criticality Diagnostics	O		9.2.1.13		YES	ignore

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of radio links for one UE.

### 9.1.9 RADIO LINK DELETION REQUEST

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
<b>RL Information</b>		1..<maxnoofRLs>			EACH	notify
>RL ID	M		9.2.1.49		–	

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of radio links for one UE

### 9.1.10 RADIO LINK DELETION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
Criticality Diagnostics	O		9.2.1.13		YES	ignore



## 9.1.11 RADIO LINK RECONFIGURATION PREPARE

## 9.1.11.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
Allowed Queuing Time	O		9.2.1.2		YES	reject
<b>UL DPCH Information</b>		0..1			YES	reject
>UL Scrambling Code	O		9.2.2.53		–	
>UL SIR Target	O		Uplink SIR 9.2.1.69		–	
>Min UL Channelisation Code Length	O		9.2.2.25		–	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.24		–	
>Puncture Limit	O		9.2.1.46	For the UL.	–	
>TFCS	O		9.2.1.63	TFCS for the UL.	–	
>UL DPCCH Slot Format	O		9.2.2.52		–	
>Diversity Mode	O		9.2.2.8		–	
>SSDT Cell Identity Length	O		9.2.2.41		–	
>S-Field Length	O		9.2.2.36		–	
<u>&gt;UL DPDCH Indicator for E-DCH operation</u>	<u>C- EDCHInfo</u>		<u>ENUMERATED (UL-DPDCH present, UL-DPDCH not present)</u>		<u>YES</u>	<u>reject</u>
<b>DL DPCH Information</b>		0..1			YES	reject
>TFCS	O		9.2.1.63	TFCS for the DL.	–	
>DL DPCH Slot Format	O		9.2.2.9		–	
>Number of DL Channelisation Codes	O		9.2.2.26A		–	
>TFCI Signalling Mode	O		9.2.2.46		–	
>TFCI Presence	C- SlotFormat		9.2.1.55		–	
>Multiplexing Position	O		9.2.2.26		–	
>Limited Power Increase	O		9.2.2.21A		–	
>Split Type	O		9.2.2.39a		YES	reject
>Length of TFCI2	O		9.2.2.21C		YES	reject
DCHs To Modify	O		FDD DCHs To Modify 9.2.2.13C		YES	reject
DCHs To Add	O		DCH FDD Information 9.2.2.4A		YES	reject
<b>DCHs To Delete</b>		0..<maxnoof DCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.16		–	
<b>DSCHs To Modify</b>		0..1			YES	reject
<b>&gt;DSCH Info</b>		0..<maxnoof DSCHs>			–	
>>DSCH ID	M		9.2.1.26A		–	
>>TrCH Source Statistics Descriptor	O		9.2.1.65		–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>>Transport Format Set	O		9.2.1.64	For DSCH	–	
>>Allocation/Retention Priority	O		9.2.1.1		–	
>>Scheduling Priority Indicator	O		9.2.1.51A		–	
>>BLER	O		9.2.1.4		–	
>>Transport Bearer Request Indicator	M		9.2.1.61		–	
>>Traffic Class	O		9.2.1.58A		YES	ignore
>>Binding ID	O		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>Transport Layer Address	O		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>PDSCH RL ID	O		RL ID 9.2.1.49		–	
>TFCS	O		9.2.1.63	For DSCH	–	
>Enhanced DSCH PC Indicator	O		9.2.2.13F		YES	ignore
>Enhanced DSCH PC	C-EDSCHPC On		9.2.2.13D		YES	ignore
DSCHs To Add	O		DSCH FDD Information 9.2.2.13A		YES	reject
<b>DSCHs to Delete</b>		0..1			YES	reject
<b>&gt;DSCH Info</b>		1..<maxnoof DSCHs>			–	
>>DSCH ID	M		9.2.1.26A		–	
<b>RL Information</b>		0..<maxnoof RLS>			EACH	reject
>RL ID	M		9.2.1.49		–	
>SSDT Indication	O		9.2.2.42		–	
>SSDT Cell Identity	C-SSDTIndON		9.2.2.40		–	
>Transmit Diversity Indicator	C-Diversity mode		9.2.2.48		–	
>SSDT Cell Identity for EDSCHPC	C-EDSCHPC		9.2.2.40A		YES	ignore
>DL Reference Power	O		DL Power 9.2.1.21A	Power on DPCH	YES	ignore
>RL Specific DCH Information	O		9.2.1.49A		YES	ignore
>DL DPCH Timing Adjustment	O		9.2.2.9A	Required RL Timing Adjustment	YES	reject
>Qth Parameter	O		9.2.2.34a		YES	ignore
>Phase Reference Update Indicator	O		9.2.2.27B		YES	ignore
>RL specific E-DCH Information	O		E-DCH MAC-d Flows Information 9.2.1.300 C		YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
>E-DCH MAC-d Flows to Add	O		<a href="#">RL specific E-DCH Information E-DCH MAC-d Flows Information</a> 9.2.1.300C		YES	reject
<del>&gt;E-DCH MAC-d Flows to Delete</del>	<del>O</del>		<del>9.2.2.300D</del>		<del>YES</del>	<del>reject</del>
>E-DCH RL Indication	O		9.2.2.4E		YES	reject
Transmission Gap Pattern Sequence Information	O		9.2.2.47A		YES	reject
HS-DSCH Information	O		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-DSCH Information To Modify	O		9.2.1.30Q		YES	reject
HS-DSCH MAC-d Flows To Add	O		HS-DSCH MAC-d Flows Information 9.2.1.300A		YES	reject
HS-DSCH MAC-d Flows To Delete	O		9.2.1.300B		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.49		YES	reject
UE Support Of Dedicated Pilots For Channel Estimation	O		9.2.2.50A		YES	ignore
UE Support Of Dedicated Pilots For Channel Estimation Of HS-DSCH	O		9.2.2.50B		YES	ignore
<b>E-DPCH Information</b>		<b>0..1</b>			<b>YES</b>	<b>reject</b>
<del>&gt;Min UL Channelisation Code Length for E-DCH FDD</del>	<del>O</del>		<del>9.2.2.25A</del>		<del>=</del>	
<del>&gt;Max Number of E-DPDCHs</del>	<del>C-CodeLenE DCH</del>		<del>9.2.2.24e</del>	<del>more than one E-DPDCHs possible in case of SF=2</del>	<del>=</del>	
<del>&gt;Puncture Limit</del>	<del>O</del>		<del>9.2.1.50</del>		<del>=</del>	
<del>&gt;E-TFCS</del>	<del>O</del>		<del>9.2.1.63A</del>		<del>=</del>	
<del>&gt;E-TTI</del>	<del>O</del>		<del>ENUMERATED (2ms, 40ms)</del>		<del>=</del>	
<b>E-DPCH Information</b>		<b>0..1</b>			<b>YES</b>	<b>reject</b>
<del>&gt;Min UL Channelisation Code Length for E-DCH FDD</del>	<del>O</del>		<del>9.2.2.25A</del>		<del>=</del>	
<del>&gt;Max Number of E-DPDCHs</del>	<del>C-CodeLenE DCH</del>		<del>9.2.2.24e</del>		<del>=</del>	
<del>&gt;Puncture Limit</del>	<del>O</del>		<del>9.2.1.50</del>		<del>=</del>	
<del>&gt;E-TFCS</del>	<del>O</del>		<del>9.2.2.x2</del>		<del>=</del>	
<del>&gt;E-TTI</del>	<del>O</del>		<del>9.2.2.x3</del>		<del>=</del>	
E-DCH FDD Information	O		9.2.2.4B		YES	reject
E-DCH FDD Information to Modify	O		9.2.2.4F		YES	reject
<del>E-DCH MAC-d Flows to</del>	<del>O</del>		<del>9.2.2.300</del>		<del>YES</del>	<del>reject</del>

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
<a href="#">Delete</a>			<a href="#">D</a>			
Serving E-DCH RL-ID	O		<del>RL-ID</del> 9.2.1.45C9		YES	reject

Condition	Explanation
SSDTIndON	The IE shall be present if the <i>SSDT Indication</i> IE is set to "SSDT Active in the UE".
CodeLen	The IE shall be present only if the <i>Min UL Channelisation Code length</i> IE equals to 4.
SlotFormat	The IE shall only be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE is present in the <i>UL DPCH Information</i> IE and is not equal to "none".
EDSCHPCOn	The IE shall be present if the <i>Enhanced DSCH PC Indicator</i> IE is set to "Enhanced DSCH PC Active in the UE".
EDSCHPC	The IE shall be present if <i>Enhanced DSCH PC</i> IE is present in either the <i>DSCHs To Modify</i> IE or the <i>DSCHs To Add</i> IE.
<del>EDCHInfo</del>	<del>This IE shall be present if <i>E-DPCH Information</i> IE is present.</del>
CodeLenEDCH	The IE shall be present if <i>Min UL Channelisation Code length for E-DCH FDD</i> IE equals to <del>{2-or-4}</del> .

Range bound	Explanation
<i>maxnoofDCHs</i>	Maximum number of DCHs for a UE.
<i>maxnoofDSCHs</i>	Maximum number of DSCHs for one UE.
<i>maxnoofRLs</i>	Maximum number of RLs for a UE.

## 9.1.12 RADIO LINK RECONFIGURATION READY

## 9.1.12.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
<b>RL Information Response</b>		<i>0..&lt;maxno ofRLs&gt;</i>			EACH	ignore
>RL ID	M		9.2.1.49		–	
>Maximum Uplink SIR	O		Uplink SIR 9.2.1.69		–	
>Minimum Uplink SIR	O		Uplink SIR 9.2.1.69		–	
>Maximum DL TX Power	O		DL Power 9.2.1.21A		–	
>Minimum DL TX Power	O		DL Power 9.2.1.21A		–	
>Secondary CCPCH Info	O		9.2.2.37B		–	
>DL Code Information	O		FDD DL Code Information 9.2.2.14A		YES	ignore
>DCH Information Response	O		9.2.1.16A		YES	ignore
>DSCHs to be Added or Modified	O		DSCH FDD Information Response 9.2.2.13B		YES	ignore
>DL Power Balancing Updated Indicator	O		9.2.2.10D		YES	ignore
>Primary CPICH Usage For Channel Estimation	O		9.2.2.32A		YES	ignore
>Secondary CPICH Information Change	O		9.2.2.38B		YES	ignore
>E-DCH FDD Information Response	O		9.2.2.4C		YES	ignore
>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	O		9.2.2.4D		YES	ignore
Criticality Diagnostics	O		9.2.1.13		YES	ignore
DSCH-RNTI	O		9.2.1.26Ba		YES	ignore
HS-DSCH-RNTI	O		9.2.1.30P		YES	ignore
HS-DSCH Information Response	O		HS-DSCH FDD Information Response 9.2.2.19b		YES	ignore
MAC-hs Reset Indicator	O		9.2.1.34B		YES	ignore

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for a UE.

## 9.1.13 RADIO LINK RECONFIGURATION COMMIT

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
CFN	M		9.2.1.9		YES	ignore
Active Pattern Sequence Information	O		9.2.2.A	FDD only	YES	ignore

## 9.1.14 RADIO LINK RECONFIGURATION FAILURE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
CHOICE <i>Cause Level</i>	M				YES	ignore
> <i>General</i>					–	
>> <i>Cause</i>	M		9.2.1.5		–	
> <i>RL Specific</i>					–	
>> <b>RLs Causing Reconfiguration Failure</b>		0..< <i>maxnoof RLs</i> >			EACH	ignore
>>>RL ID	M		9.2.1.49		–	
>>> <i>Cause</i>	M		9.2.1.5		–	
Criticality Diagnostics	O		9.2.1.13		YES	ignore

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for a UE.

## 9.1.15 RADIO LINK RECONFIGURATION CANCEL

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	

## 9.1.16 RADIO LINK RECONFIGURATION REQUEST

## 9.1.16.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
Allowed Queuing Time	O		9.2.1.2		YES	reject
<b>UL DPCH Information</b>		0..1			YES	reject
>TFCS	O		9.2.1.63	TFCS for the UL.	–	
>UL-DPDCH Indicator for E-DCH operation	<del>C</del> EDCHInfo		ENUMERATED (UL-DPDCH present, UL-DPDCH not present)		YES	reject
<b>DL DPCH Information</b>		0..1			YES	reject
>TFCS	O		9.2.1.63	TFCS for the DL.	–	
>TFCI Signalling Mode	O		9.2.2.46		–	
>Limited Power Increase	O		9.2.2.21A		–	
DCHs To Modify	O		FDD DCHs To Modify 9.2.2.13C		YES	reject
DCHs To Add	O		DCH FDD Information 9.2.2.4A		YES	reject
<b>DCHs To Delete</b>		0..<maxno ofDCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.16		–	
Transmission Gap Pattern Sequence Information	O		9.2.2.47A		YES	reject
<b>RL Information</b>		0..<maxno ofRLs>			EACH	ignore
>RL ID	M		9.2.1.49		–	
>RL Specific DCH Information	O		9.2.1.49A		–	
>RL specific E-DCH Information	O		E-DCH MAC-d Flows Information 9.2.1.300 C		YES	reject
>E-DCH RL Indication	O		9.2.2.4E		YES	reject
>E-DCH MAC-d Flows to Add	O		RL specific E-DCH Information E-DCH MAC-d Flows Information 9.2.1.300 C		YES	reject
>E-DCH MAC-d Flows to Delete	<del>O</del>		9.2.2.300 D		YES	reject
DL Reference Power Information	O		9.2.2.10C		YES	ignore
UE Support Of Dedicated Pilots For Channel Estimation	O		9.2.2.50A		YES	ignore

UE Support Of Dedicated Pilots For Channel Estimation Of HS-DSCH	O		9.2.2.50B		YES	ignore
HS-DSCH Information	O		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-DSCH Information To Modify Unsynchronised	O		9.2.1.30NA		YES	reject
HS-DSCH MAC-d Flows To Add	O		HS-DSCH MAC-d Flows Information 9.2.1.30OA		YES	reject
HS-DSCH MAC-d Flows To Delete	O		9.2.1.30OB		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.49		YES	reject
<b>E-DPCH Information</b>		<u>0..1</u>			YES	reject
>E-TFCS	<u>0</u>		9.2.2.x24-63A		-	
E-DCH FDD Information	O		9.2.2.4B		YES	reject
E-DCH FDD Information to Modify	O		9.2.2.4F		YES	reject
<a href="#">E-DCH MAC-d Flows to Delete</a>	<u>0</u>		<a href="#">9.2.2.30OD</a>		<a href="#">YES</a>	<a href="#">reject</a>
<a href="#">Serving E-DCH RL</a>	<u>0</u>		<a href="#">9.2.1.45C</a>		<a href="#">YES</a>	<a href="#">reject</a>

Range Bound	Explanation
<i>maxnoofDCHs</i>	Maximum number of DCHs for one UE.
<i>maxnoofRLs</i>	Maximum number of RLs for a UE.

Condition	Explanation
<b>EDCHInfo</b>	<i>This IE shall be present if RL specific E-DCH Information IE is present for at least one RL indicated in the message.</i>



## 9.1.17 RADIO LINK RECONFIGURATION RESPONSE

## 9.1.17.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
<b>RL Information Response</b>		<i>0..&lt;maxno ofRLs&gt;</i>			EACH	ignore
>RL ID	M		9.2.1.49		–	
>Maximum Uplink SIR	O		Uplink SIR 9.2.1.69		–	
>Minimum Uplink SIR	O		Uplink SIR 9.2.1.69		–	
>Maximum DL TX Power	O		DL Power 9.2.1.21A		–	
>Minimum DL TX Power	O		DL Power 9.2.1.21A		–	
>Secondary CCPCH Info	O		9.2.2.37B		–	
>DCH Information Response	O		9.2.1.16A		YES	ignore
>DL Code Information	O		FDD DL Code Information 9.2.2.14A		YES	ignore
>DL Power Balancing Updated Indicator	O		9.2.2.10D		YES	ignore
>E-DCH FDD Information Response	O		9.2.2.4C		YES	ignore
>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.35		YES	ignore
>E-DCH FDD DL Control Channel Information	O		9.2.2.4D		YES	ignore
Criticality Diagnostics	O		9.2.1.13		YES	ignore
HS-DSCH-RNTI	O		9.2.1.30P		YES	ignore
HS-DSCH Information Response	O		HS-DSCH FDD Information Response 9.2.2.19b		YES	ignore
MAC-hs Reset Indicator	O		9.2.1.34B		YES	ignore

Range Bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for a UE.

## 9.1.41 RADIO LINK PREEMPTION REQUIRED INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
<b>RL Information</b>		0..<maxno ofRLs>			EACH	ignore
>RL ID	M		9.2.1.49		–	
<b>&gt;E-DCH MAC-d Flow Specific Information</b>		0..<maxno ofEDCHMACdFlows>			EACH	ignore
>>E-DCH MAC-d Flow ID	M		9.2.1.30OE		–	
<b>HS-DSCH MAC-d Flow Specific Information</b>		0..<maxno ofMACdFlows>			EACH	ignore
>HS-DSCH MAC-d Flow ID	M		9.2.1.30O		–	

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of radio links for one UE
<i>maxnoofMACdFlows</i>	Maximum number of HS-DSCH MAC-d flows
<a href="#">maxnoofEDCHMACdFlows</a>	<a href="#">Maximum number of E-DCH MAC-d flows</a>

## 9.1.42 RADIO LINK CONGESTION INDICATION

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
Congestion Cause	O		9.2.1.79		YES	ignore
<b>RL Information</b>		1..<maxno ofRLs>			EACH	ignore
>RL ID	M		9.2.1.49		–	
<b>&gt;DCH Rate Information</b>		1..<maxno ofDCHs>			EACH	ignore
>>DCH ID	M		9.2.1.16		–	
>>Allowed Rate Information	O		9.2.1.2A		–	
<b>&gt;E-DCH MAC-d Flow Specific Information</b>		0..<maxno ofEDCHMACdFlows>			EACH	ignore
>>E-DCH MAC-d Flow ID	M		9.2.1.30OE		–	

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of Radio Links for one UE
<i>maxnoofDCHs</i>	Maximum number of DCHs for one UE.
<a href="#">maxnoofEDCHMACdFlows</a>	<a href="#">Maximum number of E-DCH MAC-d flows</a>

## 9.1.58 RADIO LINK PARAMETER UPDATE INDICATION

### 9.1.58.1 FDD Message

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
Message type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		–	
HS-DSCH FDD Update Information	O		9.2.2.19c		YES	ignore
<b>RL Information</b>		<i>0..&lt;max noofRLs &gt;</i>			EACH	ignore
>RL Id	M		9.2.1.49		–	
>Phase Reference Update Indicator	O		9.2.2.27B		–	
E-DCH FDD Update Information	O		9.2.2.19e		YES	ignore

## 9.2 Information Element Functional Definition and Contents

### 9.2.1.5 Cause

The purpose of the cause information element is to indicate the reason for a particular event for the whole protocol.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
CHOICE Cause Group	M			
>Radio Network Layer				
>>Radio Network Layer Cause	M		ENUMERATED (Unknown C-ID, Cell not Available, Power Level not Supported, UL Scrambling Code Already in Use, DL Radio Resources not Available, UL Radio Resources not Available, Measurement not Supported For The Object, Combining Resources Not Available, Combining not Supported, Reconfiguration not Allowed, Requested Configuration not Supported, Synchronisation Failure, Requested Tx Diversity Mode not Supported, Measurement Temporarily not Available, Unspecified, Invalid CM Settings, Reconfiguration CFN not Elapsed, Number of DL Codes Not Supported, Dedicated Transport Channel Type not Supported, DL Shared Channel Type not Supported, UL Shared Channel Type not Supported, Common Transport Channel Type not Supported, UL Spreading Factor not Supported, DL Spreading Factor not Supported, CM not Supported, Transaction not Supported by Destination Node B, RL Already Activated/Allocated, .... Number of UL Codes Not Supported, Cell reserved for operator use, DPC Mode Change not Supported, Information temporarily not available, Information Provision not supported for the object, Power Balancing status not compatible, Delayed Activation not Supported, RL Timing Adjustment Not Supported, Unknown RNTI, Measurement Repetition Rate not Compatible with Current Measurements, UE not Capable to Implement Measurement, HARQ Preamble Mode not supported, <a href="#">E-DCH not supported</a> )	
>Transport Layer				
>>Transport Layer Cause	M		ENUMERATED (Transport Resource Unavailable, Unspecified, ...)	
>Protocol				
>>Protocol Cause	M		ENUMERATED (Transfer Syntax Error, Abstract Syntax Error (Reject), Abstract Syntax Error (Ignore and Notify), Message not Compatible with Receiver State, Semantic Error, Unspecified, Abstract Syntax Error (Falsely Constructed Message),...)	

>Misc			
>>Miscellaneous Cause	M		ENUMERATED (Control Processing Overload, Hardware Failure, O&M Intervention, Not enough User Plane Processing Resources, Unspecified,...)

The meaning of the different cause values is described in the following table. In general, "not supported" cause values indicate that the concerned capability is missing. On the other hand, "not available" cause values indicate that the concerned capability is present, but insufficient resources were available to perform the requested action.

Radio Network Layer cause	Meaning
Cell not Available	The concerned cell is not available
Cell reserved for operator use	The concerned cell is reserved for operator use
Combining not Supported	The DRNS does not support the RL combining for the concerned cells
Combining Resources Not Available	The value of the received <i>Diversity Control Field</i> IE was set to "Must", but the DRNS cannot perform the requested combining
CM not Supported	The concerned cell(s) do not support Compressed Mode
Common Transport Channel Type not Supported	The concerned cell(s) do not support the RACH and/or FACH and/or CPCH Common Transport Channel Type
Dedicated Transport Channel Type not Supported	The concerned cell(s) do not support the Dedicated Transport Channel Type
Delayed Activation not Supported	The concerned cell(s) do not support delayed activation of RLs
DL Radio Resources not Available	The DRNS does not have sufficient DL radio resources available
DL SF not Supported	The concerned cell(s) do not support the requested DL SF
DL Shared Channel Type not Supported	The concerned cell(s) do not support the Downlink Shared Channel Type
DPC Mode Change not Supported	The concerned cells do not support the DPC mode changes
<a href="#">E-DCH not supported</a>	<a href="#">The concerned cell(s) do not support E-DCH</a>
HARQ Preamble Mode not supported	The concerned cell does not support the HARQ Preamble Mode
Information Provision not supported for the object	The RNS doesn't support provision of the requested information for the concerned object types
Information temporarily not available	The RNS can temporarily not provide the requested information
Invalid CM Settings	The concerned cell(s) consider the requested Compressed Mode settings invalid
Measurement not Supported For The Object	At least one of the concerned cell(s) does not support the requested measurement on the concerned object type
Measurement Repetition Rate not Compatible with Current Measurements	The requested parameters for a forwarded UE measurement are not compatible with the current measurement schedule in the SRNC.
Measurement Temporarily not Available	The DRNS can temporarily not provide the requested measurement value
Number of DL Codes not Supported	The concerned cell(s) do not support the requested number of DL codes
Number of UL Codes not Supported	The concerned cell(s) do not support the requested number of UL codes
Power Level not Supported	A DL power level was requested which the concerned cell(s) do not support
Power Balancing status not compatible	The power balancing status in the SRNC is not compatible with that of the DRNC.
RL Timing Adjustment not Supported	The concerned cell(s) do not support adjustments of the RL timing
Reconfiguration CFN not Elapsed	The requested action cannot be performed due to that a COMMIT message was received previously, but the concerned CFN has not yet elapsed
Reconfiguration not Allowed	The SRNC does currently not allow the requested reconfiguration
Requested Configuration not Supported	The concerned cell(s) do not support the requested configuration i.e. power levels, Transport Formats, physical channel parameters,.....

Requested Tx Diversity mode not Supported	The concerned cell(s) do not support the requested transmit diversity mode
RL Already Activated/ Allocated	The DRNS has already allocated an RL with the requested RL ID for this UE Context
Synchronisation Failure	Loss of UL Uu synchronisation
Transaction not Supported by Destination Node B	The requested action cannot be performed due to lack of support of the corresponding action in the destination Node B
UE not Capable to Implement Measurement	The UE is not capable to initiate/report a requested measurement due to its current state or capabilities.
UL Radio Resources not Available	The DRNS does not have sufficient UL radio resources available
UL Scrambling Code Already in Use	The concerned UL scrambling code is already in use for another UE
UL SF not Supported	The concerned cell(s) do not support the requested minimum UL SF
UL Shared Channel Type not Supported	The concerned cell(s) do not support the Uplink Shared Channel Type
Unknown C-ID	The DRNS is not aware of a cell with the provided C-ID
Unknown RNTI	The SRNC or DRNC is not aware of a UE indicated with the provided RNTI
Unspecified	Sent when none of the above cause values applies but still the cause is Radio Network Layer related

<b>Transport Network Layer cause</b>	<b>Meaning</b>
Transport resource unavailable	The required transport resources are not available
Unspecified	Sent when none of the above cause values applies but still the cause is Transport Network Layer related

<b>Protocol cause</b>	<b>Meaning</b>
Abstract Syntax Error (Reject)	The received message included an abstract syntax error and the concerned criticality indicated "reject" (see subclause 10.3)
Abstract Syntax Error (Ignore and Notify)	The received message included an abstract syntax error and the concerned criticality indicated "ignore and notify" (see subclause 10.3)
Abstract syntax error (falsely constructed message)	The received message contained IEs or IE groups in wrong order or with too many occurrences (see subclause 10.3)
Message not Compatible with Receiver State	The received message was not compatible with the receiver state (see subclause 10.4)
Semantic Error	The received message included a semantic error (see subclause 10.4)
Transfer Syntax Error	The received message included a transfer syntax error (see subclause 10.2)
Unspecified	Sent when none of the above cause values applies but still the cause is Protocol related

<b>Miscellaneous cause</b>	<b>Meaning</b>
Control Processing Overload	DRNS control processing overload
Hardware Failure	DRNS hardware failure
Not enough User Plane Processing Resources	DRNS has insufficient user plane processing resources available
O&M Intervention	Operation and Maintenance intervention related to DRNS equipment
Unspecified	Sent when none of the above cause values applies and the cause is not related to any of the categories Radio Network Layer, Transport Network Layer or Protocol.

### [9.2.1.300x E-DCH MAC-d Flows Information](#)

[The E-DCH MAC-d Flows Information IE is used for the establishment of E-DCH MAC-d flows.](#)

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE Type and Reference</u>	<u>Semantics Description</u>	<u>Criticality</u>	<u>Assigned Criticality</u>
<b><u>E-DCH MAC-d Flow Specific Information</u></b>		<u>1..&lt;maxno ofEDCHMACdFlows &gt;</u>				
> <u>E-DCH MAC-d Flow ID</u>	<u>M</u>		<u>9.2.1.30O</u>			
> <u>Allocation/Retention Priority</u>	<u>O</u>		<u>9.2.1.1</u>			
> <u>TNL QoS</u>	<u>O</u>		<u>9.2.1.56A</u>			
> <u>Payload CRC Presence Indicator</u>	<u>M</u>		<u>9.2.1.42</u>			
> <u>Maximum Number of Retransmissions for E-DCH</u>	<u>O</u>		<u>9.2.1.30OF</u>			
<b><u>Data Description Indicator</u></b>		<u>1..&lt;maxno ofDDIs&gt;</u>				
> <u>E-DCH DDI Value</u>	<u>M</u>		<u>9.2.1.45C</u>			
> <u>Associated E-DCH MAC-d Flow</u>	<u>M</u>		<u>E-DCH MAC-d Flow ID 9.2.1.30O</u>	<u>The E-DCH MAC-d Flow ID shall be one of the flow IDs defined in the E-DCH MAC-d Flow Specific Information of this IE. Multiple E-DCH DDI Values can be associated with the same E-DCH MAC-d Flow ID.</u>		
> <u>MAC-d PDU Size</u>	<u>M</u>		<u>9.2.1.34A</u>			
> <u>Scheduling Priority Indicator</u>	<u>M</u>		<u>9.2.1.51A</u>			
> <u>MAC-es Guaranteed Bit Rate</u>	<u>O</u>		<u>9.2.1.30OH</u>			

<u>Range bound</u>	<u>Explanation</u>
<u>maxnoofEDCHMACdFlows</u>	<u>Maximum number of E-DCH MAC-d flows.</u>
<u>maxnoofDDIs</u>	<u>Maximum number of Data Description Indicators</u>

9.2.1.30OC RL Specific E-DCH ~~MAC-d Flows~~ Information

The RL Specific ~~E-DCH MAC-d Flows~~ Information IE is used for the establishment of E-DCH MAC-d flows.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE Type and Reference</u>	<u>Semantics Description</u>
<b><u>RL Specific E-DCH MAC-d Flow Specific Information</u></b>		<u>1..&lt;maxno ofEDCHMACdFlows &gt;</u>		
> <u>E-DCH MAC-d Flow ID</u>	<u>M</u>		<u>9.2.1.30OE</u>	
> <u>Binding ID</u>	<u>O</u>		<u>9.2.1.3</u>	<u>Shall be ignored if bearer establishment with ALCAP.</u>
> <u>Transport Layer Address</u>	<u>O</u>		<u>9.2.1.62</u>	<u>Shall be ignored if bearer establishment with ALCAP.</u>

<u>Range Bound</u>	<u>Explanation</u>
<u>maxnoofE-DCHMACdFlows</u>	<u>Maximum number of E-DCH <del>HS-DSCH</del> MAC-d flows</u>

## 9.2.1.300D E-DCH MAC-d Flows To Delete

The *E-DCH MAC-d Flows To Delete* IE is used for the removal of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flows To Delete		1..<maxno of EDCHMACdFlows >		
>E-DCH MAC-d Flow ID	M		9.2.1.300E	

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

## 9.2.1.300E E-DCH MAC-d Flow ID

The *E-DCH MAC-d Flow ID* IE is the unique identifier for one MAC-d flow on E-DCH.

Note: The actual range needs to be verified with RAN2 and is FFS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow ID			INTEGER (0..maxnoofE-DCHMACdFlows-1)	

Range Bound	Explanation
maxnoofE-DCHMACdFlows	Maximum number of E-DCH MAC-d flows

## 9.2.1.300F Maximum Number of Retransmissions for E-DCH

The *Maximum Number of Retransmissions for E-DCH* IE specifies the upper boundary for retransmissions for a single re-ordering queue/MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of Retransmissions for E-DCH			INTEGER (0..15)	

## 9.2.1.300H MAC-es Guaranteed Bit Rate

The *MAC-es Guaranteed Bit Rate* IE indicates the guaranteed number of bits per second to be delivered over the air interface under normal operating conditions (provided there is data to deliver) for which the Node B shall provide sufficient UL resources.

IE/Group Name	Presence	Range	IE type and reference	Semantics description
MAC-es Guaranteed Bit Rate			INTEGER (0..2 <sup>24</sup> -1, ...)	Unit: bit/s

## 9.2.1.30V E-RNTI

The *E-RNTI* IE is needed for the UE (or UE group) specific CRC in E-AGCH, see ref. [52].



IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RNTI			INTEGER (0..65535)	

### 9.2.1.30W ~~E-DCH Physical Layer Category~~

~~The *E-DCH Physical Layer Category* IE defines a set of UE radio access capabilities related to E-DCH, as defined in [42].~~

~~Note: Coding is FFS.~~

### 9.2.1.45A Priority Queue ID

The *Priority Queue ID* IE provides the identity of the Priority Queue. The Priority Queue ID is unique across all MAC-d flows that are currently allocated for one UE Context.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Priority Queue ID			INTEGER (0..7)	

### 9.2.1.45B Process Memory Size

The *Process Memory Size* IE is the size of an HARQ process in the DRNS expressed in bits. It provides the maximum number of soft channel bits in the virtual IR buffer [9] or [46].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Process Memory Size			ENUMERATED ( 800, 1600, 2400, 3200, 4000, 4800, 5600, 6400, 7200, 8000, 8800, 9600, 10400, 11200, 12000, 12800, 13600, 14400, 15200, 16000, 17600, 19200, 20800, 22400, 24000, 25600, 27200, 28800, 30400, 32000, 36000, 40000, 44000, 48000, 52000, 56000, 60000, 64000, 68000, 72000, 76000, 80000, 88000, 96000, 104000, 112000, 120000, 128000, 136000, 144000, 152000, 160000, 176000, 192000, 208000, 224000, 240000, 256000, 272000, 288000, 304000,...)	

### 9.2.1.45C E-DCH DDI Value

The *E-DCH DDI Value* IE is the Data Description Indicator value identifying a unique combination of E-DCH MAC-d Flow ID and MAC-d PDU Size.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH DDI Value			INTEGER (0..63)	

### 9.2.1.45C Serving E-DCH RL

The Serving E-DCH RL IE indicates whether the Serving E-DCH RL is in the DRNS.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE Type and Reference</u>	<u>Semantics Description</u>
<u>CHOICE Serving E-DCH RL</u>	<u>M</u>			
<u>&gt;Serving E-DCH RL in this DRNS</u>				
<u>&gt;&gt;Serving E-DCH RL ID</u>	<u>M</u>		<u>RL ID</u> <u>9.2.1.49</u>	
<u>&gt;Serving E-DCH RL not in this DRNS</u>			<u>NULL</u>	

### 9.2.1.63 Transport Format Combination Set (TFCS)

The Transport Format Combination Set is defined as a set of Transport Format Combinations on a Coded Composite Transport Channel. It is the allowed Transport Format Combinations of the corresponding Transport Channels. The DL Transport Format Combination Set is applicable to DL Transport Channels.

[FDD - Where the UE is assigned access to one or more DSCH transport channels then the UTRAN has the choice of two methods for signalling the mapping between TFCI(field 2) values and the corresponding TFC:

#### Method #1 - TFCI range

The mapping is described in terms of a number of groups, each group corresponding to a given transport format combination (value of CTFC(field2)). The CTFC(field2) value specified in the first group applies for all values of TFCI(field 2) between 0 and the specified 'Max TFCI(field2) value'. The CTFC(field2) value specified in the second group applies for all values of TFCI(field 2) between the 'Max TFCI(field2) value' specified in the last group plus one and the specified 'Max TFCI(field2) value' in the second group. The process continues in the same way for the following groups with the TFCI(field 2) value used by the UE in constructing its mapping table starting at the largest value reached in the previous group plus one.

#### Method #2 - Explicit

The mapping between TFCI(field 2) value and CTFC(field2) is spelt out explicitly for each value of TFCI (field2).

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
<b>CHOICE DSCH</b>	M			
>No Split in the TFCI				This choice is made if: a) The TFCS refers to the uplink OR b) The mode is FDD and none of the Radio Links of the concerned UE are assigned any DSCH transport channels OR c) The mode is TDD
>>TFCS		1..<maxnoofTFCs>		The first instance of the parameter corresponds to TFCI zero, the second to 1 and so on. [TDD - The first entry (for TFCI 0) should be ignored by the receiver.]
>>>CTFC	M		9.2.1.14A	
>>>CHOICE Gain Factors	C-PhysChan			
>>>>Signalled Gain Factors				
>>>>>Gain Factor $\beta_C$	M		INTEGER(0..15)	[FDD - For UL DPCCCH or control part of PRACH ref. [21].] [TDD - $\beta$ for UL DPCH mapping in accordance to [13].]
>>>>>Gain Factor $\beta_D$	M		INTEGER(0..15)	[FDD - For UL DPDCCH or data part of PRACH ref. [21].] [TDD - Should be set to 0 by the sender, and shall be ignored by the receiver.]
>>>>>Reference TFC nr	O		INTEGER(0..15)	If this TFC is a reference TFC, this IE indicates the reference number
>>>>>Computed Gain Factors				
>>>>>Reference TFC nr	M		INTEGER(0..15)	Indicates the reference TFC to be used to calculate the gain factors for this TFC
>There is a split in the TFCI				This choice is made if : a) The TFCS refers to the downlink AND b) The mode is FDD and one of the Radio Links of the concerned UE is assigned one or more DSCH transport channels
>>Transport Format Combination_DCH		1..<maxTFCI_1_Combs>		The first instance of the <i>Transport Format Combination_DCH</i> IE corresponds to TFCI (field 1) = 0, the second to TFCI (field 1) = 1 and so on.
>>>CTFC(field1)	M		9.2.1.14A	
>>Choice Signalling Method	M			
>>>TFCI Range				
>>>>TFC Mapping on DSCH		1..<maxNoTFCIGroups>		
>>>>>Max TFCI(field2) Value	M		INTEGER(1..<maxTFCI_2_Combs -	This is the Maximum value in the range of TFCI(field2) values for which the specified

>>>>>CTFC(field 2)	M		1>) 9.2.1.14A	CTFC(field2) applies Integer number calculated according to [16] The calculation of CTFC ignores any DCH transport channels which may be assigned
>>>Explicit				
>>>>Transport Format Combination_DSCH		1..<maxTFCI_2_Combs>		The first instance of the Transport Format Combination_DSCH IE corresponds to TFCI (field2) = 0, the second to TFCI (field 2) = 1 and so on.
>>>>>CTFC(field 2)	M		9.2.1.14A	Integer number calculated according to [16] . The calculation of CTFC ignores any DCH transport channels which may be assigned

Condition	Explanation
PhysChan	The choice shall be present if the TFCS concerns a UL DPCH [FDD – or PRACH channel].

Range bound	Explanation
maxnoofTFCs	The maximum number of Transport Format Combinations.
maxTFCI_1_Combs	Maximum number of TFCI (field 1) combinations (given by 2 raised to the power of the length of the TFCI (field 1)).
maxTFCI_2_Combs	Maximum number of TFCI (field 2) combinations (given by 2 raised to the power of the length of the TFCI (field 2)).
maxNoTFCIGroups	Maximum number of groups, each group described in terms of a range of TFCI(field 2) values for which a single value of CTFC(field2) applies.
MaxCTFC	Maximum number of the CTFC value is calculated according to the following: $\sum_{i=1}^I (L_i - 1)P_i$ with the notation according to ref. [16].

**9.2.1.63A — E-DCH Transport Format Combination Set (E-TFCS)**

Note: Coding is FFS

**9.2.1.64 Transport Format Set**

The Transport Format Set is defined as the set of Transport Formats associated to a Transport Channel, e.g. DCH.

[TDD - The Transport Format Set for each transport channel within the same CCTrCH shall have the same value for the 2<sup>nd</sup> Interleaving Mode IE.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
<b>Dynamic Transport Format Information</b>		1..<maxTFcount>		The first instance of the parameter corresponds to TFI zero, the second to 1 and so on.
>Number of Transport Blocks	M		INTEGER (0..512)	
>Transport Block Size	C – Blocks		INTEGER (0..5000)	Unit: Bits
>CHOICE Mode	M			
>>TDD				
>>>Transmission Time Interval Information	C-TTIdynamic	1..<maxTTIcount>		
>>>>Transmission Time Interval	M		ENUMERATED(10, 20, 40, 80,...)	Unit: msec
<b>Semi-static Transport Format Information</b>		1		
>Transmission Time Interval	M		ENUMERATED (10, 20, 40, 80, dynamic, ...)	Unit: msec Value "dynamic" for TDD only
>Type of Channel Coding	M		ENUMERATED (No codingTDD, Convolutional, Turbo,...)	[FDD - The value "No codingTDD" shall be treated as logical error if received]
>Coding Rate	C – Coding		ENUMERATED (1/2, 1/3,...)	
>Rate Matching Attribute	M		INTEGER (1..maxRM)	
>CRC size	M		ENUMERATED (0, 8, 12, 16, 24,...)	
>CHOICE Mode	M			
>>TDD				
>>>2 <sup>nd</sup> Interleaving Mode	M		ENUMERATED(Frame related, Timeslot related,...)	

Condition	Explanation
Blocks	The IE shall be present if the <i>Number of Transport Blocks</i> IE is set to a value greater than 0.
Coding	The IE shall be present if <i>Type of Channel Coding</i> IE is set to "Convolutional" or "Turbo".
TTIdynamic	The IE shall be present if the <i>Transmission Time Interval</i> IE in the <i>Semi-static Transport Format Information</i> IE is set to "dynamic".

Range bound	Explanation
maxTFcount	The maximum number of different transport formats that can be included in the Transport format set for one transport channel.
maxRM	The maximum number that could be set as rate matching attribute for a transport channel.
maxTTIcount	The amount of different TTI that are possible for that transport format is.

## 9.2.2 FDD Specific Parameters

This subclause contains parameters that are specific to FDD.

### 9.2.2.4A DCH FDD Information

The *DCH FDD Information* IE provides information for DCHs to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
<b>DCH FDD Information</b>		1..<maxno ofDCHs>			–	
>Payload CRC Presence Indicator	M		9.2.1.42		–	
>UL FP Mode	M		9.2.1.67		–	
>ToAWS	M		9.2.1.58		–	
>ToAWE	M		9.2.1.57		–	
<b>&gt;DCH Specific Info</b>		1..<maxno ofDCHs>			–	
>>DCH ID	M		9.2.1.16		–	
>>TrCH Source Statistics Descriptor	M		9.2.1.65		–	
>>Transport Format Set	M		9.2.1.64	For the UL.	–	
>>Transport Format Set	M		9.2.1.64	For the DL.	–	
>>BLER	M		9.2.1.4	For the UL.	–	
>>BLER	M		9.2.1.4	For the DL.	–	
>>Allocation/Retention Priority	M		9.2.1.1		–	
>>Frame Handling Priority	M		9.2.1.29		–	
>>QE-Selector	M		9.2.1.46A		–	
>>DRAC control	M		9.2.2.13		–	
>>Guaranteed Rate Information	O		9.2.1.30M		YES	ignore
>>Traffic Class	M		9.2.1.58A		YES	ignore
>>Unidirectional DCH Indicator	O		9.2.1.68B		YES	reject
>TNL QoS	O		9.2.1.56A		YES	ignore

Range bound	Explanation
<i>maxnoofDCHs</i>	Maximum number of DCHs for one UE.

### 9.2.2.4B E-DCH FDD Information

The E-DCH *FDD Information* IE provides information for an E-DCH to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
<a href="#">E-DCH MAC-d Flows Information</a>	M		<a href="#">9.2.1.30Ox</a>			
<b>UE Capabilities Information</b>		1				
>E-DCH Physical Layer Category	M		9.2.2.x41.30W			
<b>E-DCH MAC-d Flow Information</b>		1..<maxno ofMACdFlows>				
>E-DCH MAC-d Flow ID	M		9.2.1.30O			
>Allocation/Retention Priority	O		9.2.1.1			
>TNL-QoS	O		9.2.1.56A			
>Payload-CRC-Presence Indicator	M		9.2.1.42			
>Maximum Number of Retransmissions for E-DCH	O		9.2.1.30OF			
<b>&gt;Data-Description Indicator</b>		1..<maxno ofDDIs>				
>>E-DCH DDI Value	M		9.2.1.45G			
>>Associated E-DCH MAC-d Flow	M		E-DCH MAC-d Flow ID 9.2.1.30O	The E-DCH MAC-d Flow ID shall be one of the flow IDs defined in the E-DCH MAC-d Flow Specific Information of this IE. Multiple E-DCH DDI Values can be associated with the same E-DCH MAC-d Flow ID.		
>>MAC-d PDU Size	M		9.2.1.34A			
>>Scheduling Priority Indicator	M		9.2.1.51A			
>>MAC-es Guaranteed Bit Rate	O		9.2.1.30OH			

Range-bound	Explanation
<i>maxnoofMACdFlows</i>	Maximum number of MAC-d flows.
<i>maxnoofDDIs</i>	Maximum number of Data-Description Indicators

### 9.2.2.4C E-DCH FDD Information Response

The *E-DCH FDD Information Response* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the DRNS.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
<b>E-DCH MAC-d Flow Specific Information Response</b>		0..<maxnoofEDCHMACdFlows>		
>E-DCH MAC-d Flow ID	M		9.2.1.30OE	
>Binding ID	O		9.2.1.3	
>Transport Layer Address	O		9.2.1.62	

Range bound	Explanation
<a href="#">maxnoofEDCHMACdFlows</a>	Maximum number of <a href="#">E-DCH</a> MAC-d flows.

### 9.2.2.4D E-DCH FDD DL Control Channel Information

The *E-DCH FDD DL Control Channel Information* IE provides information for E-DCH specific DL Control Channels to be provided to UE via RRC signalling.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH and E-RGCH And E-HICH FDD Scrambling Code	M		DL Scrambling Code 9.2.2.13	Scrambling code on which E-AGCH, E-RGCH and E-HICH are transmitted. 0= Primary scrambling code of the cell 1...15 = Secondary scrambling code
E-AGCH Channelisation Code	O		FDD DL Channelisation Code Number 9.2.2.14	
E-RNTI	O		9.2.1.30V	
E-RGCH and E-HICH Channelisation Code	M		FDD DL Channelisation Code Number 9.2.2.14	
E-RGCH <a href="#">Signature Sequence</a> <del>Number</del>	M		INTEGER (0.. <a href="#">maxnoofSigSeqE</a> <a href="#">RGHICH</a> <del>20-1</del> )	
E-HICH <a href="#">Signature Sequence</a> <del>Number</del>	M		INTEGER (0.. <a href="#">maxnoofSigSeqE</a> <a href="#">RGHICH</a> <del>20-1</del> )	

Range bound	Explanation
<a href="#">maxnoofSigSeqERGHICH</a>	Maximum number Signature Sequences for E-RGCH / E-HICH

### 9.2.2.4E E-DCH RL Indication

Indicates whether a RL is an E-DCH RL.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH RL Indication			ENUMERATED(E-DCH, non E-DCH)	

### 9.2.2.4F E-DCH FDD Information To Modify

The *E-DCH FDD Information* IE provides information for an E-DCH to be modified.



IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
<b>E-DCH MAC-d Flow Specific Information</b>		1..<maxno of EDCH MACdFlows>				
>E-DCH MAC-d Flow ID	M		9.2.1.300			
>Allocation/Retention Priority	OM		9.2.1.1			
>Transport Bearer Request Indicator	M		9.2.1.61			
>TNL QoS	O		9.2.1.56A			
>Payload CRC Presence Indicator	M		9.2.1.42			
>Maximum Number of Retransmissions for E-DCH	O		9.2.1.300F			
<b>&gt;Data Description Indicator</b>		0..<maxno of DDIs>				
>>E-DCH DDI Value	M		9.2.1.45C			
>>Associated E-DCH MAC-d Flow ID	M		E-DCH MAC-d Flow ID 9.2.1.300	Shall only refer to an E-DCH MAC-d Flow ID identified by the E-DCH MAC-d Flow ID IE above. shall be one of the flow IDs defined in the E-DCH MAC-d Flow Specific Information of this IE. Multiple E-DCH DDI Values can be associated with the same E-DCH MAC-d Flow ID.		
>>MAC-d PDU Size	M		9.2.1.34A			
>>Scheduling Priority Indicator	M		9.2.1.51A			
>>MAC-es Guaranteed Bit Rate	O		9.2.1.300H			

Range bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows.
maxnoofDDIs	Maximum number of Data Description Indicators

### 9.2.2.19e E-DCH FDD Update Information

The *E-DCH FDD Update Information* IE provides information for E-DCH to be updated. At least one IE shall be presented.

IE/Group name	Presence	Range	IE Type and Reference	Semantic Description	Criticality	Assigned Criticality
E-DCH FDD RL specific update Information		0..<maxnoofRLs >				
>E-DCH FDD DL Control Channel Information	O		9.2.2.4D		–	

Range bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for one UE.

### 9.2.2.24e Max Number of UL E-DPDCHs

Maximum number of uplink E-DPDCHs during the connection. Needed by the rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Max Number Of UL E-DPDCHs			ENUMERATED (1, 2, 4, ...)	

#### 9.2.2.x1 UL DPDCH Indicator for E-DCH operation

This IE indicated whether the requested configuration actually contain an UL DPDCH.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE Type and Reference</u>	<u>Semantics Description</u>
<u>UL DPDCH Indicator for E-DCH operation</u>			<u>ENUMERATED (UL-DPDCH present, UL-DPDCH not present)</u>	

#### 9.2.2.x2 E-DCH Transport Format Combination Set (E-TFCS)

Note: Coding is FFS

#### 9.2.2.x3 E-TTI

This IE specifies the TTI of the concerned E-DPDCH.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE Type and Reference</u>	<u>Semantics Description</u>
<u>E-TTI</u>			<u>ENUMERATED (2ms, 10ms)</u>	

#### 9.2.2.x4 E-DCH Physical Layer Category

The E-DCH Physical Layer Category IE defines a set of UE radio access capabilities related to E-DCH, as defined in [42].

Note: Coding is FFS.

## 9.2.2.24A Min DL Channelisation Code Length

Void

## 9.2.2.25 Min UL Channelisation Code Length

Minimum UL channelisation code length (spreading factor) of a DPDCH during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code Length			ENUMERATED ED(4,8,16, 32,64,128, 256)	

## 9.2.2.25A Min UL Channelisation Code Length for E-DCH FDD

Minimum UL channelisation code length (spreading factor) of a E-DPDCH during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code Length for E-DCH FDD			ENUMERATED (2, 4, 8, 16, 32, 64, ...)	

3GPP TSG-RAN3 Meeting #46  
 Scottsdale, Arizona, USA, 14th – 18th February 2005

**draft Tdoc** ⌘ **R3-050216**

CR-Form-v7.1
<b>CHANGE REQUEST</b>
⌘ <b>25.423 CR 1039</b> ⌘ rev <b>-</b> ⌘ Current version: <b>6.4.1</b> ⌘

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

**Proposed change affects:** UICC apps  ME  Radio Access Network  Core Network

<b>Title:</b>	⌘ EDCH RNSAP ASN.1		
<b>Source:</b>	⌘ RAN3		
<b>Work item code:</b>	⌘ EDCH-lurlub	<b>Date:</b>	⌘ 14/02/2005
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-6
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

<b>Reason for change:</b>	⌘ ASN.1 representation of E-DCH specific changes in 25.423 was missing.
<b>Summary of change:</b>	⌘ This CR contains the changes in the ASN.1 caused by the introduction of E-DCH specific procedures and IEs in the RNSAP protocol.
<b>Consequences if not approved:</b>	⌘ ASN.1 representation of E-DCH feature is missing.

<b>Clauses affected:</b>	⌘ 9.3										
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Y</td> <td style="padding: 2px;">N</td> </tr> <tr> <td style="padding: 2px;">X</td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">X</td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">X</td> </tr> </table>	Y	N	X			X		X	Other core specifications	⌘ 25.433 Rel-6
	Y	N									
	X										
	X										
	X										
		Test specifications									
		O&M Specifications									
<b>Other comments:</b>	⌘ This CR is related to CR1034r1 which contains the procedure text and the tabular format of the described ASN.1 changes.										

**How to create CRs using this form:**

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

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

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

## 9.3 Message and Information Element Abstract Syntax (with ASN.1)

### 9.3.0 General

Subclause 9.3 presents the Abstract Syntax of RNSAP protocol with ASN.1. In case there is contradiction between the ASN.1 definition in this subclause and the tabular format in subclause 9.1 and 9.2, the ASN.1 shall take precedence, except for the definition of conditions for the presence of conditional elements, in which the tabular format shall take precedence.

The ASN.1 definition specifies the structure and content of RNSAP messages. RNSAP messages can contain any IEs specified in the object set definitions for that message without the order or number of occurrence being restricted by ASN.1. However, for this version of the standard, a sending entity shall construct a RNSAP message according to the PDU definitions module and with the following additional rules (Note that in the following IE means an IE in the object set with an explicit id. If one IE needed to appear more than once in one object set, then the different occurrences have different IE ids):

- IEs shall be ordered (in an IE container) in the order they appear in object set definitions.
- Object set definitions specify how many times IEs may appear. An IE shall appear exactly once if the presence field in an object has value "mandatory". An IE may appear at most once if the presence field in an object has value "optional" or "conditional". If in a tabular format there is multiplicity specified for an IE (i.e. an IE list) then in the corresponding ASN.1 definition the list definition is separated into two parts. The first part defines an IE container list in which the list elements reside. The second part defines list elements. The IE container list appears as an IE of its own. For this version of the standard an IE container list may contain only one kind of list elements.

If a RNSAP message that is not constructed as defined above is received, this shall be considered as Abstract Syntax Error, and the message shall be handled as defined for Abstract Syntax Error in subclause 10.3.6.

### 9.3.1 Usage of Private Message Mechanism for Non-standard Use

The private message mechanism for non-standard use may be used:

- for special operator (and/or vendor) specific features considered not to be part of the basic functionality, i.e. the functionality required for a complete and high-quality specification in order to guarantee multivendor inter-operability.
- by vendors for research purposes, e.g. to implement and evaluate new algorithms/features before such features are proposed for standardisation.

The private message mechanism shall not be used for basic functionality. Such functionality shall be standardised.

### 9.3.2 Elementary Procedure Definitions

```
-- *****
--
-- Elementary Procedure definitions
```

```
--
-- *****
RNSAP-PDU-Descriptions {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-PDU-Descriptions (0) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

IMPORTS
    Criticality,
    ProcedureID,
    TransactionID
FROM RNSAP-CommonDataTypes

    CommonMeasurementFailureIndication,
    CommonMeasurementInitiationFailure,
    CommonMeasurementInitiationRequest,
    CommonMeasurementInitiationResponse,
    CommonMeasurementReport,
    CommonMeasurementTerminationRequest,
    CommonTransportChannelResourcesFailure,
    CommonTransportChannelResourcesRequest,
    CommonTransportChannelResourcesReleaseRequest,
    CommonTransportChannelResourcesResponseFDD,
    CommonTransportChannelResourcesResponseTDD,
    CompressedModeCommand,
    DedicatedMeasurementFailureIndication,
    DedicatedMeasurementInitiationFailure,
    DedicatedMeasurementInitiationRequest,
    DedicatedMeasurementInitiationResponse,
    DedicatedMeasurementReport,
    DedicatedMeasurementTerminationRequest,
    DL-PowerControlRequest,
    DL-PowerTimeslotControlRequest,
    DownlinkSignallingTransferRequest,
    ErrorIndication,
    InformationExchangeFailureIndication,
    InformationExchangeInitiationFailure,
    InformationExchangeInitiationRequest,
    InformationExchangeInitiationResponse,
    InformationExchangeTerminationRequest,
```

InformationReport,  
IurDeactivateTrace,  
IurInvokeTrace,  
MBMSAttachCommand,  
MBMSDetachCommand,  
MBMSChannelTypeReconfigurationIndication,  
PagingRequest,  
PhysicalChannelReconfigurationCommand,  
PhysicalChannelReconfigurationFailure,  
PhysicalChannelReconfigurationRequestFDD,  
PhysicalChannelReconfigurationRequestTDD,  
PrivateMessage,  
RadioLinkActivationCommandFDD,  
RadioLinkActivationCommandTDD,  
RadioLinkAdditionFailureFDD,  
RadioLinkAdditionFailureTDD,  
RadioLinkAdditionRequestFDD,  
RadioLinkAdditionRequestTDD,  
RadioLinkAdditionResponseFDD,  
RadioLinkAdditionResponseTDD,  
RadioLinkCongestionIndication,  
RadioLinkDeletionRequest,  
RadioLinkDeletionResponse,  
RadioLinkFailureIndication,  
RadioLinkParameterUpdateIndicationFDD,  
RadioLinkParameterUpdateIndicationTDD,  
RadioLinkPreemptionRequiredIndication,  
RadioLinkReconfigurationCancel,  
RadioLinkReconfigurationCommit,  
RadioLinkReconfigurationFailure,  
RadioLinkReconfigurationPrepareFDD,  
RadioLinkReconfigurationPrepareTDD,  
RadioLinkReconfigurationReadyFDD,  
RadioLinkReconfigurationReadyTDD,  
RadioLinkReconfigurationRequestFDD,  
RadioLinkReconfigurationRequestTDD,  
RadioLinkReconfigurationResponseFDD,  
RadioLinkReconfigurationResponseTDD,  
RadioLinkRestoreIndication,  
RadioLinkSetupFailureFDD,  
RadioLinkSetupFailureTDD,  
RadioLinkSetupRequestFDD,  
RadioLinkSetupRequestTDD,  
RadioLinkSetupResponseFDD,  
RadioLinkSetupResponseTDD,  
RelocationCommit,  
ResetRequest,  
ResetResponse,  
UEMeasurementFailureIndication,  
UEMeasurementInitiationFailure,



UEMeasurementInitiationRequest,  
UEMeasurementInitiationResponse,  
UEMeasurementReport,  
UEMeasurementTerminationRequest,  
UplinkSignallingTransferIndicationFDD,  
UplinkSignallingTransferIndicationTDD,  
GERANUplinkSignallingTransferIndication

FROM RNSAP-PDU-Contents

id-commonMeasurementFailure,  
id-commonMeasurementInitiation,  
id-commonMeasurementReporting,  
id-commonMeasurementTermination,  
id-commonTransportChannelResourcesInitialisation,  
id-commonTransportChannelResourcesRelease,  
id-compressedModeCommand,  
id-downlinkPowerControl,  
id-downlinkSignallingTransfer,  
id-downlinkPowerTimeslotControl,  
id-errorIndication,  
id-informationExchangeFailure,  
id-informationExchangeInitiation,  
id-informationReporting,  
id-informationExchangeTermination,  
id-iurDeactivateTrace,  
id-iurInvokeTrace,  
id-dedicatedMeasurementFailure,  
id-dedicatedMeasurementInitiation,  
id-dedicatedMeasurementReporting,  
id-dedicatedMeasurementTermination,  
id-mBMSAttach,  
id-mBMSDetach,  
id-mBMSChannelTypeReconfiguration,  
id-paging,  
id-physicalChannelReconfiguration,  
id-privateMessage,  
id-radioLinkActivation,  
id-radioLinkAddition,  
id-radioLinkCongestion,  
id-radioLinkDeletion,  
id-radioLinkFailure,  
id-radioLinkParameterUpdate,  
id-radioLinkPreemption,  
id-radioLinkRestoration,  
id-radioLinkSetup,  
id-relocationCommit,  
id-reset,  
id-synchronisedRadioLinkReconfigurationCancellation,  
id-synchronisedRadioLinkReconfigurationCommit,  
id-synchronisedRadioLinkReconfigurationPreparation,

```

    id-uMeasurementFailure,
    id-uMeasurementInitiation,
    id-uMeasurementReporting,
    id-uMeasurementTermination,
id-unSynchronisedRadioLinkReconfiguration,
    id-uplinkSignallingTransfer,
    id-gERANuplinkSignallingTransfer
FROM RNSAP-Constants;

-- *****
--
-- Interface Elementary Procedure Class
--
-- *****

RNSAP-ELEMENTARY-PROCEDURE ::= CLASS {
    &InitiatingMessage
    &SuccessfulOutcome          OPTIONAL,
    &UnsuccessfulOutcome        OPTIONAL,
    &Outcome                    OPTIONAL,
    &procedureID                ProcedureID    UNIQUE,
    &criticality                 Criticality    DEFAULT ignore
}
WITH SYNTAX {
    INITIATING MESSAGE      &InitiatingMessage
    [SUCCESSFUL OUTCOME     &SuccessfulOutcome]
    [UNSUCCESSFUL OUTCOME   &UnsuccessfulOutcome]
    [OUTCOME                 &Outcome]
    PROCEDURE ID            &procedureID
    [CRITICALITY            &criticality]
}

-- *****
--
-- Interface PDU Definition
--
-- *****

RNSAP-PDU ::= CHOICE {
    initiatingMessage      InitiatingMessage,
    successfulOutcome       SuccessfulOutcome,
    unsuccessfulOutcome     UnsuccessfulOutcome,
    outcome                 Outcome,
    ...
}

InitiatingMessage ::= SEQUENCE {
    procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID      ({RNSAP-ELEMENTARY-PROCEDURES}),
    criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality        ({RNSAP-ELEMENTARY-PROCEDURES}@procedureID),
    transactionID TransactionID,

```

```

    value      RNSAP-ELEMENTARY-PROCEDURE.&InitiatingMessage    ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

SuccessfulOutcome ::= SEQUENCE {
    procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID          ( {RNSAP-ELEMENTARY-PROCEDURES} ),
    criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality          ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    transactionID TransactionID,
    value      RNSAP-ELEMENTARY-PROCEDURE.&SuccessfulOutcome    ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

UnsuccessfulOutcome ::= SEQUENCE {
    procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID          ( {RNSAP-ELEMENTARY-PROCEDURES} ),
    criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality          ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    transactionID TransactionID,
    value      RNSAP-ELEMENTARY-PROCEDURE.&UnsuccessfulOutcome  ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

Outcome ::= SEQUENCE {
    procedureID RNSAP-ELEMENTARY-PROCEDURE.&procedureID          ( {RNSAP-ELEMENTARY-PROCEDURES} ),
    criticality RNSAP-ELEMENTARY-PROCEDURE.&criticality          ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} ),
    transactionID TransactionID,
    value      RNSAP-ELEMENTARY-PROCEDURE.&Outcome              ( {RNSAP-ELEMENTARY-PROCEDURES} {@procedureID} )
}

-- *****
--
-- Interface Elementary Procedure List
--
-- *****

RNSAP-ELEMENTARY-PROCEDURES RNSAP-ELEMENTARY-PROCEDURE ::= {
    RNSAP-ELEMENTARY-PROCEDURES-CLASS-1      |
    RNSAP-ELEMENTARY-PROCEDURES-CLASS-2      |
    RNSAP-ELEMENTARY-PROCEDURES-CLASS-3      |
    ...                                       ,
}

RNSAP-ELEMENTARY-PROCEDURES-CLASS-1 RNSAP-ELEMENTARY-PROCEDURE ::= {
    radioLinkSetupFDD                       |
    radioLinkSetupTDD                       |
    radioLinkAdditionFDD                    |
    radioLinkAdditionTDD                    |
    radioLinkDeletion                       |
    synchronisedRadioLinkReconfigurationPreparationFDD
    synchronisedRadioLinkReconfigurationPreparationTDD
    unSynchronisedRadioLinkReconfigurationFDD
    unSynchronisedRadioLinkReconfigurationTDD
    physicalChannelReconfigurationFDD
    physicalChannelReconfigurationTDD
    dedicatedMeasurementInitiation          |
}

```

```

commonTransportChannelResourcesInitialisationFDD
commonTransportChannelResourcesInitialisationTDD
...
commonMeasurementInitiation
informationExchangeInitiation
reset
uEMeasurementInitiation
}

RNSAP-ELEMENTARY-PROCEDURES-CLASS-2 RNSAP-ELEMENTARY-PROCEDURE ::= {
uplinkSignallingTransferFDD
uplinkSignallingTransferTDD
downlinkSignallingTransfer
relocationCommit
paging
synchronisedRadioLinkReconfigurationCommit
synchronisedRadioLinkReconfigurationCancellation
radioLinkFailure
radioLinkPreemption
radioLinkRestoration
dedicatedMeasurementReporting
dedicatedMeasurementTermination
dedicatedMeasurementFailure
downlinkPowerControlFDD
downlinkPowerTimeslotControl
compressedModeCommandFDD
commonTransportChannelResourcesRelease
errorIndication
privateMessage
...
radioLinkCongestion
commonMeasurementFailure
commonMeasurementReporting
commonMeasurementTermination
informationExchangeFailure
informationExchangeTermination
informationReporting
radioLinkActivationFDD
radioLinkActivationTDD
gERANuplinkSignallingTransfer
radioLinkParameterUpdateFDD
radioLinkParameterUpdateTDD
uEMeasurementReporting
uEMeasurementTermination
uEMeasurementFailure
iurInvokeTrace
iurDeactivateTrace
mBMSAttach
mBMSEdetach
mBMSChannelTypeReconfiguration

```

```

}

RNSAP-ELEMENTARY-PROCEDURES-CLASS-3 RNSAP-ELEMENTARY-PROCEDURE ::= {
  ...
}

-- *****
--
-- Interface Elementary Procedures
--
-- *****

radioLinkSetupFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkSetupRequestFDD
  SUCCESSFUL OUTCOME  RadioLinkSetupResponseFDD
  UNSUCCESSFUL OUTCOME  RadioLinkSetupFailureFDD
  PROCEDURE ID        { procedureCode id-radioLinkSetup, ddMode fdd }
  CRITICALITY         reject
}

radioLinkSetupTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkSetupRequestTDD
  SUCCESSFUL OUTCOME  RadioLinkSetupResponseTDD
  UNSUCCESSFUL OUTCOME  RadioLinkSetupFailureTDD
  PROCEDURE ID        { procedureCode id-radioLinkSetup, ddMode tdd }
  CRITICALITY         reject
}

radioLinkAdditionFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkAdditionRequestFDD
  SUCCESSFUL OUTCOME  RadioLinkAdditionResponseFDD
  UNSUCCESSFUL OUTCOME  RadioLinkAdditionFailureFDD
  PROCEDURE ID        { procedureCode id-radioLinkAddition , ddMode fdd }
  CRITICALITY         reject
}

radioLinkAdditionTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkAdditionRequestTDD
  SUCCESSFUL OUTCOME  RadioLinkAdditionResponseTDD
  UNSUCCESSFUL OUTCOME  RadioLinkAdditionFailureTDD
  PROCEDURE ID        { procedureCode id-radioLinkAddition , ddMode tdd }
  CRITICALITY         reject
}

radioLinkDeletion RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkDeletionRequest
  SUCCESSFUL OUTCOME  RadioLinkDeletionResponse
  PROCEDURE ID        { procedureCode id-radioLinkDeletion, ddMode common }
  CRITICALITY         reject
}

```

```

}

synchronisedRadioLinkReconfigurationPreparationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationPrepareFDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationReadyFDD
  UNSUCCESSFUL OUTCOME  RadioLinkReconfigurationFailure
  PROCEDURE ID        { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode fdd }
  CRITICALITY         reject
}

synchronisedRadioLinkReconfigurationPreparationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationPrepareTDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationReadyTDD
  UNSUCCESSFUL OUTCOME  RadioLinkReconfigurationFailure
  PROCEDURE ID        { procedureCode id-synchronisedRadioLinkReconfigurationPreparation, ddMode tdd }
  CRITICALITY         reject
}

unSynchronisedRadioLinkReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationRequestFDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationResponseFDD
  UNSUCCESSFUL OUTCOME  RadioLinkReconfigurationFailure
  PROCEDURE ID        { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode fdd }
  CRITICALITY         reject
}

unSynchronisedRadioLinkReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkReconfigurationRequestTDD
  SUCCESSFUL OUTCOME  RadioLinkReconfigurationResponseTDD
  UNSUCCESSFUL OUTCOME  RadioLinkReconfigurationFailure
  PROCEDURE ID        { procedureCode id-unSynchronisedRadioLinkReconfiguration, ddMode tdd }
  CRITICALITY         reject
}

physicalChannelReconfigurationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  PhysicalChannelReconfigurationRequestFDD
  SUCCESSFUL OUTCOME  PhysicalChannelReconfigurationCommand
  UNSUCCESSFUL OUTCOME  PhysicalChannelReconfigurationFailure
  PROCEDURE ID        { procedureCode id-physicalChannelReconfiguration, ddMode fdd }
  CRITICALITY         reject
}

physicalChannelReconfigurationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  PhysicalChannelReconfigurationRequestTDD
  SUCCESSFUL OUTCOME  PhysicalChannelReconfigurationCommand
  UNSUCCESSFUL OUTCOME  PhysicalChannelReconfigurationFailure
  PROCEDURE ID        { procedureCode id-physicalChannelReconfiguration, ddMode tdd }
  CRITICALITY         reject
}

```

```
dedicatedMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    DedicatedMeasurementInitiationRequest
    SUCCESSFUL OUTCOME    DedicatedMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME  DedicatedMeasurementInitiationFailure
    PROCEDURE ID          { procedureCode id-dedicatedMeasurementInitiation, ddMode common }
    CRITICALITY           reject
}

commonTransportChannelResourcesInitialisationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonTransportChannelResourcesRequest
    SUCCESSFUL OUTCOME    CommonTransportChannelResourcesResponseFDD
    UNSUCCESSFUL OUTCOME  CommonTransportChannelResourcesFailure
    PROCEDURE ID          { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode fdd }
    CRITICALITY           reject
}

commonTransportChannelResourcesInitialisationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    CommonTransportChannelResourcesRequest
    SUCCESSFUL OUTCOME    CommonTransportChannelResourcesResponseTDD
    UNSUCCESSFUL OUTCOME  CommonTransportChannelResourcesFailure
    PROCEDURE ID          { procedureCode id-commonTransportChannelResourcesInitialisation, ddMode tdd }
    CRITICALITY           reject
}

uplinkSignallingTransferFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    UplinkSignallingTransferIndicationFDD
    PROCEDURE ID          { procedureCode id-uplinkSignallingTransfer, ddMode fdd }
    CRITICALITY           ignore
}

uplinkSignallingTransferTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    UplinkSignallingTransferIndicationTDD
    PROCEDURE ID          { procedureCode id-uplinkSignallingTransfer, ddMode tdd }
    CRITICALITY           ignore
}

downlinkSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    DownlinkSignallingTransferRequest
    PROCEDURE ID          { procedureCode id-downlinkSignallingTransfer, ddMode common }
    CRITICALITY           ignore
}

relocationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    RelocationCommit
    PROCEDURE ID          { procedureCode id-relocationCommit, ddMode common }
    CRITICALITY           ignore
}

paging RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    PagingRequest
}
```

```
    PROCEDURE ID      { procedureCode id-paging, ddMode common }
    CRITICALITY      ignore
}

synchronisedRadioLinkReconfigurationCommit RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationCommit
    PROCEDURE ID      { procedureCode id-synchronisedRadioLinkReconfigurationCommit, ddMode common }
    CRITICALITY      ignore
}

synchronisedRadioLinkReconfigurationCancellation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkReconfigurationCancel
    PROCEDURE ID      { procedureCode id-synchronisedRadioLinkReconfigurationCancellation, ddMode common }
    CRITICALITY      ignore
}

radioLinkFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkFailureIndication
    PROCEDURE ID      { procedureCode id-radioLinkFailure, ddMode common }
    CRITICALITY      ignore
}

radioLinkPreemption RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkPreemptionRequiredIndication
    PROCEDURE ID      { procedureCode id-radioLinkPreemption, ddMode common }
    CRITICALITY      ignore
}

radioLinkRestoration RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE RadioLinkRestoreIndication
    PROCEDURE ID      { procedureCode id-radioLinkRestoration, ddMode common }
    CRITICALITY      ignore
}

dedicatedMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementReport
    PROCEDURE ID      { procedureCode id-dedicatedMeasurementReporting, ddMode common }
    CRITICALITY      ignore
}

dedicatedMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementTerminationRequest
    PROCEDURE ID      { procedureCode id-dedicatedMeasurementTermination, ddMode common }
    CRITICALITY      ignore
}

dedicatedMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE DedicatedMeasurementFailureIndication
    PROCEDURE ID      { procedureCode id-dedicatedMeasurementFailure, ddMode common }
    CRITICALITY      ignore
}
```



```

}

radioLinkCongestion RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  RadioLinkCongestionIndication
  PROCEDURE ID        { procedureCode id-radioLinkCongestion, ddMode common }
  CRITICALITY         ignore
}

downlinkPowerControlFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  DL-PowerControlRequest
  PROCEDURE ID        { procedureCode id-downlinkPowerControl, ddMode fdd }
  CRITICALITY         ignore
}

downlinkPowerTimeslotControl RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  DL-PowerTimeslotControlRequest
  PROCEDURE ID        { procedureCode id-downlinkPowerTimeslotControl, ddMode tdd }
  CRITICALITY         ignore
}

compressedModeCommandFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  CompressedModeCommand
  PROCEDURE ID        { procedureCode id-compressedModeCommand, ddMode fdd }
  CRITICALITY         ignore
}

commonTransportChannelResourcesRelease RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  CommonTransportChannelResourcesReleaseRequest
  PROCEDURE ID        { procedureCode id-commonTransportChannelResourcesRelease, ddMode common }
  CRITICALITY         ignore
}

errorIndication RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  ErrorIndication
  PROCEDURE ID        { procedureCode id-errorIndication, ddMode common }
  CRITICALITY         ignore
}

commonMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  CommonMeasurementInitiationRequest
  SUCCESSFUL OUTCOME  CommonMeasurementInitiationResponse
  UNSUCCESSFUL OUTCOME CommonMeasurementInitiationFailure
  PROCEDURE ID        { procedureCode id-commonMeasurementInitiation, ddMode common }
  CRITICALITY         reject
}

commonMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE  CommonMeasurementReport
  PROCEDURE ID        { procedureCode id-commonMeasurementReporting, ddMode common }
  CRITICALITY         ignore
}

```

```
}

commonMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE   CommonMeasurementTerminationRequest
  PROCEDURE ID         { procedureCode id-commonMeasurementTermination, ddMode common }
  CRITICALITY          ignore
}

commonMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE   CommonMeasurementFailureIndication
  PROCEDURE ID         { procedureCode id-commonMeasurementFailure, ddMode common }
  CRITICALITY          ignore
}

informationExchangeInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE   InformationExchangeInitiationRequest
  SUCCESSFUL OUTCOME   InformationExchangeInitiationResponse
  UNSUCCESSFUL OUTCOME InformationExchangeInitiationFailure
  PROCEDURE ID         { procedureCode id-informationExchangeInitiation, ddMode common }
  CRITICALITY          reject
}

informationReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE   InformationReport
  PROCEDURE ID         { procedureCode id-informationReporting, ddMode common }
  CRITICALITY          ignore
}

informationExchangeTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE   InformationExchangeTerminationRequest
  PROCEDURE ID         { procedureCode id-informationExchangeTermination, ddMode common }
  CRITICALITY          ignore
}

informationExchangeFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE   InformationExchangeFailureIndication
  PROCEDURE ID         { procedureCode id-informationExchangeFailure, ddMode common }
  CRITICALITY          ignore
}

privateMessage RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE   PrivateMessage
  PROCEDURE ID         { procedureCode id-privateMessage, ddMode common }
  CRITICALITY          ignore
}

reset RNSAP-ELEMENTARY-PROCEDURE ::= {
  INITIATING MESSAGE   ResetRequest
  SUCCESSFUL OUTCOME   ResetResponse
}
```

```

    PROCEDURE ID          { procedureCode id-reset, ddMode common }
    CRITICALITY           reject
}

radioLinkActivationFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    RadioLinkActivationCommandFDD
    PROCEDURE ID          { procedureCode id-radioLinkActivation, ddMode fdd }
    CRITICALITY           ignore
}

radioLinkActivationTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    RadioLinkActivationCommandTDD
    PROCEDURE ID          { procedureCode id-radioLinkActivation, ddMode tdd }
    CRITICALITY           ignore
}

gERANuplinkSignallingTransfer RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    GERANuplinkSignallingTransferIndication
    PROCEDURE ID          { procedureCode id-gERANuplinkSignallingTransfer, ddMode common }
    CRITICALITY           ignore
}

radioLinkParameterUpdateFDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    RadioLinkParameterUpdateIndicationFDD
    PROCEDURE ID          { procedureCode id-radioLinkParameterUpdate, ddMode fdd }
    CRITICALITY           ignore
}

radioLinkParameterUpdateTDD RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    RadioLinkParameterUpdateIndicationTDD
    PROCEDURE ID          { procedureCode id-radioLinkParameterUpdate, ddMode tdd }
    CRITICALITY           ignore
}

uEMeasurementInitiation RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    UEMeasurementInitiationRequest
    SUCCESSFUL OUTCOME    UEMeasurementInitiationResponse
    UNSUCCESSFUL OUTCOME  UEMeasurementInitiationFailure
    PROCEDURE ID          { procedureCode id-uEMeasurementInitiation, ddMode tdd }
    CRITICALITY           reject
}

uEMeasurementReporting RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    UEMeasurementReport
    PROCEDURE ID          { procedureCode id-uEMeasurementReporting, ddMode tdd }
    CRITICALITY           ignore
}

uEMeasurementTermination RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE    UEMeasurementTerminationRequest

```

```

    PROCEDURE ID      { procedureCode id-uEMeasurementTermination, ddMode tdd }
    CRITICALITY      ignore
}

uEMeasurementFailure RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE UMeasurementFailureIndication
    PROCEDURE ID      { procedureCode id-uEMeasurementFailure, ddMode tdd }
    CRITICALITY      ignore
}

iurInvokeTrace RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE IurInvokeTrace
    PROCEDURE ID      { procedureCode id-iurInvokeTrace, ddMode common }
    CRITICALITY      ignore
}

iurDeactivateTrace RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE IurDeactivateTrace
    PROCEDURE ID      { procedureCode id-iurDeactivateTrace, ddMode common }
    CRITICALITY      ignore
}

mBMSAttach RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE MBMSAttachCommand
    PROCEDURE ID      { procedureCode id-mBMSAttach, ddMode common }
    CRITICALITY      ignore
}

mBMSDetach RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE MBMSDetachCommand
    PROCEDURE ID      { procedureCode id-mBMSDetach, ddMode common }
    CRITICALITY      ignore
}

mBMSChannelTypeReconfiguration RNSAP-ELEMENTARY-PROCEDURE ::= {
    INITIATING MESSAGE MBMSChannelTypeReconfigurationIndication
    PROCEDURE ID      { procedureCode id-mBMSChannelTypeReconfiguration, ddMode common }
    CRITICALITY      ignore
}

END

```

### 9.3.3 PDU Definitions

```

-- *****
--
-- PDU definitions for RNSAP.
--
-- *****

```

```
RNSAP-PDU-Contents {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-PDU-Contents (1) }
```

```
DEFINITIONS AUTOMATIC TAGS ::=
```

```
BEGIN
```

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

```
IMPORTS
```

```
    Active-Pattern-Sequence-Information,    AccessPointName,
    AllocationRetentionPriority,
    AllowedQueuingTime,
    Allowed-Rate-Information,
    AlphaValue,
    AntennaColocationIndicator,
    BLER,
    SCTD-Indicator,
    BindingID,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CFN,
    CGI,
    ClosedLoopModel-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    Closedlooptimingadjustmentmode,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    CNDomainType,
    Cause,
    CellCapabilityContainer-FDD,
    CellCapabilityContainer-TDD,
    CellCapabilityContainer-TDD-LCR,
    CellParameterID,
    CellPortionID,
    ChipOffset,
    CommonMeasurementAccuracy,
    CommonMeasurementType,
    CommonMeasurementValue,
    CommonMeasurementValueInformation,
    CommonTransportChannelResourcesInitialisationNotRequired,
    CongestionCause,
    CoverageIndicator,
```

CriticalityDiagnostics,  
D-RNTI,  
D-RNTI-ReleaseIndication,  
DCH-FDD-Information,  
DCH-ID,  
DCH-InformationResponse,  
DCH-TDD-Information,  
DL-DPCH-SlotFormat,  
DL-TimeslotISCP,  
DL-Power,  
DL-PowerBalancing-Information,  
DL-PowerBalancing-ActivationIndicator,  
DL-PowerBalancing-UpdatedIndicator,  
DL-ReferencePowerInformation,  
DL-ScramblingCode,  
DL-Timeslot-Information,  
DL-TimeslotLCR-Information,  
DL-TimeSlot-ISCP-Info,  
DL-TimeSlot-ISCP-LCR-Information,  
DPC-Mode,  
DPC-Mode-Change-SupportIndicator,  
DPCH-ID,  
DL-DPCH-TimingAdjustment,  
DRACControl,  
DRXCycleLengthCoefficient,  
DedicatedMeasurementType,  
DedicatedMeasurementValue,  
DedicatedMeasurementValueInformation,  
DelayedActivation,  
DelayedActivationUpdate,  
DiversityControlField,  
DiversityMode,  
DSCH-FDD-Information,  
DSCH-FDD-InformationResponse,  
DSCH-FlowControlInformation,  
DSCH-FlowControlItem,  
DSCH-TDD-Information,  
DSCH-ID,  
DSCH-RNTI,  
[Data-Description-IndicatorList,](#)  
[EDCH-FDD-Information,](#)  
[EDCH-FDD-InformationResponse,](#)  
[EDCH-FDD-Information-To-Modify,](#)  
[EDCH-FDD-DL-ControlChannelInformation,](#)  
[EDCH-DDI-Value,](#)  
[EDCH-MACdFlow-ID,](#)  
[EDCH-MACdFlow-Specific-InfoList,](#)  
[EDCH-MACdFlows-To-Delete,](#)  
[EDCH-Physical-Layer-Category,](#)  
[EDCH-RL-Indication,](#)

EDPCH-Information-FDD,

E-RNTI,

E-TFCS,

E-TTI,

SchedulingPriorityIndicator,

EnhancedDSCHPC,

EnhancedDSCHPCCounter,

EnhancedDSCHPCIndicator,

EnhancedDSCHPCWnd,

EnhancedDSCHPowerOffset,

Enhanced-PrimaryCPICH-EcNo,

FACH-FlowControlInformation,

FDD-DCHs-to-Modify,

FDD-DL-ChannelisationCodeNumber,

FDD-DL-CodeInformation,

FDD-S-CCPCH-Offset,

FDD-TPC-DownlinkStepSize,

FirstRLS-Indicator,

FNReportingIndicator,

FrameHandlingPriority,

FrameOffset,

GA-AccessPointPosition,

GA-Cell,

GA-CellAdditionalShapes,

HCS-Prio,

HSDSCH-FDD-Information,

HSDSCH-FDD-Information-Response,

HSDSCH-FDD-Update-Information,

HSDSCH-TDD-Update-Information,

HSDSCH-Information-to-Modify,

HSDSCH-Information-to-Modify-Unsynchronised,

HSDSCH-MACdFlow-ID,

HSDSCH-MACdFlows-Information,

HSDSCH-MACdFlows-to-Delete,

HSDSCH-RNTI,

HSDSCH-TDD-Information,

HSDSCH-TDD-Information-Response,

HS-SICH-ID,

IMSI,

InformationExchangeID,

InformationReportCharacteristics,

InformationType,

InnerLoopDLPCStatus,

IPMulticastAddress,

L3-Information,

SplitType,

LengthOfTFCI2,

LimitedPowerIncrease,

MaximumAllowedULTxPower,

MaxNrDLPhysicalchannels,

MaxNrDLPhysicalchannelsTS,  
MaxNrOfUL-DPCHs,  
MaxNrTimeslots,  
MaxNrULPhysicalchannels,  
MACes-Guaranteed-Bitrate,  
MaxNr-Retransmissions-EDCH,  
MaxNrUL-EDPDCHs,  
MinULChannelisationCodeLength-EDCH-FDD,  
MeasurementFilterCoefficient,  
MeasurementID,  
MeasurementRecoveryBehavior,  
MeasurementRecoveryReportingIndicator,  
MeasurementRecoverySupportIndicator,  
MBMS-Bearer-Service-List,  
MidambleAllocationMode,  
MidambleShiftAndBurstType,  
MidambleShiftLCR,  
MinimumSpreadingFactor,  
MinUL-ChannelisationCodeLength,  
MultiplexingPosition,  
NeighbouringFDDCellMeasurementInformation,  
NeighbouringTDDCellMeasurementInformation,  
Neighbouring-GSM-CellInformation,  
Neighbouring-UMTS-CellInformation,  
NeighbouringTDDCellMeasurementInformationLCR,  
NrOfDLchannelisationcodes,  
PagingCause,  
PagingRecordType,  
PartialReportingIndicator,  
PDSCHCodeMapping,  
PayloadCRC-PresenceIndicator,  
PCCPCH-Power,  
PC-Preamble,  
Permanent-NAS-UE-Identity,  
Phase-Reference-Update-Indicator,  
PowerAdjustmentType,  
PowerOffset,  
PrimaryCCPCH-RSCP,  
PrimaryCPICH-EcNo,  
PrimaryCPICH-Power,  
Primary-CPICH-Usage-For-Channel-Estimation,  
PrimaryScramblingCode,  
PropagationDelay,  
PunctureLimit,  
QE-Selector,  
Qth-Parameter,  
RANAP-RelocationInformation,  
RB-Info,  
RL-ID,  
RL-Set-ID,



RL-Specific-EDCH-Information,

RNC-ID,  
RepetitionLength,  
RepetitionPeriod,  
ReportCharacteristics,  
Received-total-wide-band-power,  
RequestedDataValue,  
RequestedDataValueInformation,  
RL-Specific-DCH-Info,  
RxTimingDeviationForTA,  
S-FieldLength,  
S-RNTI,  
S-RNTI-Group,  
SCH-TimeSlot,  
SAI,  
SFN,  
Secondary-CCPCH-Info,  
Secondary-CCPCH-Info-TDD,  
Secondary-CPICH-Information,  
Secondary-CPICH-Information-Change,  
Secondary-LCR-CCPCH-Info-TDD,  
SNA-Information,  
SpecialBurstScheduling,  
SSDT-CellID,  
SSDT-CellID-Length,  
SSDT-Indication,  
SSDT-SupportIndicator,  
STTD-Indicator,  
STTD-SupportIndicator,  
AdjustmentPeriod,  
ScaledAdjustmentRatio,  
MaxAdjustmentStep,  
SecondaryCCPCH-SlotFormat,  
SRB-Delay,  
Support-8PSK,  
SyncCase,  
SynchronisationConfiguration,  
TDD-ChannelisationCode,  
TDD-DCHs-to-Modify,  
TDD-DL-Code-Information,  
TDD-DPCHOffset,  
TDD-PhysicalChannelOffset,  
TDD-TPC-DownlinkStepSize,  
TDD-ChannelisationCodeLCR,  
TDD-DL-Code-LCR-Information,  
TDD-UL-Code-Information,  
TDD-UL-Code-LCR-Information,  
TFCI-Coding,  
TFCI-PC-SupportIndicator,  
TFCI-Presence,  
TFCI-SignallingMode,

TimeSlot,  
TimeSlotLCR,  
TimingAdvanceApplied,  
TMGI, TnlQos,  
ToAWE,  
ToAWS,  
TraceDepth,  
TraceRecordingSessionReference,  
TraceReference,  
TrafficClass,  
TransmitDiversityIndicator,  
TransportBearerID,  
TransportBearerRequestIndicator,  
TFCS,  
Transmission-Gap-Pattern-Sequence-Information,  
TransmissionMode,  
TransportFormatManagement,  
TransportFormatSet,  
TransportLayerAddress,  
TrCH-SrcStatisticsDescr,  
TSTD-Indicator,  
TSTD-Support-Indicator,  
UARFCN,  
UC-ID,  
UEIdentity,  
UEMeasurementType,  
UEMeasurementTimeslotInfoHCR,  
UEMeasurementTimeslotInfoLCR,  
UEMeasurementReportCharacteristics,  
UEMeasurementParameterModAllow,  
UEMeasurementValueInformation,  
UE-State,  
UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation,  
UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH,  
UL-DPCCH-SlotFormat,  
UL-DPDCHIndicatorEDCH,  
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,  
URA-ID,  
URA-Information,  
USCH-ID,  
USCH-Information,  
UL-Synchronisation-Parameters-LCR,  
TDD-DL-DPCH-TimeSlotFormat-LCR,

```
TDD-UL-DPCH-TimeSlotFormat-LCR,  
MACHs-ResetIndicator,  
UL-TimingAdvanceCtrl-LCR,  
TDD-TPC-UplinkStepSize-LCR,  
PrimaryCCPCH-RSCP-Delta  
FROM RNSAP-IEs
```

```
PrivateIE-Container {},  
ProtocolExtensionContainer {},  
ProtocolIE-ContainerList {},  
ProtocolIE-ContainerPair {},  
ProtocolIE-ContainerPairList {},  
ProtocolIE-Container {},  
ProtocolIE-Single-Container {},  
RNSAP-PRIVATE-IES,  
RNSAP-PROTOCOL-EXTENSION,  
RNSAP-PROTOCOL-IES,  
RNSAP-PROTOCOL-IES-PAIR  
FROM RNSAP-Containers
```

```
maxNoOfDSCHs,  
maxNoOfUSCHs,  
maxNrOfCCTrCHs,  
maxNrOfDCHs,  
maxNrOfTS,  
maxNrOfDPCHs,  
maxNrOfInterfaces,  
maxNrOfRLs,  
maxNrOfRLSets,  
maxNrOfRLSets-1,  
maxNrOfRLs-1,  
maxNrOfRLs-2,  
maxNrOfULTs,  
maxNrOfDLTs,  
maxResetContext,  
maxResetContextGroup,  
maxNoOfDSCHsLCR,  
maxNoOfUSCHsLCR,  
maxNrOfCCTrCHsLCR,  
maxNrOfTsLCR,  
maxNrOfDLTsLCR,  
maxNrOfULTsLCR,  
maxNrOfDPCHsLCR,  
maxNrOfLCRTDDNeighboursPerRNC,  
maxNrOfMeasNCell,  
maxNrOfMACdFlows,  
maxNrOfHSSICHs,  
maxNrOfActiveMBMSServices,  
maxNrOfMBMSServices,  
maxNrOfUEs,  
maxNrOfDDIs,
```

maxNrofSigSeqERGHICH-1,

id-Active-MBMS-Bearer-Service-UplinkSigTrFDD,  
id-Active-MBMS-Bearer-Service-UplinkSigTrTDD,  
id-Active-Pattern-Sequence-Information,  
id-AdjustmentRatio,  
id-AffectedUEInformationForMBMS,  
id-AllowedQueuingTime,  
id-AntennaColocationIndicator,  
id-BindingID,  
id-C-ID,  
id-C-RNTI,  
id-CFN,  
id-CFNReportingIndicator,  
id-CN-CS-DomainIdentifier,  
id-CN-PS-DomainIdentifier,  
id-Cause,  
id-CauseLevel-RL-AdditionFailureFDD,  
id-CauseLevel-RL-AdditionFailureTDD,  
id-CauseLevel-RL-ReconfFailure,  
id-CauseLevel-RL-SetupFailureFDD,  
id-CauseLevel-RL-SetupFailureTDD,  
id-CCTrCH-InformationItem-RL-FailureInd,  
id-CCTrCH-InformationItem-RL-RestoreInd,  
id-CellCapabilityContainer-FDD,  
id-CellCapabilityContainer-TDD,  
id-CellCapabilityContainer-TDD-LCR,  
id-CellPortionID,  
id-ClosedLoopModel-SupportIndicator,  
id-ClosedLoopMode2-SupportIndicator,  
id-CNOriginatedPage-PagingRqst,  
id-CommonMeasurementAccuracy,  
id-CommonMeasurementObjectType-CM-Rprt,  
id-CommonMeasurementObjectType-CM-Rqst,  
id-CommonMeasurementObjectType-CM-Rsp,  
id-CommonMeasurementType,  
id-CommonTransportChannelResourcesInitialisationNotRequired,  
id-CongestionCause,  
id-CoverageIndicator,  
id-CriticalityDiagnostics,  
id-D-RNTI,  
id-D-RNTI-ReleaseIndication,  
id-DCHs-to-Add-FDD,  
id-DCHs-to-Add-TDD,  
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-FDD-DCHs-to-Modify,  
id-TDD-DCHs-to-Modify,  
id-DCH-InformationResponse,  
id-DCH-Rate-InformationItem-RL-CongestInd,  
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,  
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,  
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,  
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,  
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,  
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,  
id-FDD-DL-CodeInformation,  
id-DL-DPCH-Information-RL-ReconfPrepFDD,  
id-DL-DPCH-Information-RL-SetupRqstFDD,  
id-DL-DPCH-Information-RL-ReconfRqstFDD,  
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,  
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,  
id-DL-DPCH-InformationItem-RL-SetupRspTDD,  
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,  
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,  
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,  
id-DL-DPCH-TimingAdjustment,  
id-DL-Physical-Channel-Information-RL-SetupRqstTDD,  
id-DL-PowerBalancing-Information,  
id-DL-PowerBalancing-ActivationIndicator,  
id-DL-PowerBalancing-UpdatedIndicator,  
id-DL-ReferencePowerInformation,  
id-DLReferencePower,  
id-DLReferencePowerList-DL-PC-Rqst,  
id-DL-ReferencePowerInformation-DL-PC-Rqst,  
id-DRXCycleLengthCoefficient,  
id-DedicatedMeasurementObjectType-DM-Fail,  
id-DedicatedMeasurementObjectType-DM-Fail-Ind,  
id-DedicatedMeasurementObjectType-DM-Rprt,  
id-DedicatedMeasurementObjectType-DM-Rqst,  
id-DedicatedMeasurementObjectType-DM-Rsp,  
id-DedicatedMeasurementType,  
id-DelayedActivation,  
id-DelayedActivationList-RL-ActivationCmdFDD,  
id-DelayedActivationList-RL-ActivationCmdTDD,  
id-DelayedActivationInformation-RL-ActivationCmdFDD,

id-DelayedActivationInformation-RL-ActivationCmdTDD,  
id-DPC-Mode,  
id-DPC-Mode-Change-SupportIndicator,  
id-DRNC-ID,  
id-DSCHs-to-Add-FDD,  
id-DSCHs-to-Add-TDD,  
id-DSCH-DeleteList-RL-ReconfPrepTDD,  
id-DSCH-Delete-RL-ReconfPrepFDD,  
id-DSCH-FDD-Information,  
id-DSCH-InformationListIE-RL-AdditionRspTDD,  
id-DSCH-InformationListIEs-RL-SetupRspTDD,  
id-DSCH-TDD-Information,  
id-DSCH-FDD-InformationResponse,  
id-DSCH-ModifyList-RL-ReconfPrepTDD,  
id-DSCH-Modify-RL-ReconfPrepFDD,  
id-DSCH-RNTI,  
id-DSCHsToBeAddedOrModified-FDD,  
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD,  
id-EDPCH-Information,  
id-EDCH-RL-Indication,  
id-EDCH-FDD-Information,  
id-Serving-EDCHRL-Id,  
id-EDCH-FDD-DL-ControlChannelInformation,  
id-EDCH-FDD-InformationResponse,  
id-EDCH-MACdFlows-To-Add,  
id-EDCH-FDD-Information-To-Modify,  
id-EDCH-MACdFlows-To-Delete,  
id-EDPCH-Information-RLReconfRequest-FDD,  
id-EDCH-MacFlowSpecificInformationList-RL-PreemptRequiredInd,  
id-EDCH-MacFlowSpecificInformationItem-RL-PreemptRequiredInd,  
id-EDCH-MacFlowSpecificInformationList-RL-CongestInd,  
id-EDCH-MacFlowSpecificInformationItem-RL-CongestInd,  
id-EnhancedDSCHPC,  
id-EnhancedDSCHPCIndicator,  
id-Enhanced-PrimaryCPICH-EcNo,  
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD,  
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD,  
id-GA-Cell,  
id-GA-CellAdditionalShapes,  
id-GSM-Cell-InfEx-Rqst,  
id-HCS-Prio,  
id-HSDSCH-FDD-Information,  
id-HSDSCH-FDD-Information-Response,  
id-HSDSCH-FDD-Update-Information,  
id-HSDSCH-TDD-Update-Information,  
id-HSDSCH-Information-to-Modify,  
id-HSDSCH-Information-to-Modify-Unsynchronised,  
id-HSDSCH-MACdFlows-to-Add,  
id-HSDSCH-MACdFlows-to-Delete,  
id-HSDSCHMacFlowSpecificInformationList-RL-PreemptRequiredInd,

id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd,  
id-HSDSCH-RNTI,  
id-HSDSCH-TDD-Information,  
id-HSDSCH-TDD-Information-Response,  
id-HSPDSCH-RL-ID,  
id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD,  
id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD,  
id-HSSICH-Info-DM-Rprt,  
id-HSSICH-Info-DM-Rqst,  
id-HSSICH-Info-DM,  
id-IMSI,  
id-InformationExchangeID,  
id-InformationExchangeObjectType-InfEx-Rprt,  
id-InformationExchangeObjectType-InfEx-Rqst,  
id-InformationExchangeObjectType-InfEx-Rsp,  
id-InformationReportCharacteristics,  
id-InformationType,  
id-InnerLoopDLPCStatus,  
id-InterfacesToTraceItem,  
id-SplitType,  
id-LengthOfTFCI2,  
id-L3-Information,  
id-AdjustmentPeriod,  
id-ListOfInterfacesToTrace,  
id-MaxAdjustmentStep,  
id-MBMS-Bearer-Service-List,  
id-MBMS-Bearer-Service-List-InfEx-Rsp,  
id-MeasurementFilterCoefficient,  
id-MeasurementID,  
id-MeasurementRecoveryBehavior,  
id-MeasurementRecoveryReportingIndicator,  
id-MeasurementRecoverySupportIndicator,  
id-Multiple-RL-InformationResponse-RL-ReconfReadyTDD,  
id-NACC-Related-Data,  
id-Old-URA-ID,  
id-PagingArea-PagingRqst,  
id-PartialReportingIndicator,  
id-PDSCH-RL-ID,  
id-Permanent-NAS-UE-Identity,  
id-Phase-Reference-Update-Indicator,  
id-FACH-FlowControlInformation,  
id-PowerAdjustmentType,  
id-PrimCCPCH-RSCP-DL-PC-RqstTDD,  
id-Primary-CPICH-Usage-For-Channel-Estimation,  
id-PropagationDelay,  
id-Qth-Parameter,  
id-RANAP-RelocationInformation,  
id-ResetIndicator,  
[id-EDCH-RLSet-Id](#),  
id-RL-Information-PhyChReconfRqstFDD,

id-RL-Information-PhyChReconfRqstTDD,  
id-RL-Information-RL-AdditionRqstFDD,  
id-RL-Information-RL-AdditionRqstTDD,  
id-RL-Information-RL-DeletionRqst,  
id-RL-Information-RL-FailureInd,  
id-RL-Information-RL-ReconfPrepFDD,  
id-RL-Information-RL-ReconfPrepTDD,  
id-RL-Information-RL-RestoreInd,  
id-RL-Information-RL-SetupRqstFDD,  
id-RL-Information-RL-SetupRqstTDD,  
id-RL-InformationItem-RL-CongestInd,  
id-RL-InformationItem-DM-Rprt,  
id-RL-InformationItem-DM-Rqst,  
id-RL-InformationItem-DM-Rsp,  
id-RL-InformationItem-RL-PreemptRequiredInd,  
id-RL-InformationItem-RL-SetupRqstFDD,  
id-RL-InformationList-RL-CongestInd,  
id-RL-InformationList-RL-AdditionRqstFDD,  
id-RL-InformationList-RL-DeletionRqst,  
id-RL-InformationList-RL-PreemptRequiredInd,  
id-RL-InformationList-RL-ReconfPrepFDD,  
id-RL-InformationResponse-RL-AdditionRspTDD,  
id-RL-InformationResponse-RL-ReconfReadyTDD,  
id-RL-InformationResponse-RL-ReconfRspTDD,  
id-RL-InformationResponse-RL-SetupRspTDD,  
id-RL-InformationResponseItem-RL-AdditionRspFDD,  
id-RL-InformationResponseItem-RL-ReconfReadyFDD,  
id-RL-InformationResponseItem-RL-ReconfRspFDD,  
id-RL-InformationResponseItem-RL-SetupRspFDD,  
id-RL-InformationResponseList-RL-AdditionRspFDD,  
id-RL-InformationResponseList-RL-ReconfReadyFDD,  
id-RL-InformationResponseList-RL-ReconfRspFDD,  
id-RL-InformationResponseList-RL-SetupRspFDD,  
id-RL-ParameterUpdateIndicationFDD-RL-Information-Item,  
id-RL-ParameterUpdateIndicationFDD-RL-InformationList,  
id-RL-ReconfigurationFailure-RL-ReconfFail,  
id-RL-ReconfigurationRequestFDD-RL-InformationList,  
id-RL-ReconfigurationRequestFDD-RL-Information-IES,  
id-RL-ReconfigurationRequestTDD-RL-Information,  
id-RL-ReconfigurationResponseTDD-RL-Information,  
id-RL-Specific-DCH-Info,  
[id-RL-Specific-EDCH-Information](#),  
id-RL-Set-InformationItem-DM-Rprt,  
id-RL-Set-InformationItem-DM-Rqst,  
id-RL-Set-InformationItem-DM-Rsp,  
id-RL-Set-Information-RL-FailureInd,  
id-RL-Set-Information-RL-RestoreInd,  
id-RL-Set-Successful-InformationItem-DM-Fail,  
id-RL-Set-Unsuccessful-InformationItem-DM-Fail,  
id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind,  
id-RL-Successful-InformationItem-DM-Fail,



id-RL-Unsuccessful-InformationItem-DM-Fail,  
id-RL-Unsuccessful-InformationItem-DM-Fail-Ind,  
id-ReportCharacteristics,  
id-Reporting-Object-RL-FailureInd,  
id-Reporting-Object-RL-RestoreInd,  
id-RNC-ID,  
id-RxTimingDeviationForTA,  
id-S-RNTI,  
id-SAI,  
id-Secondary-CPICH-Information,  
id-Secondary-CPICH-Information-Change,  
id-SFN,  
id-SFNReportingIndicator,  
id-SNA-Information,  
id-SRNC-ID,  
id-SSDT-CellIDforEDSCHPC,  
id-STTD-SupportIndicator,  
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,  
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,  
id-TDD-maxNrDLPhysicalchannels,  
id-TDD-Support-8PSK,  
id-TFCI-PC-SupportIndicator,  
id-timeSlot-ISCP,  
id-TimeSlot-RL-SetupRspTDD,  
id-TMGI,  
id-TnlQos,  
id-TraceDepth,  
id-TraceRecordingSessionReference,  
id-TraceReference,  
id-TransmissionMode,  
id-TransportBearerID,  
id-TransportBearerRequestIndicator,  
id-TransportLayerAddress,  
id-UC-ID,  
id-ContextInfoItem-Reset,  
id-ContextGroupInfoItem-Reset,  
id-Transmission-Gap-Pattern-Sequence-Information,  
id-UEIdentity,  
id-UEMeasurementType,  
id-UEMeasurementTimeslotInfoHCR,  
id-UEMeasurementTimeslotInfoLCR,  
id-UEMeasurementReportCharacteristics,  
id-UEMeasurementParameterModAllow,  
id-UEMeasurementValueInformation,  
id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation,  
id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH,  
id-UE-State,  
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD,  
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD,  
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD,

id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,  
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,  
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,  
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,  
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,  
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,  
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,  
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,  
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,  
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,  
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,  
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,  
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,  
id-UL-DPCH-Information-RL-ReconfPrepFDD,  
id-UL-DPCH-Information-RL-ReconfRqstFDD,  
id-UL-DPCH-Information-RL-SetupRqstFDD,  
id-UL-DPCHIndicatorEDCH,  
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,  
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,  
id-UL-DPCH-InformationItem-RL-SetupRspTDD,  
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,  
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,  
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,  
id-UL-Physical-Channel-Information-RL-SetupRqstTDD,  
id-UL-SIRTarget,  
id-URA-ID,  
id-URA-Information,  
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,  
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD,  
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,  
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,  
id-USCHs-to-Add,  
id-USCH-DeleteList-RL-ReconfPrepTDD,  
id-USCH-InformationListIE-RL-AdditionRspTDD,  
id-USCH-InformationListIEs-RL-SetupRspTDD,  
id-USCH-Information,  
id-USCH-ModifyList-RL-ReconfPrepTDD,  
id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD,  
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD,  
id-RL-LCR-InformationResponse-RL-SetupRspTDD,  
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,  
id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD,  
id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,  
id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD,  
id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD,  
id-USCH-LCR-InformationListIEs-RL-SetupRspTDD,  
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD,  
id-RL-LCR-InformationResponse-RL-AdditionRspTDD,  
id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,  
id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,

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id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,
id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD,
id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD,
id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD,
id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD,
id-TSTD-Support-Indicator-RL-SetupRqstTDD,
id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD,
id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD,
id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD,
id-neighbouringTDDCellMeasurementInformationLCR,
id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD,
id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD,
id-TrafficClass,
id-UL-Synchronisation-Parameters-LCR,
id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD,
id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD,
id-MACHs-ResetIndicator,
id-UL-TimingAdvanceCtrl-LCR,
id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD,
id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD,
id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD,
id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD,
id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD,
id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD,
id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD,
id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationList-RL-ReconfRspTDD,
id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD,
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationItem-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationItem-RL-AdditionRqstTDD,
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD,
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD,
id-PrimaryCCPCH-RSCP-Delta

```

FROM RNSAP-Constants;

```

-- *****
--
-- RADIO LINK SETUP REQUEST FDD

```

```

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

RadioLinkSetupRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-SRNC-ID            CRITICALITY reject  TYPE RNC-ID                PRESENCE mandatory } |
    { ID id-S-RNTI            CRITICALITY reject  TYPE S-RNTI                PRESENCE mandatory } |
    { ID id-D-RNTI            CRITICALITY reject  TYPE D-RNTI                PRESENCE optional  } |
    { ID id-AllowedQueuingTime CRITICALITY reject  TYPE AllowedQueuingTime    PRESENCE optional  } |
    { ID id-UL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject  TYPE UL-DPCH-Information-RL-SetupRqstFDD PRESENCE mandatory } |
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject  TYPE DL-DPCH-Information-RL-SetupRqstFDD PRESENCE mandatory } |
    { ID id-DCH-FDD-Information CRITICALITY reject  TYPE DCH-FDD-Information    PRESENCE mandatory } |
    { ID id-DSCH-FDD-Information CRITICALITY reject  TYPE DSCH-FDD-Information    PRESENCE optional  } |
    { ID id-RL-Information-RL-SetupRqstFDD      CRITICALITY notify  TYPE RL-InformationList-RL-SetupRqstFDD PRESENCE mandatory } |
    { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject  TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE optional } |
    { ID id-Active-Pattern-Sequence-Information CRITICALITY reject  TYPE Active-Pattern-Sequence-Information PRESENCE optional },
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode          UL-ScramblingCode,
    minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPCHs           MaxNrOfUL-DPCHs          OPTIONAL
    -- This IE shall be present if minUL-ChannelisationCodeLength equals to 4 -- ,
    ul-PunctureLimit          PunctureLimit,
    ul-TFCS                    TFCS,
    ul-DPCCH-SlotFormat        UL-DPCCH-SlotFormat,
    ul-SIRTarget               UL-SIR                OPTIONAL,
    diversityMode              DiversityMode,
    sSDT-CellIdLength          SSDT-CellID-Length     OPTIONAL,
    s-FieldLength              S-FieldLength         OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DPC-Mode            CRITICALITY reject  EXTENSION DPC-Mode PRESENCE optional } |
    { ID id-UL-DPCHIndicatorEDCH CRITICALITY reject  EXTENSION UL-DPCHIndicatorEDCH PRESENCE conditional },
    -- This IE shall be present if E-DPCH Information IE is present.
    ...
}

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    tFCS                        TFCS,

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dl-DPCH-SlotFormat          DL-DPCH-SlotFormat,
nrOfDLchannelisationcodes  NrOfDLchannelisationcodes,
tFCI-SignallingMode        TFCI-SignallingMode,
tFCI-Presence               TFCI-Presence          OPTIONAL
-- This IE shall be present if DL DPCH Slot Format IE is equal to any of the values from 12 to 16 --,
multiplexingPosition        MultiplexingPosition,
powerOffsetInformation      PowerOffsetInformation-RL-SetupRqstFDD,
fdd-dl-TPC-DownlinkStepSize FDD-TPC-DownlinkStepSize,
limitedPowerIncrease        LimitedPowerIncrease,
innerLoopDLPCStatus        InnerLoopDLPCStatus,
iE-Extensions              ProtocolExtensionContainer { {DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-SplitType CRITICALITY reject EXTENSION SplitType PRESENCE optional }|
  { ID id-LengthOfTFCI2 CRITICALITY reject EXTENSION LengthOfTFCI2 PRESENCE optional },
  ...
}

PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
  po1-ForTFCI-Bits          PowerOffset,
  po2-ForTPC-Bits           PowerOffset,
  po3-ForPilotBits          PowerOffset,
  iE-Extensions             ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-InformationList-RL-SetupRqstFDD          ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-SetupRqstFDD} }

RL-InformationItemIEs-RL-SetupRqstFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-SetupRqstFDD CRITICALITY notify TYPE RL-InformationItem-RL-SetupRqstFDD PRESENCE mandatory }
}

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  c-ID           C-ID,
  firstRLS-indicator FirstRLS-Indicator,
  frameOffset    FrameOffset,
  chipOffset     ChipOffset,
  propagationDelay PropagationDelay          OPTIONAL,
  diversityControlField DiversityControlField OPTIONAL
-- This IE shall be present if the RL is not the first one in the RL-InformationList-RL-SetupRqstFDD --,
dl-InitialTX-Power DL-Power                  OPTIONAL,
primaryCPICH-EcNo  PrimaryCPICH-EcNo         OPTIONAL,

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sSDT-CellID                SSdT-CellID                OPTIONAL,
transmitDiversityIndicator  TransmitDiversityIndicator  OPTIONAL,
-- This IE shall be present unless Diversity Mode IE in UL DPCCH Information group is "none"
IE-Extensions              ProtocolExtensionContainer { {RL-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

RL-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-SSDT-CellIDforEDSCHPC          CRITICALITY ignore  EXTENSION SSdT-CellID                PRESENCE conditional }|
  -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Information IE.
  { ID id-Enhanced-PrimaryCPICH-EcNo     CRITICALITY ignore  EXTENSION Enhanced-PrimaryCPICH-EcNo PRESENCE optional }|
  { ID id-RL-Specific-DCH-Info           CRITICALITY ignore  EXTENSION RL-Specific-DCH-Info       PRESENCE optional }|
  { ID id-DelayedActivation              CRITICALITY reject  EXTENSION DelayedActivation          PRESENCE optional }|
  { ID id-Qth-Parameter                  CRITICALITY ignore  EXTENSION Qth-Parameter              PRESENCE optional }|
  { ID id-CellPortionID                  CRITICALITY ignore  EXTENSION CellPortionID              PRESENCE optional }|
  { ID id-RL-Specific-EDCH-Information    CRITICALITY reject  EXTENSION RL-Specific-EDCH-Information PRESENCE optional }|
  { ID id-EDCH-RL-Indication              CRITICALITY reject  EXTENSION EDCH-RL-Indication         PRESENCE optional },
  ...
}

RadioLinkSetupRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Permanent-NAS-UE-Identity      CRITICALITY ignore  EXTENSION Permanent-NAS-UE-Identity PRESENCE optional }|
  { ID id-DL-PowerBalancing-Information   CRITICALITY ignore  EXTENSION DL-PowerBalancing-Information PRESENCE optional }|
  { ID id-HSDSCH-FDD-Information          CRITICALITY reject  EXTENSION HSDSCH-FDD-Information     PRESENCE optional }|
  { ID id-HSPDSCH-RL-ID                   CRITICALITY reject  EXTENSION RL-ID                       PRESENCE conditional }|
  -- This IE shall be present if HS-DSCH Information IE is present.
  { ID id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation CRITICALITY ignore  EXTENSION UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation PRESENCE optional }|
  { ID id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH CRITICALITY ignore  EXTENSION UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH PRESENCE optional }|
  { ID id-MBMS-Bearer-Service-List        CRITICALITY notify  EXTENSION MBMS-Bearer-Service-List   PRESENCE optional }|
  { ID id-EDPCH-Information               CRITICALITY reject  EXTENSION EDPCH-Information-FDD      PRESENCE optional }|
  { ID id-EDCH-FDD-Information            CRITICALITY reject  EXTENSION EDCH-FDD-Information        PRESENCE optional }|
  { ID id-Serving-EDCHRL-Id               CRITICALITY reject  EXTENSION RL-ID                       PRESENCE conditional },
  -- This IE is present if RL Specific E-DCH Information IE is present.
  ...
}

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

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

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RadioLinkSetupRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-SRNC-ID                CRITICALITY reject  TYPE RNC-ID                PRESENCE mandatory } |
  { ID id-S-RNTI                 CRITICALITY reject  TYPE S-RNTI                 PRESENCE mandatory } |
  { ID id-D-RNTI                 CRITICALITY reject  TYPE D-RNTI                 PRESENCE optional } |
  { ID id-UL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject  TYPE UL-Physical-Channel-Information-RL-SetupRqstTDD PRESENCE
mandatory } |
  { ID id-DL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject  TYPE DL-Physical-Channel-Information-RL-SetupRqstTDD PRESENCE
mandatory } |
  { ID id-AllowedQueuingTime      CRITICALITY reject  TYPE AllowedQueuingTime      PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify  TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify  TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE optional } |
  { ID id-DCH-TDD-Information      CRITICALITY reject  TYPE DCH-TDD-Information      PRESENCE optional } |
  { ID id-DSCH-TDD-Information      CRITICALITY reject  TYPE DSCH-TDD-Information      PRESENCE optional } |
  { ID id-USCH-Information          CRITICALITY reject  TYPE USCH-Information          PRESENCE optional } |
  { ID id-RL-Information-RL-SetupRqstTDD CRITICALITY reject  TYPE RL-Information-RL-SetupRqstTDD PRESENCE mandatory},
  ...
}

UL-Physical-Channel-Information-RL-SetupRqstTDD ::= SEQUENCE {
  maxNrTimeslots-UL                MaxNrTimeslots,
  minimumSpreadingFactor-UL        MinimumSpreadingFactor,
  maxNrULPhysicalchannels          MaxNrULPhysicalchannels,
  iE-Extensions                    ProtocolExtensionContainer { {UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TDD-Support-8PSK          CRITICALITY ignore  EXTENSION Support-8PSK          PRESENCE optional },
  -- Applicable to 1.28Mcps TDD only
  ...
}

DL-Physical-Channel-Information-RL-SetupRqstTDD ::= SEQUENCE {
  maxNrTimeslots-DL                MaxNrTimeslots,
  minimumSpreadingFactor-DL        MinimumSpreadingFactor,
  maxNrDLPhysicalchannels          MaxNrDLPhysicalchannels,
  iE-Extensions                    ProtocolExtensionContainer { {DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TDD-maxNrDLPhysicalchannels CRITICALITY ignore  EXTENSION MaxNrDLPhysicalchannelsTS PRESENCE optional } |
  { ID id-TDD-Support-8PSK          CRITICALITY ignore  EXTENSION Support-8PSK          PRESENCE optional },
  -- Applicable to 1.28Mcps TDD only
  ...
}

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

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

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  ul-TFCS            TFCS,
  tFCI-Coding        TFCI-Coding,
  ul-PunctureLimit   PunctureLimit,
  iE-Extensions      ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD   CRITICALITY reject   EXTENSION   TDD-TPC-UplinkStepSize-LCR   PRESENCE optional },
  -- Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD
  ...
}

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

DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD   CRITICALITY notify   TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD   PRESENCE mandatory   }
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  dl-TFCS            TFCS,
  tFCI-Coding        TFCI-Coding,
  dl-PunctureLimit   PunctureLimit,
  tdd-TPC-DownlinkStepSize   TDD-TPC-DownlinkStepSize,
  cCTrCH-TPCList     CCTrCH-TPCList-RL-SetupRqstTDD OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

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

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

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

```



```

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

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    c-ID                C-ID,
    frameOffset         FrameOffset,
    specialBurstScheduling SpecialBurstScheduling,
    primaryCCPCH-RSCP   PrimaryCCPCH-RSCP   OPTIONAL,
    dL-TimeSlot-ISCP   DL-TimeSlot-ISCP-Info OPTIONAL,
    --for 3.84Mcps TDD only
    iE-Extensions       ProtocolExtensionContainer { {RL-Information-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD   CRITICALITY reject      EXTENSION   DL-TimeSlot-ISCP-LCR-Information PRESENCE optional
    }|
    { ID id-TSTD-Support-Indicator-RL-SetupRqstTDD           CRITICALITY ignore      EXTENSION   TSTD-Support-Indicator          PRESENCE optional
    }|
    --for 1.28Mcps TDD only
    { ID id-RL-Specific-DCH-Info   CRITICALITY ignore      EXTENSION   RL-Specific-DCH-Info   PRESENCE optional }|
    { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional }|
    { ID id-UL-Synchronisation-Parameters-LCR   CRITICALITY reject      EXTENSION   UL-Synchronisation-Parameters-LCR   PRESENCE optional
    }| -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    { ID id-PrimaryCCPCH-RSCP-Delta   CRITICALITY ignore      EXTENSION   PrimaryCCPCH-RSCP-Delta   PRESENCE optional },
    ...
}

RadioLinkSetupRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Permanent-NAS-UE-Identity   CRITICALITY ignore      EXTENSION Permanent-NAS-UE-Identity   PRESENCE optional }|
    { ID id-HSDSCH-TDD-Information       CRITICALITY reject      EXTENSION HSDSCH-TDD-Information   PRESENCE optional }|
    { ID id-HSPDSCH-RL-ID               CRITICALITY reject      EXTENSION RL-ID   PRESENCE conditional }|
    -- This IE shall be present if HS-DSCH Information IE is present.
    { ID id-PDSCH-RL-ID                 CRITICALITY ignore      EXTENSION RL-ID   PRESENCE optional }|
    { ID id-MBMS-Bearer-Service-List    CRITICALITY notify      EXTENSION MBMS-Bearer-Service-List    PRESENCE optional}, ...
}

-- *****
--
-- RADIO LINK SETUP RESPONSE FDD
--
-- *****

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

```

```

RadioLinkSetupResponseFDD-IES RNSAP-PROTOCOL-IES ::= {
  { ID id-D-RNTI                CRITICALITY ignore TYPE D-RNTI                PRESENCE optional } |
  { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
  { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
  { ID id-RL-InformationResponseList-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseList-RL-SetupRspFDD PRESENCE mandatory } |
  { ID id-UL-SIRTarget          CRITICALITY ignore TYPE UL-SIR                PRESENCE optional } |
  { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponseItemIEs-RL-SetupRspFDD} }

RL-InformationResponseItemIEs-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseItem-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseItem-RL-SetupRspFDD PRESENCE mandatory }
}

RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  rL-Set-ID            RL-Set-ID,
  uRA-Information      URA-Information OPTIONAL,
  sAI                  SAI,
  gA-Cell              GA-Cell OPTIONAL,
  gA-AccessPointPosition GA-AccessPointPosition OPTIONAL,
  received-total-wide-band-power Received-total-wide-band-power,
  secondary-CCPCH-Info Secondary-CCPCH-Info OPTIONAL,
  dl-CodeInformation   FDD-DL-CodeInformation,
  diversityIndication DiversityIndication-RL-SetupRspFDD,

  sSDT-SupportIndicator SSDT-SupportIndicator,
  maxUL-SIR            UL-SIR,
  minUL-SIR            UL-SIR,
  closedloopTimingadjustmentmode ClosedloopTimingadjustmentmode OPTIONAL,
  maximumAllowedULTxPower MaximumAllowedULTxPower,
  maximumDLTxPower    DL-Power,
  minimumDLTxPower    DL-Power,
  primaryScramblingCode PrimaryScramblingCode OPTIONAL,
  uL-UARFCN            UARFCN OPTIONAL,
  dL-UARFCN            UARFCN OPTIONAL,
  primaryCPICH-Power   PrimaryCPICH-Power,
  dSCHInformationResponse DSCH-InformationResponse-RL-SetupRspFDD OPTIONAL,
  neighbouring-UMTS-CellInformation Neighbouring-UMTS-CellInformation OPTIONAL,
  neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation OPTIONAL,
  pC-Preamble          PC-Preamble,
  sRB-Delay            SRB-Delay,
  iE-Extensions        ProtocolExtensionContainer { {RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes          CRITICALITY ignore  EXTENSION GA-CellAdditionalShapes          PRESENCE optional }|
  { ID id-DL-PowerBalancing-ActivationIndicator  CRITICALITY ignore  EXTENSION DL-PowerBalancing-ActivationIndicator  PRESENCE optional }|
  { ID id-TFCI-PC-SupportIndicator            CRITICALITY ignore  EXTENSION TFCI-PC-SupportIndicator            PRESENCE optional }|
  { ID id-HCS-Prio                           CRITICALITY ignore  EXTENSION HCS-Prio                           PRESENCE optional }|
  { ID id-Primary-CPICH-Usage-For-Channel-Estimation  CRITICALITY ignore  EXTENSION Primary-CPICH-Usage-For-Channel-Estimation  PRESENCE optional }|
  { ID id-Secondary-CPICH-Information         CRITICALITY ignore  EXTENSION Secondary-CPICH-Information         PRESENCE optional }|
  { ID id-EDCH-RLSet-ID                      CRITICALITY ignore  EXTENSION RL-Set-ID                          PRESENCE optional }|
  { ID id-EDCH-FDD-DL-ControlChannelInformation  CRITICALITY ignore  EXTENSION EDCH-FDD-DL-ControlChannelInformation  PRESENCE optional },
  ...
}

DiversityIndication-RL-SetupRspFDD ::= CHOICE {
  combining                Combining-RL-SetupRspFDD,
  nonCombiningOrFirstRL   NonCombiningOrFirstRL-RL-SetupRspFDD
}

Combining-RL-SetupRspFDD ::= SEQUENCE {
  rL-ID                    RL-ID,
  iE-Extensions           ProtocolExtensionContainer { { CombiningItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
  ...
}

CombiningItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DCH-InformationResponse          CRITICALITY ignore  EXTENSION DCH-InformationResponse          PRESENCE optional }|
  { ID id-EDCH-FDD-InformationResponse    CRITICALITY ignore  EXTENSION EDCH-FDD-InformationResponse    PRESENCE optional },
  ...
}

NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE {
  dCH-InformationResponse  DCH-InformationResponse,
  iE-Extensions           ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs } } OPTIONAL,
  ...
}

NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-EDCH-FDD-InformationResponse    CRITICALITY ignore  EXTENSION EDCH-FDD-InformationResponse    PRESENCE mandatory },
  ...
}

DSCH-InformationResponse-RL-SetupRspFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseIE-RL-SetupRspFDD }}

DSCH-InformationResponseIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DSCH-FDD-InformationResponse    CRITICALITY ignore  TYPE    DSCH-FDD-InformationResponse PRESENCE mandatory }
}

RadioLinkSetupResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DSCH-RNTI                CRITICALITY ignore  EXTENSION DSCH-RNTI                PRESENCE optional }|
  { ID id-HSDSCH-RNTI              CRITICALITY ignore  EXTENSION HSDSCH-RNTI              PRESENCE optional }|
  { ID id-HSDSCH-FDD-Information-Response  CRITICALITY ignore  EXTENSION HSDSCH-FDD-Information-Response  PRESENCE optional },
}

```

```

}
...
}
-- *****
--
-- RADIO LINK SETUP RESPONSE TDD
--
-- *****

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

RadioLinkSetupResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-D-RNTI                CRITICALITY ignore TYPE D-RNTI                PRESENCE optional } |
    { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
    { ID id-RL-InformationResponse-RL-SetupRspTDD CRITICALITY ignore TYPE RL-InformationResponse-RL-SetupRspTDD PRESENCE optional } |
    --Mandatory for 3.84Mcps TDD only
    { ID id-UL-SIRTarget          CRITICALITY ignore TYPE UL-SIR                PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

RL-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    uRA-Information      URA-Information    OPTIONAL,
    sAI                  SAI,
    gA-Cell              GA-Cell    OPTIONAL,
    gA-AccessPointPosition GA-AccessPointPosition OPTIONAL,
    ul-TimeSlot-ISCP-Info UL-TimeSlot-ISCP-Info,
    maxUL-SIR            UL-SIR,
    minUL-SIR            UL-SIR,
    maximumAllowedULTxPower MaximumAllowedULTxPower,
    maximumDLTxPower    DL-Power,
    minimumDLTxPower    DL-Power,
    uARFCNforNt         UARFCN            OPTIONAL,
    cellParameterID     CellParameterID    OPTIONAL,
    syncCase            SyncCase          OPTIONAL,
    sCH-TimeSlot        SCH-TimeSlot      OPTIONAL,
    -- This IE shall be present if Sync Case IE is equal to "Case2". --
    sCTD-Indicator      SCTD-Indicator  OPTIONAL,
    pCCPCH-Power        PCCPCH-Power,
    timingAdvanceApplied TimingAdvanceApplied,
    alphaValue          AlphaValue,
    ul-PhysCH-SF-Variation UL-PhysCH-SF-Variation,
    synchronisationConfiguration SynchronisationConfiguration,
    secondary-CCPCH-Info-TDD Secondary-CCPCH-Info-TDD    OPTIONAL,

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    ul-CCTrCHInformation      UL-CCTrCHInformationList-RL-SetupRspTDD    OPTIONAL,
    dl-CCTrCHInformation      DL-CCTrCHInformationList-RL-SetupRspTDD    OPTIONAL,
    dCH-InformationResponse   DCH-InformationResponseList-RL-SetupRspTDD  OPTIONAL,
    dsch-InformationResponse  DSCH-InformationResponse-RL-SetupRspTDD    OPTIONAL,
    usch-InformationResponse  USCH-InformationResponse-RL-SetupRspTDD    OPTIONAL,
    neighbouring-UMTS-CellInformation      Neighbouring-UMTS-CellInformation  OPTIONAL,
    neighbouring-GSM-CellInformation      Neighbouring-GSM-CellInformation  OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {RL-InformationResponse-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponse-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes      CRITICALITY ignore  EXTENSION  GA-CellAdditionalShapes      PRESENCE optional }|
  { ID id-HCS-Prio                      CRITICALITY ignore  EXTENSION  HCS-Prio                      PRESENCE optional }|
  { ID id-TimeSlot-RL-SetupRspTDD      CRITICALITY ignore  EXTENSION  TimeSlot                      PRESENCE conditional },
  -- This IE shall be present if Sync Case IE is Casel. --
  ...
}

UL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-SetupRspTDD}}

UL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD  CRITICALITY ignore  TYPE  UL-CCTrCHInformationListIE-RL-SetupRspTDD  PRESENCE mandatory }
}

UL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-SetupRspTDD

UL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
  cCTrCH-ID              CCTrCH-ID,
  ul-DPCH-Information    UL-DPCH-InformationList-RL-SetupRspTDD    OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  {ID id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD  CRITICALITY ignore  EXTENSION  UL-SIR  PRESENCE optional},
  ...
}

UL-DPCH-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-SetupRspTDD} }

UL-DPCH-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationItem-RL-SetupRspTDD  CRITICALITY ignore  TYPE  UL-DPCH-InformationItem-RL-SetupRspTDD  PRESENCE mandatory }
}

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

```

```

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

UL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-SetupRspTDD}}

DL-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD    CRITICALITY ignore TYPE DL-CCTrCHInformationListIE-RL-SetupRspTDD    PRESENCE mandatory }
}

DL-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-SetupRspTDD

DL-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    dl-DPCH-Information      DL-DPCH-InformationList-RL-SetupRspTDD    OPTIONAL,
    IE-Extensions            ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD        CRITICALITY ignore      EXTENSION DL-Power      PRESENCE optional } | -- this is a DCH type
    CCTrCH power
    { ID id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD        CRITICALITY ignore      EXTENSION DL-Power      PRESENCE optional }, -- this is a DCH type
    CCTrCH power
    ...
}

DL-DPCH-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-SetupRspTDD} }

DL-DPCH-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-RL-SetupRspTDD        CRITICALITY ignore      TYPE DL-DPCH-InformationItem-RL-SetupRspTDD    PRESENCE mandatory}
}

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

DL-DPCH-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DCH-InformationResponseList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DCH-InformationResponseListIEs-RL-SetupRspTDD}}

DCH-InformationResponseListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse  CRITICALITY ignore  TYPE DCH-InformationResponse  PRESENCE mandatory }
}

DSCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{DSCH-InformationList-RL-SetupRspTDD}}

DSCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationListIEs-RL-SetupRspTDD  CRITICALITY ignore  TYPE DSCH-InformationListIEs-RL-SetupRspTDD  PRESENCE mandatory }
}

DSCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCHInformationItem-RL-SetupRspTDD

DSCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
  dsch-ID                DSCH-ID,
  dsch-FlowControlInformation  DSCH-FlowControlInformation,
  bindingID              BindingID  OPTIONAL,
  transportLayerAddress  TransportLayerAddress  OPTIONAL,
  transportFormatManagement  TransportFormatManagement,
  iE-Extensions          ProtocolExtensionContainer { {DSCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

DSCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

USCH-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{USCH-InformationList-RL-SetupRspTDD}}

USCH-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-USCH-InformationListIEs-RL-SetupRspTDD  CRITICALITY ignore  TYPE USCH-InformationListIEs-RL-SetupRspTDD  PRESENCE mandatory }
}

USCH-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCHInformationItem-RL-SetupRspTDD

USCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
  usch-ID                USCH-ID,
  bindingID              BindingID  OPTIONAL,
  transportLayerAddress  TransportLayerAddress  OPTIONAL,
  transportFormatManagement  TransportFormatManagement,
  iE-Extensions          ProtocolExtensionContainer { {USCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

USCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

RadioLinkSetupResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  optional {
    ID id-RL-LCR-InformationResponse-RL-SetupRspTDD CRITICALITY ignore EXTENSION RL-LCR-InformationResponse-RL-SetupRspTDD PRESENCE
  }
  --Mandatory for 1.28Mcps TDD only
  {
    ID id-HSDSCH-RNTI CRITICALITY ignore EXTENSION HSDSCH-RNTI PRESENCE optional }|
    ID id-HSDSCH-TDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response PRESENCE optional }|
    ID id-DSCH-RNTI CRITICALITY ignore EXTENSION DSCH-RNTI PRESENCE optional },
  ...
}

RL-LCR-InformationResponse-RL-SetupRspTDD ::= SEQUENCE {
  rL-ID RL-ID,
  uRA-Information URA-Information,
  sAI SAI,
  gA-Cell GA-Cell OPTIONAL,
  gA-AccessPointPosition GA-AccessPointPosition OPTIONAL,
  ul-TimeSlot-ISCP-LCR-Info UL-TimeSlot-ISCP-LCR-Info,
  maxUL-SIR UL-SIR,
  minUL-SIR UL-SIR,
  maximumAllowedULTxPower MaximumAllowedULTxPower,
  maximumDLTxPower DL-Power,
  minimumDLTxPower DL-Power,
  uARFCNforNt UARFCN OPTIONAL,
  cellParameterID CellParameterID OPTIONAL,
  sCTD-Indicator SCTD-Indicator OPTIONAL,
  pCCPCH-Power PCCPCH-Power,
  alphaValue AlphaValue,
  ul-PhysCH-SF-Variation UL-PhysCH-SF-Variation,
  synchronisationConfiguration SynchronisationConfiguration,
  secondary-LCR-CCPCH-Info-TDD Secondary-LCR-CCPCH-Info-TDD OPTIONAL,
  ul-LCR-CCTrCHInformation UL-LCR-CCTrCHInformationList-RL-SetupRspTDD OPTIONAL,
  dl-LCR-CCTrCHInformation DL-LCR-CCTrCHInformationList-RL-SetupRspTDD OPTIONAL,
  dCH-InformationResponse DCH-InformationResponseList-RL-SetupRspTDD OPTIONAL,
  dsch-LCR-InformationResponse DSCH-LCR-InformationResponse-RL-SetupRspTDD OPTIONAL,
  usch-LCR-InformationResponse USCH-LCR-InformationResponse-RL-SetupRspTDD OPTIONAL,
  neighbouring-UMTS-CellInformation Neighbouring-UMTS-CellInformation OPTIONAL,
  neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { RL-LCR-InformationResponseList-RL-SetupRspTDD-ExtIEs } } OPTIONAL,
  ...
}

RL-LCR-InformationResponseList-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes CRITICALITY ignore EXTENSION GA-CellAdditionalShapes PRESENCE optional }|
  { ID id-HCS-Prio CRITICALITY ignore EXTENSION HCS-Prio PRESENCE optional }|
  { ID id-UL-TimingAdvanceCtrl-LCR CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR PRESENCE optional },
  ...
}

UL-LCR-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{UL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD}}

```



```

UL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD    CRITICALITY ignore TYPE UL-LCR-CCTrCHInformationListIE-RL-SetupRspTDD    PRESENCE mandatory
  }
}

UL-LCR-CCTrCHInformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD

UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  ul-DPCH-LCR-Information  UL-DPCH-LCR-InformationList-RL-SetupRspTDD    OPTIONAL,
  iE-Extensions           ProtocolExtensionContainer { {UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-LCR-CCTrCHInformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  {ID id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD    CRITICALITY ignore    EXTENSION UL-SIR    PRESENCE optional},
  ...
}

UL-DPCH-LCR-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD} }

UL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD    CRITICALITY ignore TYPE UL-DPCH-LCR-InformationItem-RL-SetupRspTDD    PRESENCE mandatory }
}

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

UL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-LCR-CCTrCHInformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD} }

DL-LCR-CCTrCHInformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD    CRITICALITY ignore TYPE DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD    PRESENCE mandatory
  }
}

DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD

DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  dl-DPCH-LCR-Information  DL-DPCH-LCR-InformationList-RL-SetupRspTDD    OPTIONAL,

```

```

    iE-Extensions          ProtocolExtensionContainer { {DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-InformationList-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD} }

DL-DPCH-LCR-InformationListIEs-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD          CRITICALITY ignore   TYPE DL-DPCH-LCR-InformationItem-RL-SetupRspTDD   PRESENCE mandatory }
}

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

DL-DPCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-LCR-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container { {DSCH-LCR-InformationList-RL-SetupRspTDD} }

DSCH-LCR-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD          CRITICALITY ignore   TYPE DSCH-LCR-InformationListIEs-RL-SetupRspTDD   PRESENCE mandatory }
}

DSCH-LCR-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHsLCR)) OF DSCH-LCR-InformationItem-RL-SetupRspTDD

DSCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
    dsch-ID                DSCH-ID,
    dSCH-FlowControlInformation  DSCH-FlowControlInformation,
    bindingID              BindingID   OPTIONAL,
    transportLayerAddress  TransportLayerAddress   OPTIONAL,
    transportFormatManagement  TransportFormatManagement,
    iE-Extensions          ProtocolExtensionContainer { {DSCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

USCH-LCR-InformationResponse-RL-SetupRspTDD ::= ProtocolIE-Single-Container {{USCH-LCR-InformationList-RL-SetupRspTDD}}

USCH-LCR-InformationList-RL-SetupRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-USCH-LCR-InformationListIEs-RL-SetupRspTDD          CRITICALITY ignore  TYPE USCH-LCR-InformationListIEs-RL-SetupRspTDD PRESENCE mandatory }
}

USCH-LCR-InformationListIEs-RL-SetupRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHsLCR)) OF USCH-LCR-InformationItem-RL-SetupRspTDD

USCH-LCR-InformationItem-RL-SetupRspTDD ::= SEQUENCE {
  usch-ID                USCH-ID,
  bindingID              BindingID OPTIONAL,
  transportLayerAddress  TransportLayerAddress OPTIONAL,
  transportFormatManagement TransportFormatManagement,
  iE-Extensions          ProtocolExtensionContainer { {USCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs} } OPTIONAL,
  ...
}

USCH-LCR-InformationItem-RL-SetupRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****

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

RadioLinkSetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-D-RNTI                CRITICALITY ignore  TYPE D-RNTI                PRESENCE optional } |
  { ID id-CN-PS-DomainIdentifier CRITICALITY ignore  TYPE CN-PS-DomainIdentifier PRESENCE optional } |
  { ID id-CN-CS-DomainIdentifier CRITICALITY ignore  TYPE CN-CS-DomainIdentifier PRESENCE optional } |
  { ID id-CauseLevel-RL-SetupFailureFDD CRITICALITY ignore  TYPE CauseLevel-RL-SetupFailureFDD PRESENCE mandatory } |
  { ID id-UL-SIRTarget          CRITICALITY ignore  TYPE UL-SIR                PRESENCE optional } |
  { ID id-CriticalityDiagnostics CRITICALITY ignore  TYPE CriticalityDiagnostics PRESENCE optional },
  ...
}

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
  generalCause          GeneralCauseList-RL-SetupFailureFDD,
  rLSpecificCause      RLSpecificCauseList-RL-SetupFailureFDD,
  ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {

```

```

    cause
    iE-Extensions
    ...
}

GeneralCauseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-SetupFailureFDD      UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD        SuccessfulRL-InformationResponseList-RL-SetupFailureFDD OPTIONAL,
    iE-Extensions                                               ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DSCH-RNTI          CRITICALITY ignore      EXTENSION DSCH-RNTI          PRESENCE optional }|
    { ID id-HSDSCH-RNTI       CRITICALITY ignore      EXTENSION HSDSCH-RNTI       PRESENCE optional }|
    { ID id-HSDSCH-FDD-Information-Response CRITICALITY ignore      EXTENSION HSDSCH-FDD-Information-Response PRESENCE optional },
    ...
}

UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs} }

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD      CRITICALITY ignore      TYPE UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD
    PRESENCE mandatory }
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID          RL-ID,
    cause          Cause,
    iE-Extensions ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {SuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs} }

SuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD      CRITICALITY ignore      TYPE SuccessfulRL-InformationResponse-RL-SetupFailureFDD
    PRESENCE mandatory }
}

```

```

SuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID                               RL-ID,
    rL-Set-ID                           RL-Set-ID,
    uRA-Information                      URA-Information OPTIONAL,
    sAI                                  SAI,
    gA-Cell                             GA-Cell OPTIONAL,
    gA-AccessPointPosition              GA-AccessPointPosition OPTIONAL,
    received-total-wide-band-power      Received-total-wide-band-power,
    secondary-CCPCH-Info                Secondary-CCPCH-Info OPTIONAL,
    dl-CodeInformation                  FDD-DL-CodeInformation,
    diversityIndication                 DiversityIndication-RL-SetupFailureFDD,

    sSDT-SupportIndicator               SSDT-SupportIndicator,
    maxUL-SIR                           UL-SIR,
    minUL-SIR                           UL-SIR,
    closedlooptimingadjustmentmode      Closedlooptimingadjustmentmode OPTIONAL,
    maximumAllowedULTxPower             MaximumAllowedULTxPower,
    maximumDLTxPower                   DL-Power,
    minimumDLTxPower                   DL-Power,
    primaryCPICH-Power                  PrimaryCPICH-Power,
    primaryScramblingCode               PrimaryScramblingCode OPTIONAL,
    uL-UARFCN                           UARFCN OPTIONAL,
    dL-UARFCN                           UARFCN OPTIONAL,
    dSCH-InformationResponse-RL-SetupFailureFDD DSCH-InformationResponseList-RL-SetupFailureFDD OPTIONAL,
    neighbouring-UMTS-CellInformation    Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation     Neighbouring-GSM-CellInformation OPTIONAL,
    pC-Preamble                         PC-Preamble,
    sRB-Delay                           SRB-Delay,
    iE-Extensions                       ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes          CRITICALITY ignore EXTENSION GA-CellAdditionalShapes          PRESENCE optional } |
    { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE optional } |
    { ID id-TFCI-PC-SupportIndicator          CRITICALITY ignore EXTENSION TFCI-PC-SupportIndicator          PRESENCE optional } |
    { ID id-HCS-Prio                          CRITICALITY ignore EXTENSION HCS-Prio                          PRESENCE optional } |
    { ID id-Primary-CPICH-Usage-For-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-For-Channel-Estimation PRESENCE optional } |
    { ID id-Secondary-CPICH-Information        CRITICALITY ignore EXTENSION Secondary-CPICH-Information        PRESENCE optional } |
    { ID id-EDCH-RLSet-ID                     CRITICALITY ignore EXTENSION RL-Set-ID                     PRESENCE optional } |
    { ID id-EDCH-FDD-DL-ControlChannelInformation CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation PRESENCE optional } |
    ...
}

```

```

DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
    combining                Combining-RL-SetupFailureFDD,
    nonCombiningOrFirstRL    NonCombiningOrFirstRL-RL-SetupFailureFDD
}

```

```

Combining-RL-SetupFailureFDD ::= SEQUENCE {

```

```

    rL-ID                RL-ID,
    iE-Extensions        ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
    ...
}

CombiningItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DCH-InformationResponse      CRITICALITY ignore  EXTENSION DCH-InformationResponse      PRESENCE optional }|
  { ID id-EDCH-FDD-InformationResponse CRITICALITY ignore  EXTENSION EDCH-FDD-InformationResponse  PRESENCE optional },
  ...
}

NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
  dCH-InformationResponse      DCH-InformationResponse,
  iE-Extensions                ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
  ...
}

NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-EDCH-FDD-InformationResponse CRITICALITY ignore  EXTENSION EDCH-FDD-InformationResponse  PRESENCE optional },
  ...
}

DSCH-InformationResponseList-RL-SetupFailureFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupFailureFDD }}

DSCH-InformationResponseListIEs-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DSCH-FDD-InformationResponse CRITICALITY ignore  TYPE DSCH-FDD-InformationResponse  PRESENCE mandatory }
}

RadioLinkSetupFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK SETUP FAILURE TDD
--
-- *****

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

RadioLinkSetupFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-CauseLevel-RL-SetupFailureTDD CRITICALITY ignore  TYPE CauseLevel-RL-SetupFailureTDD  PRESENCE mandatory }|
  { ID id-CriticalityDiagnostics        CRITICALITY ignore  TYPE CriticalityDiagnostics        PRESENCE optional },
  ...
}

```

```

CauseLevel-RL-SetupFailureTDD ::= CHOICE {
    generalCause      GeneralCauseList-RL-SetupFailureTDD,
    rLSpecificCause   RLSpecificCauseList-RL-SetupFailureTDD,
    ...
}

GeneralCauseList-RL-SetupFailureTDD ::= SEQUENCE {
    cause             Cause,
    iE-Extensions     ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
    ...
}

GeneralCauseItem-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-SetupFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD,
    iE-Extensions     ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureTDD RNSAP-PROTOCOL-IES ::= {
    { ID      id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD      CRITICALITY ignore      TYPE UnsuccessfulRL-InformationResponse-RL-
SetupFailureTDD      PRESENCE      mandatory      }
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD ::= SEQUENCE {
    rL-ID           RL-ID,
    cause           Cause,
    iE-Extensions   ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs} } OPTIONAL,
    ...
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkSetupFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--

```

```

-- RADIO LINK ADDITION REQUEST FDD
--
-- *****

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

RadioLinkAdditionRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-SIRTarget          CRITICALITY reject  TYPE UL-SIR          PRESENCE mandatory } |
    { ID id-RL-InformationList-RL-AdditionRqstFDD CRITICALITY notify  TYPE RL-InformationList-RL-AdditionRqstFDD PRESENCE mandatory } |
    { ID id-Active-Pattern-Sequence-Information CRITICALITY reject  TYPE Active-Pattern-Sequence-Information PRESENCE optional } ,
    ...
}

RL-InformationList-RL-AdditionRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-Information-RL-AdditionRqstFDD-IEs} }

RL-Information-RL-AdditionRqstFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-AdditionRqstFDD CRITICALITY notify  TYPE RL-Information-RL-AdditionRqstFDD PRESENCE mandatory }
}

RL-Information-RL-AdditionRqstFDD ::= SEQUENCE {
    rL-ID          RL-ID,
    c-ID           C-ID,
    frameOffset    FrameOffset,
    chipOffset     ChipOffset,
    diversityControlField DiversityControlField,
    primaryCPICH-EcNo PrimaryCPICH-EcNo      OPTIONAL,
    sSDT-CellID    SSDT-CellID      OPTIONAL,
    transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
    iE-Extensions  ProtocolExtensionContainer { {RL-Information-RL-AdditionRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-AdditionRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DLReferencePower CRITICALITY ignore EXTENSION DL-Power PRESENCE optional } |
    { ID id-Enhanced-PrimaryCPICH-EcNo CRITICALITY ignore EXTENSION Enhanced-PrimaryCPICH-EcNo PRESENCE optional } |
    { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional } |
    { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional } |
    { ID id-Qth-Parameter CRITICALITY ignore EXTENSION Qth-Parameter PRESENCE optional } |
    { ID id-RL-Specific-EDCH-Information CRITICALITY reject EXTENSION RL-Specific-EDCH-Information PRESENCE optional } |
    { ID id-EDCH-RL-Indication CRITICALITY reject EXTENSION EDCH-RL-Indication PRESENCE optional } ,
    ...
}

RadioLinkAdditionRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DPC-Mode CRITICALITY reject EXTENSION DPC-Mode PRESENCE optional } |

```



```

    { ID id-Permanent-NAS-UE-Identity          CRITICALITY ignore          EXTENSION Permanent-NAS-UE-Identity  PRESENCE optional }|
    { ID id-Serving-EDCHRL-Id                  CRITICALITY reject              EXTENSION RL-ID                      PRESENCE conditional},
    -- This IE is present if RL Specific E-DCHInformation IE is present.
}
...
}

-- *****
--
-- RADIO LINK ADDITION REQUEST TDD
--
-- *****

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

RadioLinkAdditionRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-AdditionRqstTDD  CRITICALITY reject  TYPE RL-Information-RL-AdditionRqstTDD  PRESENCE mandatory  },
    ...
}

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    c-ID                 C-ID,
    frameOffset          FrameOffset,
    diversityControlField DiversityControlField,
    primaryCCPCH-RSCP    PrimaryCCPCH-RSCP          OPTIONAL,
    dL-TimeSlot-ISCP-Info DL-TimeSlot-ISCP-Info  OPTIONAL,
    --for 3.84Mcps TDD only
    iE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD CRITICALITY reject          EXTENSION  DL-TimeSlot-ISCP-LCR-Information  PRESENCE
optional  }|
    --for 1.28Mcps TDD only
    { ID id-RL-Specific-DCH-Info          CRITICALITY ignore          EXTENSION  RL-Specific-DCH-Info  PRESENCE  optional }|
    { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional }|
    { ID id-UL-Synchronisation-Parameters-LCR          CRITICALITY reject          EXTENSION  UL-Synchronisation-Parameters-LCR          PRESENCE  optional
}| -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    { ID id-PrimaryCCPCH-RSCP-Delta          CRITICALITY ignore          EXTENSION  PrimaryCCPCH-RSCP-Delta          PRESENCE  optional },
    ...
}

RadioLinkAdditionRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Permanent-NAS-UE-Identity          CRITICALITY ignore          EXTENSION Permanent-NAS-UE-Identity  PRESENCE optional }|

```

```

    { ID id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD  CRITICALITY notify  EXTENSION UL-CCTrCH-InformationList-RL-AdditionRqstTDD  PRESENCE
optional    } |
    { ID id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD  CRITICALITY notify  EXTENSION DL-CCTrCH-InformationList-RL-AdditionRqstTDD  PRESENCE
optional    },
    ...
}

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

UL-CCTrCH-InformationItemIEs-RL-AdditionRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationItem-RL-AdditionRqstTDD  CRITICALITY notify  TYPE UL-CCTrCH-InformationItem-RL-AdditionRqstTDD  PRESENCE optional},
    ...
}

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    uplinkStepSizeLCR        TDD-TPC-UplinkStepSize-LCR  OPTIONAL,
    -- Applicable to 1.28Mcps TDD only
    iE-Extensions            ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

DL-CCTrCH-InformationItemIEs-RL-AdditionRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationItem-RL-AdditionRqstTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationItem-RL-AdditionRqstTDD  PRESENCE optional},
    ...
}

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    downlinkStepSize         TDD-TPC-DownlinkStepSize  OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--

```

-- \*\*\*\*\*

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

RadioLinkAdditionResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseList-RL-AdditionRspFDD    CRITICALITY ignore TYPE RL-InformationResponseList-RL-AdditionRspFDD    PRESENCE mandatory
    } |
    { ID id-CriticalityDiagnostics                          CRITICALITY ignore TYPE CriticalityDiagnostics          PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {RL-
InformationResponseItemIEs-RL-AdditionRspFDD} }

RL-InformationResponseItemIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-AdditionRspFDD    CRITICALITY ignore TYPE RL-InformationResponseItem-RL-AdditionRspFDD    PRESENCE
mandatory }
}

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Set-ID            RL-Set-ID,
    uRA-Information      URA-Information    OPTIONAL,
    sAI                  SAI,
    gA-Cell              GA-Cell    OPTIONAL,
    gA-AccessPointPosition GA-AccessPointPosition OPTIONAL,
    received-total-wide-band-power Received-total-wide-band-power,
    secondary-CCPCH-Info Secondary-CCPCH-Info    OPTIONAL,
    dl-CodeInformation   DL-CodeInformationList-RL-AdditionRspFDD,
    diversityIndication DiversityIndication-RL-AdditionRspFDD,

    sSDT-SupportIndicator SSDT-SupportIndicator,
    minUL-SIR            UL-SIR,
    maxUL-SIR            UL-SIR,
    closedloopTimingadjustmentmode ClosedloopTimingadjustmentmode OPTIONAL,
    maximumAllowedULTxPower MaximumAllowedULTxPower,
    maximumDLTxPower    DL-Power,
    minimumDLTxPower    DL-Power,
    neighbouring-UMTS-CellInformation Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation OPTIONAL,
    pC-Preamble          PC-Preamble,
    sRB-Delay            SRB-Delay,
    primaryCPICH-Power   PrimaryCPICH-Power,
    iE-Extensions        ProtocolExtensionContainer { {RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes          CRITICALITY ignore  EXTENSION  GA-CellAdditionalShapes          PRESENCE optional }|
  { ID id-DL-PowerBalancing-ActivationIndicator  CRITICALITY ignore  EXTENSION  DL-PowerBalancing-ActivationIndicator  PRESENCE
optional}|
  { ID id-TFCI-PC-SupportIndicator          CRITICALITY ignore  EXTENSION  TFCI-PC-SupportIndicator          PRESENCE optional }|
  { ID id-HCS-Prio                          CRITICALITY ignore  EXTENSION  HCS-Prio                          PRESENCE optional }|
  { ID id-Primary-CPICH-Usage-For-Channel-Estimation  CRITICALITY ignore  EXTENSION  Primary-CPICH-Usage-For-Channel-Estimation  PRESENCE
optional }|
  { ID id-EDCH-RLSet-Id                    CRITICALITY ignore  EXTENSION  RL-Set-ID                        PRESENCE optional }|
  { ID id-EDCH-FDD-DL-ControlChannelInformation  CRITICALITY ignore  EXTENSION  EDCH-FDD-DL-ControlChannelInformation  PRESENCE optional },
  ...
}

DL-CodeInformationList-RL-AdditionRspFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-AdditionRspFDD }}

DL-CodeInformationListIEs-RL-AdditionRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-FDD-DL-CodeInformation  CRITICALITY ignore  TYPE  FDD-DL-CodeInformation  PRESENCE mandatory }
}

DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
  combining          Combining-RL-AdditionRspFDD,
  nonCombining      NonCombining-RL-AdditionRspFDD
}

Combining-RL-AdditionRspFDD ::= SEQUENCE {
  rL-ID              RL-ID,
  iE-Extensions      ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
  ...
}

CombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DCH-InformationResponse          CRITICALITY ignore  EXTENSION  DCH-InformationResponse          PRESENCE optional }|
  { ID id-EDCH-FDD-InformationResponse     CRITICALITY ignore  EXTENSION  EDCH-FDD-InformationResponse     PRESENCE optional },
  ...
}

NonCombining-RL-AdditionRspFDD ::= SEQUENCE {
  dCH-InformationResponse          DCH-InformationResponse,
  iE-Extensions                    ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
  ...
}

NonCombiningItem-RL-AdditionRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-EDCH-FDD-InformationResponse     CRITICALITY ignore  EXTENSION  EDCH-FDD-InformationResponse     PRESENCE optional },
  ...
}

RadioLinkAdditionResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

}
-- *****
--
-- RADIO LINK ADDITION RESPONSE TDD
--
-- *****

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

RadioLinkAdditionResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponse-RL-AdditionRspTDD          CRITICALITY ignore TYPE RL-InformationResponse-RL-AdditionRspTDD PRESENCE optional } |
    --Mandatory for 3.84Mcps TDD only
    { ID id-CriticalityDiagnostics          CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

RL-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    uRA-Information           URA-Information          OPTIONAL,
    sAI                       SAI,
    gA-Cell                   GA-Cell                OPTIONAL,
    gA-AccessPointPosition    GA-AccessPointPosition  OPTIONAL,
    ul-TimeSlot-ISCP-Info     UL-TimeSlot-ISCP-Info,
    minUL-SIR                 UL-SIR,
    maxUL-SIR                 UL-SIR,
    maximumAllowedULTxPower    MaximumAllowedULTxPower,
    maximumDLTxPower          DL-Power,
    minimumDLTxPower          DL-Power,
    pCCPCH-Power              PCCPCH-Power,
    timingAdvanceApplied      TimingAdvanceApplied,
    alphaValue                AlphaValue,
    ul-PhysCH-SF-Variation    UL-PhysCH-SF-Variation,
    synchronisationConfiguration SynchronisationConfiguration,
    secondary-CCPCH-Info-TDD   Secondary-CCPCH-Info-TDD          OPTIONAL,
    ul-CCTrCHInformationList-RL-AdditionRspTDD  UL-CCTrCHInformationList-RL-AdditionRspTDD  OPTIONAL,
    dl-CCTrCHInformationList-RL-AdditionRspTDD  DL-CCTrCHInformationList-RL-AdditionRspTDD  OPTIONAL,
    dCH-Information           DCH-Information-RL-AdditionRspTDD  OPTIONAL,
    dSCH-InformationResponse   DSCH-InformationResponse-RL-AdditionRspTDD  OPTIONAL,
    uSCH-InformationResponse   USCH-InformationResponse-RL-AdditionRspTDD  OPTIONAL,
    neighbouring-UMTS-CellInformation Neighbouring-UMTS-CellInformation  OPTIONAL,
    neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation  OPTIONAL,
    IE-Extensions              ProtocolExtensionContainer { {RL-InformationResponse-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

RL-InformationResponse-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes          CRITICALITY ignore  EXTENSION  GA-CellAdditionalShapes          PRESENCE optional }|
  { ID id-HCS-Prio                        CRITICALITY ignore  EXTENSION  HCS-Prio                        PRESENCE optional },
  ...
}

UL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}

UL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD  CRITICALITY ignore  TYPE  UL-CCTrCHInformationListIE-RL-AdditionRspTDD  PRESENCE mandatory
  }
}

UL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCHInformationItem-RL-AdditionRspTDD

UL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  ul-DPCH-Information      UL-DPCH-InformationList-RL-AdditionRspTDD  OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { {UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-InformationListIEs-RL-AdditionRspTDD} }

UL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationItem-RL-AdditionRspTDD      CRITICALITY ignore  TYPE  UL-DPCH-InformationItem-RL-AdditionRspTDD  PRESENCE mandatory
  }
}

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

UL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCHInformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-AdditionRspTDD}}

DL-CCTrCHInformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD  CRITICALITY ignore  TYPE  DL-CCTrCHInformationListIE-RL-AdditionRspTDD  PRESENCE mandatory
  }
}

```

```

}

DL-CCTrCHInformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCHInformationItem-RL-AdditionRspTDD

DL-CCTrCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    dl-DPCH-Information      DL-DPCH-InformationList-RL-AdditionRspTDD    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD    CRITICALITY ignore    EXTENSION DL-Power    PRESENCE optional} | -- this is a DCH type
    CCTrCH power
    { ID id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD    CRITICALITY ignore    EXTENSION DL-Power    PRESENCE optional}, -- this is a DCH type
    CCTrCH power
    ...
}

DL-DPCH-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-InformationListIEs-RL-AdditionRspTDD} }

DL-DPCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-RL-AdditionRspTDD    CRITICALITY ignore    TYPE DL-DPCH-InformationItem-RL-AdditionRspTDD    PRESENCE mandatory }
}

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

DL-DPCH-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-Information-RL-AdditionRspTDD ::= SEQUENCE {
    diversityIndication       DiversityIndication-RL-AdditionRspTDD,

    iE-Extensions            ProtocolExtensionContainer { { DCH-Information-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DCH-Information-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionRspTDD ::= CHOICE {

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    combining      Combining-RL-AdditionRspTDD,
    nonCombining   NonCombining-RL-AdditionRspTDD
}

Combining-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID          RL-ID,
    iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

CombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DCH-InformationResponse      CRITICALITY ignore EXTENSION DCH-InformationResponse      PRESENCE optional },
    ...
}

NonCombining-RL-AdditionRspTDD ::= SEQUENCE {
    dCH-InformationResponse      DCH-InformationResponse,
    iE-Extensions                ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

NonCombiningItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DSCH-InformationListIEs-RL-AdditionRspTDD}}

DSCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationListIE-RL-AdditionRspTDD      CRITICALITY ignore TYPE DSCH-InformationListIE-RL-AdditionRspTDD      PRESENCE mandatory }
}

DSCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCHInformationItem-RL-AdditionRspTDD

DSCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    dsch-ID          DSCH-ID,
    transportFormatManagement      TransportFormatManagement,
    dSCH-FlowControlInformation     DSCH-FlowControlInformation,
    diversityIndication      DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
    -- diversityIndication present, if CHOICE = nonCombining
    iE-Extensions          ProtocolExtensionContainer { {DSCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DSCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiversityIndication-RL-AdditionRspTDD2 ::= SEQUENCE {
    bindingID          BindingID OPTIONAL,
    transportLayerAddress      TransportLayerAddress OPTIONAL,
}

```



```

    iE-Extensions          ProtocolExtensionContainer { {DiversityIndication-RL-AdditionRspTDD2-ExtIEs} } OPTIONAL,
    ...
}
DiversityIndication-RL-AdditionRspTDD2-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCH-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{USCH-InformationListIEs-RL-AdditionRspTDD}}

USCH-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationListIE-RL-AdditionRspTDD    CRITICALITY ignore    TYPE USCH-InformationListIE-RL-AdditionRspTDD    PRESENCE mandatory }
}

USCH-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCHInformationItem-RL-AdditionRspTDD

USCHInformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    transportFormatManagement TransportFormatManagement,
    diversityIndication    DiversityIndication-RL-AdditionRspTDD2 OPTIONAL,
    -- diversityIndication present, if CHOICE = nonCombining
    iE-Extensions          ProtocolExtensionContainer { {USCHInformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

USCHInformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkAdditionResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-LCR-InformationResponse-RL-AdditionRspTDD    CRITICALITY ignore    EXTENSION    RL-LCR-InformationResponse-RL-AdditionRspTDD
    PRESENCE optional },
    --Mandatory for 1.28Mcps TDD only
    ...
}

RL-LCR-InformationResponse-RL-AdditionRspTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    uRA-Information      URA-Information,
    sAI                  SAI,
    gA-Cell              GA-Cell    OPTIONAL,
    gA-AccessPointPosition GA-AccessPointPosition    OPTIONAL,
    ul-TimeSlot-ISCP-LCR-Info UL-TimeSlot-ISCP-LCR-Info,
    maxUL-SIR            UL-SIR,
    minUL-SIR            UL-SIR,
    pCCPCH-Power         PCCPCH-Power,
    maximumAllowedULTxPower MaximumAllowedULTxPower,
    maximumDLTxPower    DL-Power,
    minimumDLTxPower    DL-Power,
    alphaValue           AlphaValue,
    ul-PhysCH-SF-Variation UL-PhysCH-SF-Variation,

```

```

synchronisationConfiguration      SynchronisationConfiguration,
secondary-LCR-CCPCH-Info-TDD      Secondary-LCR-CCPCH-Info-TDD          OPTIONAL,
ul-CCTrCH-LCR-InformationList      UL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD  OPTIONAL,
dl-CCTrCH-LCR-InformationList      DL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD  OPTIONAL,
dch-InformationResponseList       DCH-InformationResponseList-RL-AdditionRspTDD    OPTIONAL,
dsch-LCR-InformationResponse       DSCH-LCR-InformationResponse-RL-AdditionRspTDD   OPTIONAL,
usch-LCR-InformationResponse       USCH-LCR-InformationResponse-RL-AdditionRspTDD   OPTIONAL,
neighbouring-UMTS-CellInformation  Neighbouring-UMTS-CellInformation              OPTIONAL,
neighbouring-GSM-CellInformation   Neighbouring-GSM-CellInformation                OPTIONAL,
iE-Extensions                      ProtocolExtensionContainer { { RL-LCR-InformationResponseList-RL-AdditionRspTDD-ExtIEs } }  OPTIONAL,
...
}

RL-LCR-InformationResponseList-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-GA-CellAdditionalShapes  CRITICALITY ignore  EXTENSION  GA-CellAdditionalShapes  PRESENCE optional } |
  { ID id-HCS-Prio                 CRITICALITY ignore  EXTENSION  HCS-Prio                 PRESENCE optional } |
  { ID id-UL-TimingAdvanceCtrl-LCR CRITICALITY ignore  EXTENSION  UL-TimingAdvanceCtrl-LCR  PRESENCE optional },
  --Mandatory for 1.28Mcps TDD only
  ...
}

UL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {UL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD } }

UL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD  CRITICALITY ignore  TYPE UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD  PRESENCE
  mandatory }
}

UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD

UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  cTrCH-ID          CCTrCH-ID,
  ul-DPCH-LCR-Information      UL-DPCH-LCR-InformationList-RL-AdditionRspTDD          OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { {UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {UL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD} }

UL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD  CRITICALITY ignore  TYPE UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD  PRESENCE
  mandatory }
}

UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  repetitionPeriod          RepetitionPeriod,

```

```

    repetitionLength      RepetitionLength,
    tDD-DPCHOffset       TDD-DPCHOffset,
    uL-TimeslotLCR-Information  UL-TimeslotLCR-Information,
    iE-Extensions        ProtocolExtensionContainer { {UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD}}

DL-CCTrCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD    CRITICALITY ignore    TYPE DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD    PRESENCE
    mandatory }
}

DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHsLCR)) OF DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD

DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
    cCTrCH-ID                CCTrCH-ID,
    dl-DPCH-LCR-Information  DL-DPCH-LCR-InformationList-RL-AdditionRspTDD    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-LCR-InformationList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container { {DL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD} }

DL-DPCH-LCR-InformationListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD        CRITICALITY ignore    TYPE DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD    PRESENCE
    mandatory }
}

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

DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

DCH-InformationResponseList-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DCH-InformationResponseListIEs-RL-AdditionRspTDD}}

DCH-InformationResponseListIEs-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse  CRITICALITY ignore  TYPE DCH-InformationResponse  PRESENCE mandatory }
}

DSCH-LCR-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{DSCH-LCR-InformationList-RL-AdditionRspTDD}}

DSCH-LCR-InformationList-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD  CRITICALITY ignore  TYPE DSCH-LCR-InformationListIEs-RL-AdditionRspTDD  PRESENCE
  mandatory }
}

DSCH-LCR-InformationListIEs-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHsLCR)) OF DSCH-LCR-InformationItem-RL-AdditionRspTDD

DSCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  dsch-ID          DSCH-ID,
  dSCH-FlowControlInformation  DSCH-FlowControlInformation,
  bindingID        BindingID  OPTIONAL,
  transportLayerAddress  TransportLayerAddress  OPTIONAL,
  transportFormatManagement  TransportFormatManagement,
  iE-Extensions      ProtocolExtensionContainer { {DSCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

DSCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

USCH-LCR-InformationResponse-RL-AdditionRspTDD ::= ProtocolIE-Single-Container {{USCH-LCR-InformationList-RL-AdditionRspTDD}}

USCH-LCR-InformationList-RL-AdditionRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD  CRITICALITY ignore  TYPE USCH-LCR-InformationListIEs-RL-AdditionRspTDD  PRESENCE
  mandatory }
}

USCH-LCR-InformationListIEs-RL-AdditionRspTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHsLCR)) OF USCH-LCR-InformationItem-RL-AdditionRspTDD

USCH-LCR-InformationItem-RL-AdditionRspTDD ::= SEQUENCE {
  usch-ID          USCH-ID,
  transportFormatManagement  TransportFormatManagement,
  diversityIndication  DiversityIndication-RL-AdditionRspTDD2  OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { {USCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs} } OPTIONAL,
  ...
}

USCH-LCR-InformationItem-RL-AdditionRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

}
-- *****
--
-- RADIO LINK ADDITION FAILURE FDD
--
-- *****

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

RadioLinkAdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CauseLevel-RL-AdditionFailureFDD          CRITICALITY ignore          TYPE CauseLevel-RL-AdditionFailureFDD
    PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics                    CRITICALITY ignore TYPE CriticalityDiagnostics          PRESENCE optional },
    ...
}

CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
    generalCause          GeneralCauseList-RL-AdditionFailureFDD,
    rLSpecificCause       RLSpecificCauseList-RL-AdditionFailureFDD,
    ...
}

GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs} }      OPTIONAL,
    ...
}

GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD          UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD,
    successful-RL-InformationRespList-RL-AdditionFailureFDD            SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs} }      OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UnsuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {UnsuccessfulRL-
InformationResponse-RL-AdditionFailureFDD-IEs} }

```

```

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD    CRITICALITY ignore  TYPE UnsuccessfulRL-InformationResponse-RL-
AdditionFailureFDD          PRESENCE mandatory  }
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  cause                Cause,
  iE-Extensions       ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
  ...
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

SuccessfulRL-InformationResponseList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-2)) OF ProtocolIE-Single-Container { {SuccessfulRL-
InformationResponse-RL-AdditionFailureFDD-IEs} }

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD    CRITICALITY ignore  TYPE SuccessfulRL-InformationResponse-RL-AdditionFailureFDD
  PRESENCE mandatory  }
}

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  rL-Set-ID            RL-Set-ID,
  uRA-Information      URA-Information    OPTIONAL,
  sAI                  SAI,
  gA-Cell              GA-Cell    OPTIONAL,
  gA-AccessPointPosition GA-AccessPointPosition    OPTIONAL,
  received-total-wide-band-power Received-total-wide-band-power,
  secondary-CCPCH-Info Secondary-CCPCH-Info    OPTIONAL,
  dl-CodeInformation  DL-CodeInformationList-RL-AdditionFailureFDD,
  diversityIndication DiversityIndication-RL-AdditionFailureFDD,
  -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  -- the tabular message format in subclause 9.1.
  sSDT-SupportIndicator SSdT-SupportIndicator,
  minUL-SIR            UL-SIR,
  maxUL-SIR            UL-SIR,
  closedloopoptimingadjustmentmode Closedloopoptimingadjustmentmode    OPTIONAL,
  maximumAllowedULTxPower MaximumAllowedULTxPower,
  maximumDLTxPower    DL-Power,
  minimumDLTxPower    DL-Power,
  neighbouring-UMTS-CellInformation Neighbouring-UMTS-CellInformation    OPTIONAL,
  neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation    OPTIONAL,
  primaryCPICH-Power  PrimaryCPICH-Power,
  pC-Preamble         PC-Preamble,
  sRB-Delay           SRB-Delay,

```

```

    iE-Extensions          ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

SuccessfulRL-InformationResponse-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes          CRITICALITY ignore EXTENSION GA-CellAdditionalShapes          PRESENCE optional }|
    { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE optional}|
    { ID id-TFCI-PC-SupportIndicator          CRITICALITY ignore EXTENSION TFCI-PC-SupportIndicator          PRESENCE optional }|
    { ID id-HCS-Prio                          CRITICALITY ignore EXTENSION HCS-Prio                          PRESENCE optional }|
    { ID id-Primary-CPICH-Usage-For-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-For-Channel-Estimation PRESENCE optional }|
    { ID id-EDCH-RLSet-Id                     CRITICALITY ignore EXTENSION RL-Set-ID                     PRESENCE optional }|
    { ID id-EDCH-FDD-DL-ControlChannelInformation CRITICALITY ignore EXTENSION EDCH-FDD-DL-ControlChannelInformation PRESENCE optional },
    ...
}

DL-CodeInformationList-RL-AdditionFailureFDD ::= ProtocolIE-Single-Container {{ DL-CodeInformationListIEs-RL-AdditionFailureFDD }}

DL-CodeInformationListIEs-RL-AdditionFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-FDD-DL-CodeInformation CRITICALITY ignore TYPE FDD-DL-CodeInformation PRESENCE mandatory }
}

DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
    combining          Combining-RL-AdditionFailureFDD,
    nonCombining      NonCombining-RL-AdditionFailureFDD
}

Combining-RL-AdditionFailureFDD ::= SEQUENCE {
    rL-ID              RL-ID,
    iE-Extensions     ProtocolExtensionContainer { { CombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

CombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DCH-InformationResponse          CRITICALITY ignore EXTENSION DCH-InformationResponse          PRESENCE optional }|7
    { ID id-EDCH-FDD-InformationResponse     CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse     PRESENCE optional },
    ...
}

NonCombining-RL-AdditionFailureFDD ::= SEQUENCE {
    dCH-InformationResponse DCH-InformationResponse,
    iE-Extensions          ProtocolExtensionContainer { { NonCombiningItem-RL-AdditionFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

NonCombiningItem-RL-AdditionFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EDCH-FDD-InformationResponse     CRITICALITY ignore EXTENSION EDCH-FDD-InformationResponse     PRESENCE optional },
    ...
}

```

```

RadioLinkAdditionFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****
--
-- RADIO LINK ADDITION FAILURE TDD
--
-- *****

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

RadioLinkAdditionFailureTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CauseLevel-RL-AdditionFailureTDD    CRITICALITY ignore    TYPE CauseLevel-RL-AdditionFailureTDD    PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics              CRITICALITY ignore    TYPE CriticalityDiagnostics        PRESENCE optional },
    ...
}

CauseLevel-RL-AdditionFailureTDD ::= CHOICE {
    generalCause          GeneralCauseList-RL-AdditionFailureTDD,
    rLSpecificCause      RLSpecificCauseList-RL-AdditionFailureTDD,
    ...
}

GeneralCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs } }    OPTIONAL,
    ...
}

GeneralCauseItem-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-AdditionFailureTDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD    Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD,
    iE-Extensions          ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs } }
    OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureTDD ::= ProtocolIE-Single-Container { {Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD} }

Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD CRITICALITY ignore TYPE UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD PRESENCE mandatory}
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD ::= SEQUENCE {
  rL-ID RL-ID,
  cause Cause,
  iE-Extensions ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD-ExtIEs} } OPTIONAL,
  ...
}

UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkAdditionFailureTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK DELETION REQUEST
--
-- *****

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

RadioLinkDeletionRequest-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationList-RL-DeletionRqst CRITICALITY notify TYPE RL-InformationList-RL-DeletionRqst PRESENCE mandatory },
  ...
}

RL-InformationList-RL-DeletionRqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-DeletionRqst-IEs} }

RL-Information-RL-DeletionRqst-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Information-RL-DeletionRqst CRITICALITY notify TYPE RL-Information-RL-DeletionRqst PRESENCE mandatory }
}

RL-Information-RL-DeletionRqst ::= SEQUENCE {
  rL-ID RL-ID,
  iE-Extensions ProtocolExtensionContainer { {RL-Information-RL-DeletionRqst-ExtIEs} } OPTIONAL,
  ...
}

```

```

}

RL-Information-RL-DeletionRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkDeletionRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK DELETION RESPONSE
--
-- *****

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

RadioLinkDeletionResponse-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics          PRESENCE optional },
  ...
}

RadioLinkDeletionResponse-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE FDD
--
-- *****

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

RadioLinkReconfigurationPrepareFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime          PRESENCE optional } |
  { ID id-UL-DPCH-Information-RL-ReconfPrepFDD          CRITICALITY reject  TYPE UL-DPCH-Information-RL-ReconfPrepFDD          PRESENCE optional } |
  { ID id-DL-DPCH-Information-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DL-DPCH-Information-RL-ReconfPrepFDD          PRESENCE optional } |
  { ID id-FDD-DCHs-to-Modify          CRITICALITY reject  TYPE FDD-DCHs-to-Modify          PRESENCE optional } |
  { ID id-DCHs-to-Add-FDD          CRITICALITY reject  TYPE DCH-FDD-Information          PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DCH-DeleteList-RL-ReconfPrepFDD          PRESENCE optional } |

```

```

    { ID id-DSCH-Modify-RL-ReconfPrepFDD          CRITICALITY reject  TYPE DSCH-Modify-RL-ReconfPrepFDD          PRESENCE optional } |
    { ID id-DSCHs-to-Add-FDD                      CRITICALITY reject  TYPE DSCH-FDD-Information          PRESENCE optional } |
    { ID id-DSCH-Delete-RL-ReconfPrepFDD         CRITICALITY reject  TYPE DSCH-Delete-RL-ReconfPrepFDD  PRESENCE optional } |
    { ID id-RL-InformationList-RL-ReconfPrepFDD  CRITICALITY reject  TYPE RL-InformationList-RL-ReconfPrepFDD  PRESENCE optional } |
    { ID id-Transmission-Gap-Pattern-Sequence-Information  CRITICALITY reject  TYPE Transmission-Gap-Pattern-Sequence-Information  PRESENCE optional },
    ...
}

UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    ul-ScramblingCode          UL-ScramblingCode          OPTIONAL,
    ul-SIRTarget               UL-SIR                      OPTIONAL,
    minUL-ChannelisationCodeLength  MinUL-ChannelisationCodeLength  OPTIONAL,
    maxNrOfUL-DPDCHs          MaxNrOfUL-DPDCHs          OPTIONAL
    -- This IE shall be present if minUL-ChannelisationCodeLength equals to 4 --,
    ul-PunctureLimit          PunctureLimit            OPTIONAL,
    tFCS                       TFCS                      OPTIONAL,
    ul-DPCCH-SlotFormat        UL-DPCCH-SlotFormat        OPTIONAL,
    diversityMode              DiversityMode              OPTIONAL,
    sSDT-CellIDLength          SSDT-CellID-Length        OPTIONAL,
    s-FieldLength              S-FieldLength            OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPDCHIndicatorEDCH  CRITICALITY reject  EXTENSION UL-DPDCHIndicatorEDCH PRESENCE conditional },
    -- This IE shall be present if E-DPCH Information IE is present.
    ...
}

DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    tFCS                       TFCS                      OPTIONAL,
    dl-DPCH-SlotFormat          DL-DPCH-SlotFormat        OPTIONAL,
    nrOfDLchannelisationcodes  NrOfDLchannelisationcodes  OPTIONAL,
    tFCI-SignallingMode         TFCI-SignallingMode        OPTIONAL,
    tFCI-Presence               TFCI-Presence            OPTIONAL
    -- This IE shall be present if DL DPCH Slot Format IE is from 12 to 16 --,
    multiplexingPosition        MultiplexingPosition        OPTIONAL,
    limitedPowerIncrease        LimitedPowerIncrease        OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-SplitType  CRITICALITY reject  EXTENSION  SplitType  PRESENCE optional } |
    { ID id-LengthOfTFCI2  CRITICALITY reject  EXTENSION  LengthOfTFCI2  PRESENCE optional },
    ...
}

DCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfPrepFDD

```

```

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

DCH-DeleteItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Modify-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-Information      DSCH-ModifyInfo-RL-ReconfPrepFDD    OPTIONAL,
    pdSCH-RL-ID          RL-ID                                OPTIONAL,
    tFCS                 TFCS                                OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {DSCH-Modify-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-Modify-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EnhancedDSCHPCIndicator    CRITICALITY ignore EXTENSION EnhancedDSCHPCIndicator    PRESENCE optional}|
    { ID id-EnhancedDSCHPC            CRITICALITY ignore EXTENSION EnhancedDSCHPC            PRESENCE conditional},
    -- The IE shall be present if the Enhanced DSCH PC Indicator IE is set to "Enhanced DSCH PC Active in the UE".
    ...
}

DSCH-ModifyInfo-RL-ReconfPrepFDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-ModifyInformationItem-RL-ReconfPrepFDD

DSCH-ModifyInformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID                DSCH-ID,
    trChSourceStatisticsDescriptor    TrCH-SrcStatisticsDescr OPTIONAL,
    transportFormatSet            TransportFormatSet            OPTIONAL,
    allocationRetentionPriority    AllocationRetentionPriority    OPTIONAL,
    schedulingPriorityIndicator    SchedulingPriorityIndicator    OPTIONAL,
    bLER                          BLER                          OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    iE-Extensions                ProtocolExtensionContainer { {DSCH-ModifyInformationItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-ModifyInformationItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TrafficClass            CRITICALITY ignore EXTENSION TrafficClass            PRESENCE optional}|
    { ID id-BindingID                CRITICALITY ignore EXTENSION BindingID                PRESENCE optional}|
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress    CRITICALITY ignore EXTENSION TransportLayerAddress    PRESENCE optional },
    -- Shall be ignored if bearer establishment with ALCAP.
    ...
}

DSCH-Delete-RL-ReconfPrepFDD ::= SEQUENCE {

```

```

    dSCH-Information          DSCH-Info-Delete-RL-ReconfPrepFDD,
    iE-Extensions            ProtocolExtensionContainer { {DSCH-Delete-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-Delete-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-Info-Delete-RL-ReconfPrepFDD ::= SEQUENCE (SIZE(1..maxNoOfDSCHs)) OF DSCH-DeleteInformationItem-RL-ReconfPrepFDD

DSCH-DeleteInformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
    dSCH-ID                  DSCH-ID,
    iE-Extensions            ProtocolExtensionContainer { {DSCH-DeleteInformationItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

DSCH-DeleteInformationItem-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-ReconfPrepFDD-IEs}
}

RL-Information-RL-ReconfPrepFDD-IEs RNSAP-PROTOCOL-IEs ::= {
    { ID id-RL-Information-RL-ReconfPrepFDD    CRITICALITY reject    TYPE RL-Information-RL-ReconfPrepFDD    PRESENCE mandatory    }
}

RL-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    sSDT-Indication          SSDT-Indication    OPTIONAL,
    sSDT-CellIdentity        SSDT-CellID      OPTIONAL
    -- The IE shall be present if the sSDT-Indication is set to 'sSDT-active-in-the-UE' --,
    transmitDiversityIndicator TransmitDiversityIndicator    OPTIONAL,
    -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and is not equal to "none"
    iE-Extensions            ProtocolExtensionContainer { {RL-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-ReconfPrepFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-SSDT-CellIDforEDSCHPC            CRITICALITY ignore    EXTENSION SSDT-CellID            PRESENCE conditional }|
    -- This IE shall be present if Enhanced DSCH PC IE is present in either the DSCHs to Modify IE or the DSCHs to Add IE.
    { ID id-DLReferencePower                  CRITICALITY ignore    EXTENSION DL-Power              PRESENCE optional }|
    { ID id-RL-Specific-DCH-Info              CRITICALITY ignore    EXTENSION RL-Specific-DCH-Info  PRESENCE optional }|
    { ID id-DL-DPCH-TimingAdjustment          CRITICALITY reject    EXTENSION DL-DPCH-TimingAdjustment PRESENCE optional }|
    { ID id-Qth-Parameter                     CRITICALITY ignore    EXTENSION Qth-Parameter         PRESENCE optional }|
    { ID id-Phase-Reference-Update-Indicator  CRITICALITY ignore    EXTENSION Phase-Reference-Update-Indicator PRESENCE optional }|
    { ID id-RL-Specific-EDCH-Information      CRITICALITY reject    EXTENSION RL-Specific-EDCH-Information PRESENCE optional }|
    { ID id-EDCH-MACdFlows-To-Add             CRITICALITY reject    EXTENSION RL-Specific-EDCH-Information PRESENCE optional }|
    { ID id-EDCH-RL-Indication                CRITICALITY reject    EXTENSION EDCH-RL-Indication    PRESENCE optional }|
}

```

```

...
}

RadioLinkReconfigurationPrepareFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-HSDSCH-FDD-Information          CRITICALITY reject  EXTENSION HSDSCH-FDD-Information          PRESENCE optional}|
  { ID id-HSDSCH-Information-to-Modify    CRITICALITY reject  EXTENSION HSDSCH-Information-to-Modify    PRESENCE optional}|
  { ID id-HSDSCH-MACdFlows-to-Add         CRITICALITY reject  EXTENSION HSDSCH-MACdFlows-Information    PRESENCE optional}|
  { ID id-HSDSCH-MACdFlows-to-Delete      CRITICALITY reject  EXTENSION HSDSCH-MACdFlows-to-Delete     PRESENCE optional}|
  { ID id-HSPDSCH-RL-ID                   CRITICALITY reject  EXTENSION RL-ID PRESENCE optional}|
  { ID id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation CRITICALITY ignore  EXTENSION UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation PRESENCE optional}|
  { ID id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH CRITICALITY ignore  EXTENSION UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH PRESENCE optional}|
  { ID id-EDPCH-Information                CRITICALITY reject  EXTENSION EDPCH-Information-FDD          PRESENCE optional}|
  { ID id-EDCH-FDD-Information             CRITICALITY reject  EXTENSION EDCH-FDD-Information          PRESENCE optional}|
  { ID id-EDCH-FDD-Information-To-Modify   CRITICALITY reject  EXTENSION EDCH-FDD-Information-To-Modify PRESENCE optional}|
  { ID id-EDCH-MACdFlows-To-Delete         CRITICALITY reject  EXTENSION EDCH-MACdFlows-To-Delete     PRESENCE optional}|
  { ID id-Serving-EDCHRL-Id               CRITICALITY reject  EXTENSION RL-ID PRESENCE conditional},
  -- This IE is present if RL Specific E-DCHInformation IE is present.
}

```

```

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

```

```

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

```

```

RadioLinkReconfigurationPrepareTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-AllowedQueuingTime          CRITICALITY reject  TYPE AllowedQueuingTime          PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY notify  TYPE UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY notify  TYPE UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD CRITICALITY notify  TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD CRITICALITY notify  TYPE DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD CRITICALITY notify  TYPE DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD CRITICALITY notify  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-ModifyList-RL-ReconfPrepTDD   CRITICALITY reject  TYPE DSCH-ModifyList-RL-ReconfPrepTDD   PRESENCE optional } |
    { ID id-DSCHs-to-Add-TDD                    CRITICALITY reject  TYPE DSCH-TDD-Information                PRESENCE optional } |
    { ID id-DSCH-DeleteList-RL-ReconfPrepTDD   CRITICALITY reject  TYPE DSCH-DeleteList-RL-ReconfPrepTDD   PRESENCE optional } |
    { ID id-USCH-ModifyList-RL-ReconfPrepTDD   CRITICALITY reject  TYPE USCH-ModifyList-RL-ReconfPrepTDD   PRESENCE optional } |
    { ID id-USCHs-to-Add                        CRITICALITY reject  TYPE USCH-Information                    PRESENCE optional } |
    { ID id-USCH-DeleteList-RL-ReconfPrepTDD   CRITICALITY reject  TYPE USCH-DeleteList-RL-ReconfPrepTDD   PRESENCE optional },
    ...
}

UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IEs} }

UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD    CRITICALITY notify  TYPE UL-CCTrCH-AddInformation-RL-ReconfPrepTDD    PRESENCE mandatory }
}

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

UL-CCTrCH-AddInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-SIRTarget      CRITICALITY reject  EXTENSION    UL-SIR      PRESENCE optional } |
    -- This IE shall be mandatory for 1.28Mcps TDD, not applicable for 3.84Mcps TDD.
    { ID id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD CRITICALITY reject  EXTENSION TDD-TPC-UplinkStepSize-LCR PRESENCE optional },
    -- Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD
    ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IEs} }

UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD    CRITICALITY notify  TYPE UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD    PRESENCE mandatory }
}

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

```

```

UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-SIRTarget          CRITICALITY reject      EXTENSION      UL-SIR          PRESENCE optional}|
  -- This IE shall be applicable for 1.28Mcps TDD only.
  { ID id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD  CRITICALITY reject  EXTENSION  TDD-TPC-UplinkStepSize-LCR  PRESENCE
  optional  },
  -- Applicable to 1.28Mcps TDD only
  ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
DeleteInformation-RL-ReconfPrepTDD-IEs} }

UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD  CRITICALITY notify  TYPE UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD  PRESENCE mandatory
  }
}

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

UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-AddInformation-
RL-ReconfPrepTDD-IEs} }

DL-CCTrCH-AddInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD  PRESENCE mandatory
  }
}

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,
  IE-Extensions      ProtocolExtensionContainer { {DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD  CRITICALITY reject  EXTENSION  TDD-TPC-DownlinkStepSize  PRESENCE optional },
  ...
}

```



```

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

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

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

DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
ModifyInformation-RL-ReconfPrepTDD-IEs} }

DL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD    CRITICALITY notify    TYPE DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD    PRESENCE
mandatory }
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    cCCTrCH-ID          CCTrCH-ID,
    tFCS                TFCS          OPTIONAL,
    tFCI-Coding         TFCI-Coding   OPTIONAL,
    punctureLimit       PunctureLimit  OPTIONAL,
    cCCTrCH-TPCList     CCTrCH-TPCModifyList-RL-ReconfPrepTDD    OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD    CRITICALITY reject    EXTENSION TDD-TPC-DownlinkStepSize    PRESENCE
optional},
    ...
}

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

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

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

```

```

DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
DeleteInformation-RL-ReconfPrepTDD-IEs} }

DL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD CRITICALITY notify TYPE DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD PRESENCE
mandatory }
}

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 RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..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 RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-ModifyItem-RL-ReconfPrepTDD

DSCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
  dSCH-ID DSCH-ID,
  dl-ccTrCHID CcTrCH-ID OPTIONAL,
  trChSourceStatisticsDescriptor TrCH-SrcStatisticsDescr OPTIONAL,
  transportFormatSet TransportFormatSet OPTIONAL,
  allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
  schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL,
  bLER BLER OPTIONAL,
  transportBearerRequestIndicator TransportBearerRequestIndicator,
  iE-Extensions ProtocolExtensionContainer { {DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
  ...
}

DSCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TrafficClass CRITICALITY ignore EXTENSION TrafficClass PRESENCE optional }|
  { ID id-BindingID CRITICALITY ignore EXTENSION BindingID PRESENCE optional }|
  -- Shall be ignored if bearer establishment with ALCAP.
  { ID id-TransportLayerAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
}

```

```

    -- Shall be ignored if bearer establishment with ALCAP.
    ...
}

DSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfDSCHs)) OF DSCH-DeleteItem-RL-ReconfPrepTDD

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

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

USCH-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCH-ModifyItem-RL-ReconfPrepTDD

USCH-ModifyItem-RL-ReconfPrepTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    ul-ccTrCHID            CCH-TRCH-ID                OPTIONAL,
    trChSourceStatisticsDescriptor TrCH-SourceStatisticsDescriptor OPTIONAL,
    transportFormatSet      TransportFormatSet          OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL,
    bLER                    BLER                        OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    rb-Info                 RB-Info                      OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs} } OPTIONAL,
    ...
}

USCH-ModifyItem-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TrafficClass          CRITICALITY ignore EXTENSION TrafficClass          PRESENCE optional }|
    { ID id-BindingID             CRITICALITY ignore EXTENSION BindingID           PRESENCE optional }|
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional }|
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TnlQos                CRITICALITY ignore EXTENSION TnlQos                PRESENCE optional },
    ...
}

USCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE(0..maxNoOfUSCHs)) OF USCH-DeleteItem-RL-ReconfPrepTDD

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

```

```

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

RadioLinkReconfigurationPrepareTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD          CRITICALITY ignore          EXTENSION PrimaryCCPCH-RSCP PRESENCE optional }|
    { ID id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD      CRITICALITY ignore          EXTENSION DL-TimeSlot-ISCP-Info PRESENCE optional }|
    { ID id-DL-TimeSlot-ISCP-LCR-Information-RL-ReconfPrepTDD CRITICALITY ignore          EXTENSION DL-TimeSlot-ISCP-LCR-Information PRESENCE optional }|
    }|
    { ID id-HSDSCH-TDD-Information                      CRITICALITY reject          EXTENSION HSDSCH-TDD-Information PRESENCE optional }|
    { ID id-HSDSCH-Information-to-Modify                CRITICALITY reject          EXTENSION HSDSCH-Information-to-Modify PRESENCE optional }|
    { ID id-HSDSCH-MACdFlows-to-Add                    CRITICALITY reject          EXTENSION HSDSCH-MACdFlows-Information PRESENCE optional }|
    { ID id-HSDSCH-MACdFlows-to-Delete                 CRITICALITY reject          EXTENSION HSDSCH-MACdFlows-to-Delete PRESENCE optional }|
    { ID id-HSPDSCH-RL-ID                              CRITICALITY reject          EXTENSION RL-ID PRESENCE optional }|
    { ID id-PDSCH-RL-ID                                CRITICALITY ignore          EXTENSION RL-ID PRESENCE optional }|
    { ID id-UL-Synchronisation-Parameters-LCR          CRITICALITY ignore          EXTENSION UL-Synchronisation-Parameters-LCR PRESENCE optional }|
    }| -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    { ID id-RL-Information-RL-ReconfPrepTDD            CRITICALITY ignore          EXTENSION RL-Information-RL-ReconfPrepTDD PRESENCE optional }|
    { ID id-PrimaryCCPCH-RSCP-Delta                    CRITICALITY ignore          EXTENSION PrimaryCCPCH-RSCP-Delta PRESENCE optional },
    ...
}

RL-Information-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF RL-InformationIE-RL-ReconfPrepTDD

RL-InformationIE-RL-ReconfPrepTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    rL-Specific-DCH-Info RL-Specific-DCH-Info OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RL-InformationIE-RL-ReconfPrepTDD-ExtIEs } } OPTIONAL,
    ...
}

RL-InformationIE-RL-ReconfPrepTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION READY FDD
--
-- *****

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

RadioLinkReconfigurationReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {

```

```

    { ID id-RL-InformationResponseList-RL-ReconfReadyFDD    CRITICALITY ignore  TYPE RL-InformationResponseList-RL-ReconfReadyFDD    PRESENCE optional
    } |
    { ID id-CriticalityDiagnostics                          CRITICALITY ignore  TYPE CriticalityDiagnostics          PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-ReconfReadyFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponse-RL-
ReconfReadyFDD-IEs} }

RL-InformationResponse-RL-ReconfReadyFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponseItem-RL-ReconfReadyFDD    CRITICALITY ignore  TYPE RL-InformationResponseItem-RL-ReconfReadyFDD    PRESENCE mandatory
  }
}

RL-InformationResponseItem-RL-ReconfReadyFDD ::= SEQUENCE {
  rL-ID                RL-ID,
  max-UL-SIR           UL-SIR          OPTIONAL,
  min-UL-SIR           UL-SIR          OPTIONAL,
  maximumDLTxPower    DL-Power        OPTIONAL,
  minimumDLTxPower    DL-Power        OPTIONAL,
  secondary-CCPCH-Info Secondary-CCPCH-Info OPTIONAL,
  dl-CodeInformationList DL-CodeInformationList-RL-ReconfReadyFDD OPTIONAL,
  dCHInformationResponse DCH-InformationResponseList-RL-ReconfReadyFDD OPTIONAL,
  dSCHsToBeAddedOrModified DSCHsToBeAddedOrModified-RL-ReconfReadyFDD OPTIONAL,
  IE-Extensions       ProtocolExtensionContainer { {RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationResponseItem-RL-ReconfReadyFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-PowerBalancing-UpdatedIndicator          CRITICALITY ignore  EXTENSION DL-PowerBalancing-UpdatedIndicator          PRESENCE optional } |
  { ID id-Primary-CPICH-Usage-For-Channel-Estimation  CRITICALITY ignore  EXTENSION Primary-CPICH-Usage-For-Channel-Estimation  PRESENCE optional } |
  { ID id-Secondary-CPICH-Information-Change          CRITICALITY ignore  EXTENSION Secondary-CPICH-Information-Change          PRESENCE optional } |
  { ID id-EDCH-FDD-InformationResponse                CRITICALITY ignore  EXTENSION EDCH-FDD-InformationResponse                PRESENCE optional } |
  { ID id-EDCH-RLSet-Id                              CRITICALITY ignore  EXTENSION RL-Set-ID                                  PRESENCE optional } |
  { ID id-EDCH-FDD-DL-ControlChannelInformation       CRITICALITY ignore  EXTENSION EDCH-FDD-DL-ControlChannelInformation       PRESENCE optional },
  ...
}

DL-CodeInformationList-RL-ReconfReadyFDD ::= ProtocolIE-Single-Container { { DL-CodeInformationListIEs-RL-ReconfReadyFDD } }

DL-CodeInformationListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-FDD-DL-CodeInformation          CRITICALITY ignore  TYPE FDD-DL-CodeInformation          PRESENCE mandatory }
}

DCH-InformationResponseList-RL-ReconfReadyFDD ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfReadyFDD} }

DCH-InformationResponseListIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse        CRITICALITY ignore  TYPE DCH-InformationResponse        PRESENCE mandatory }
}

```

```

DSCHsToBeAddedOrModified-RL-ReconfReadyFDD ::= ProtocolIE-Single-Container { {DSCHsToBeAddedOrModifiedIEs-RL-ReconfReadyFDD} }

DSCHsToBeAddedOrModifiedIEs-RL-ReconfReadyFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DSCHsToBeAddedOrModified-FDD      CRITICALITY ignore  TYPE DSCH-FDD-InformationResponse  PRESENCE mandatory  }
}

RadioLinkReconfigurationReadyFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DSCH-RNTI                CRITICALITY ignore      EXTENSION DSCH-RNTI                PRESENCE optional  }|
  { ID id-HSDSCH-RNTI              CRITICALITY ignore      EXTENSION HSDSCH-RNTI             PRESENCE optional  }|
  { ID id-HSDSCH-FDD-Information-Response  CRITICALITY ignore  EXTENSION HSDSCH-FDD-Information-Response  PRESENCE optional  }|
  { ID id-MACHs-ResetIndicator      CRITICALITY ignore      EXTENSION MACHs-ResetIndicator      PRESENCE optional  },
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION READY TDD
--
-- *****

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

RadioLinkReconfigurationReadyTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponse-RL-ReconfReadyTDD
    CRITICALITY ignore  TYPE RL-InformationResponse-RL-ReconfReadyTDD  PRESENCE optional  } |
  --This RL-InformationResponse-RL-ReconfReadyTDD is for the first RL repetition in the list.
  --Repetitions 2 and on are defined in Multiple-RL-InformationResponse-RL-ReconfReadyTDD.
  { ID id-CriticalityDiagnostics      CRITICALITY ignore  TYPE CriticalityDiagnostics      PRESENCE optional  },
  ...
}

RL-InformationResponse-RL-ReconfReadyTDD ::= SEQUENCE {
  rL-ID                      RL-ID,
  max-UL-SIR                 UL-SIR                OPTIONAL,
  min-UL-SIR                 UL-SIR                OPTIONAL,
  maximumDLTxPower          DL-Power              OPTIONAL,
  minimumDLTxPower          DL-Power              OPTIONAL,
  secondary-CCPCH-Info-TDD   Secondary-CCPCH-Info-TDD  OPTIONAL,
  ul-CCTrCH-Information      UL-CCTrCH-InformationList-RL-ReconfReadyTDD  OPTIONAL,
  dl-CCTrCH-Information      DL-CCTrCH-InformationList-RL-ReconfReadyTDD  OPTIONAL,
  dCHInformationResponse     DCH-InformationResponseList-RL-ReconfReadyTDD  OPTIONAL,
  dSCHsToBeAddedOrModified   DSCHToBeAddedOrModified-RL-ReconfReadyTDD  OPTIONAL,
  uSCHsToBeAddedOrModified   USCHToBeAddedOrModified-RL-ReconfReadyTDD  OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { {RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

RL-InformationResponse-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-TimingAdvanceCtrl-LCR          CRITICALITY ignore  EXTENSION  UL-TimingAdvanceCtrl-LCR          PRESENCE optional },
  --For 1.28Mcps TDD only
  ...
}

UL-CCTrCH-InformationList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}

UL-CCTrCHInformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD  CRITICALITY ignore  TYPE  UL-CCTrCHInformationListIE-RL-ReconfReadyTDD  PRESENCE mandatory
  }
}

UL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-ReconfReadyTDD

UL-CCTrCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  ul-DPCH-AddInformation    UL-DPCH-InformationAddList-RL-ReconfReadyTDD          OPTIONAL,
  --For 3.84Mcps TDD only
  ul-DPCH-ModifyInformation UL-DPCH-InformationModifyList-RL-ReconfReadyTDD      OPTIONAL,
  --For 3.84Mcps TDD only
  ul-DPCH-DeleteInformation UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD        OPTIONAL,
  IE-Extensions            ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD  CRITICALITY ignore  EXTENSION  UL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD
  PRESENCE optional },
  --For 1.28Mcps TDD only
  ...
}

UL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tDD-DPCHOffset        TDD-DPCHOffset,
  uL-TimeslotLCR-Info   UL-TimeslotLCR-Information,
  IE-Extensions         ProtocolExtensionContainer { {UL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

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

UL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {

```

```

    { ID id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD PRESENCE
optional }
}

UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tDD-DPCHOffset            TDD-DPCHOffset,
    rxTimingDeviationForTA    RxTimingDeviationForTA OPTIONAL,
    uL-Timeslot-Information    UL-Timeslot-Information,
    iE-Extensions              ProtocolExtensionContainer { {UL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCH-InformationModifyList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD}}

UL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD PRESENCE
mandatory }
}

UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod OPTIONAL,
    repetitionLength          RepetitionLength OPTIONAL,
    tDD-DPCHOffset            TDD-DPCHOffset OPTIONAL,
    uL-Timeslot-InformationModifyList-RL-ReconfReadyTDD UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD OPTIONAL,
    --For 3.84Mcps TDD only
    iE-Extensions              ProtocolExtensionContainer { {UL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD CRITICALITY ignore EXTENSION UL-TimeslotLCR-InformationModifyList-RL-
ReconfReadyTDD PRESENCE optional },
    --For 1.28Mcps TDD only
    ...
}

UL-TimeslotLCR-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD

UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR            MidambleShiftLCR OPTIONAL,
    tFCI-Presence                TFCI-Presence OPTIONAL,
    tDD-uL-Code-LCR-Information    TDD-UL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { {UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
}

```



```

}
...
}

TDD-UL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfDPCHsLCR)) OF TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD

TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tDD-ChannelisationCodeLCR    TDD-ChannelisationCodeLCR    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

TDD-UL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD    CRITICALITY    reject    EXTENSION TDD-UL-DPCH-TimeSlotFormat-LCR    PRESENCE optional},
    ...
}

UL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD

UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType    MidambleShiftAndBurstType    OPTIONAL,
    tFCI-Presence            TFCI-Presence    OPTIONAL,
    uL-Code-Information        TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-UL-Code-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD

TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tDD-ChannelisationCode    TDD-ChannelisationCode    OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

TDD-UL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD}}

UL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD  CRITICALITY ignore  TYPE UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD  PRESENCE
  mandatory }
}

UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF UL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD

UL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD ::= SEQUENCE {
  dPCH-ID          DPCH-ID,
  iE-Extensions    ProtocolExtensionContainer { {UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationList-RL-ReconfReadyTDD          ::= ProtocolIE-Single-Container {{DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD}}

DL-CCTrCHInformationListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD  CRITICALITY ignore  TYPE DL-CCTrCHInformationListIE-RL-ReconfReadyTDD  PRESENCE mandatory
  }
}

DL-CCTrCHInformationListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-ReconfReadyTDD

DL-CCTrCH-InformationItem-RL-ReconfReadyTDD ::= SEQUENCE {
  cCtRch-ID          CCTrCH-ID,
  dl-DPCH-AddInformation    DL-DPCH-InformationAddList-RL-ReconfReadyTDD          OPTIONAL,
  --For 3.84Mcps TDD only
  dl-DPCH-ModifyInformation    DL-DPCH-InformationModifyList-RL-ReconfReadyTDD          OPTIONAL,
  --For 3.84Mcps TDD only
  dl-DPCH-DeleteInformation    DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD          OPTIONAL,
  iE-Extensions    ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CCTrCH-InformationItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD  CRITICALITY ignore  EXTENSION  DL-DPCH-LCR-InformationAddList-RL-
  ReconfReadyTDD  PRESENCE optional}
  --For 1.28Mcps TDD only
  { ID id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD  CRITICALITY ignore  EXTENSION DL-Power  PRESENCE optional}
  -- Applicable to 3.84Mcps TDD only, this is a DCH type CCTrCH power
  { ID id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD  CRITICALITY ignore  EXTENSION DL-Power  PRESENCE optional},
  ...
}

```

```

DL-DPCH-LCR-InformationAddList-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tDD-DPCHOffset            TDD-DPCHOffset,
    dL-TimeslotLCR-Info        DL-TimeslotLCR-Information,
    iE-Extensions              ProtocolExtensionContainer { {DL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

DL-DPCH-InformationAddListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD    CRITICALITY ignore TYPE DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD    PRESENCE
mandatory }
}

DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod,
    repetitionLength          RepetitionLength,
    tDD-DPCHOffset            TDD-DPCHOffset,
    dL-Timeslot-Information    DL-Timeslot-Information,
    iE-Extensions              ProtocolExtensionContainer { {DL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationAddItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-DPCH-InformationModifyList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD}}

DL-DPCH-InformationModifyListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD    CRITICALITY ignore TYPE DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD    PRESENCE
mandatory }
}

DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod          OPTIONAL,
    repetitionLength          RepetitionLength          OPTIONAL,
    tDD-DPCHOffset            TDD-DPCHOffset            OPTIONAL,
    dL-Timeslot-InformationModifyList-RL-ReconfReadyTDD    DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD    OPTIONAL,
    --For 3.84Mcps TDD only
    iE-Extensions              ProtocolExtensionContainer { {DL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

DL-DPCH-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD  CRITICALITY ignore  EXTENSION  DL-TimeslotLCR-InformationModifyList-RL-
ReconfReadyTDD  PRESENCE optional },
  --For 1.28Mcps TDD only
  ...
}

DL-TimeslotLCR-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD

DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
  timeSlotLCR                TimeSlotLCR,
  midambleShiftLCR           MidambleShiftLCR          OPTIONAL,
  tFCI-Presence              TFCI-Presence          OPTIONAL,
  tDD-dL-Code-LCR-Information TDD-DL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD  OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { {DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

TDD-DL-Code-LCR-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfDPCHsLCR)) OF TDD-DL-Code-LCR-InformationModifyItem-RL-
ReconfReadyTDD

TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
  dPCH-ID                    DPCH-ID,
  tDD-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR  OPTIONAL,
  iE-Extensions              ProtocolExtensionContainer { {TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

TDD-DL-Code-LCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD  CRITICALITY ignore  EXTENSION  DL-Power  PRESENCE optional }|
  { ID id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD  CRITICALITY ignore  EXTENSION  DL-Power  PRESENCE optional },
  ...
}

DL-Timeslot-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfTs)) OF DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD

DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
  timeSlot                TimeSlot,
  midambleShiftAndBurstType MidambleShiftAndBurstType  OPTIONAL,
  tFCI-Presence          TFCI-Presence          OPTIONAL,
  dL-Code-Information    TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD  OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { {DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
  ...
}

```

```

DL-Timeslot-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DL-Code-InformationModifyList-RL-ReconfReadyTDD ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD

TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tDD-ChannelisationCode TDD-ChannelisationCode OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

TDD-DL-Code-InformationModifyItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD CRITICALITY reject EXTENSION TDD-DL-DPCH-TimeSlotFormat-LCR PRESENCE
optional},
    ...
}

DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container { {DL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD} }

DL-DPCH-InformationDeleteListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD CRITICALITY ignore TYPE DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD PRESENCE
mandatory }
}

DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD

DL-DPCH-InformationDeleteItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    iE-Extensions          ProtocolExtensionContainer { {DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationDeleteList-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-InformationResponseList-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfReadyTDD} }

DCH-InformationResponseListIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory }
}

DSCHToBeAddedOrModified-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container { {DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD} }

DSCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD CRITICALITY ignore TYPE DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD PRESENCE mandatory
}
}

```

```

DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNoOfDSCHs)) OF DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD

DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD ::= SEQUENCE {
    dsch-ID                DSCH-ID,
    transportFormatManagement TransportFormatManagement,
    dSCH-FlowControlInformation DSCH-FlowControlInformation,
    bindingID              BindingID OPTIONAL,
    transportLayerAddress  TransportLayerAddress OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { {DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

DSCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

USCHToBeAddedOrModified-RL-ReconfReadyTDD ::= ProtocolIE-Single-Container { {USCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD}
}USCHToBeAddedOrModifiedIEs-RL-ReconfReadyTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD CRITICALITY ignore TYPE USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD PRESENCE mandatory
    }
}

USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (0..maxNoOfUSCHs)) OF USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD

USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD ::= SEQUENCE {
    uSCH-ID                USCH-ID,
    transportFormatManagement TransportFormatManagement,
    bindingID              BindingID OPTIONAL,
    transportLayerAddress  TransportLayerAddress OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { {USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs} } OPTIONAL,
    ...
}

USCHToBeAddedOrModifiedItem-RL-ReconfReadyTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkReconfigurationReadyTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-RNTI                CRITICALITY ignore EXTENSION HSDSCH-RNTI PRESENCE optional }|
    { ID id-DSCH-RNTI                 CRITICALITY ignore EXTENSION DSCH-RNTI PRESENCE optional }|
    { ID id-HSDSCH-TDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response PRESENCE optional }|
    { ID id-MACHs-ResetIndicator        CRITICALITY ignore EXTENSION MACHs-ResetIndicator PRESENCE optional }|
    { ID id-Multiple-RL-InformationResponse-RL-ReconfReadyTDD CRITICALITY ignore EXTENSION Multiple-RL-InformationResponse-RL-ReconfReadyTDD PRESENCE optional},
    -- This is for RL repetitions 2 and on in RL list.
    ...
}

Multiple-RL-InformationResponse-RL-ReconfReadyTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF RL-InformationResponse-RL-ReconfReadyTDD

```

```

-- *****
--
-- RADIO LINK RECONFIGURATION COMMIT
--
-- *****

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

RadioLinkReconfigurationCommit-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CFN          CRITICALITY ignore  TYPE CFN          PRESENCE mandatory } |
    { ID id-Active-Pattern-Sequence-Information CRITICALITY ignore  TYPE Active-Pattern-Sequence-Information PRESENCE optional },--FDD only
    ...
}

RadioLinkReconfigurationCommit-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION FAILURE
--
-- *****

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

RadioLinkReconfigurationFailure-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CauseLevel-RL-ReconfFailure    CRITICALITY ignore  TYPE CauseLevel-RL-ReconfFailure PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics        CRITICALITY ignore  TYPE CriticalityDiagnostics     PRESENCE optional },
    ...
}

CauseLevel-RL-ReconfFailure ::= CHOICE {
    generalCause          GeneralCauseList-RL-ReconfFailure,
    rLSpecificCause      RLSpecificCauseList-RL-ReconfFailure,
    ...
}

GeneralCauseList-RL-ReconfFailure ::= SEQUENCE {
    cause                Cause,

```

```

    iE-Extensions                ProtocolExtensionContainer { { GeneralCauseItem-RL-ReconfFailure-ExtIEs} }      OPTIONAL,
    ...
}

GeneralCauseItem-RL-ReconfFailure-ExtIEs  RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-ReconfFailure ::= SEQUENCE {
    rL-ReconfigurationFailureList-RL-ReconfFailure    RL-ReconfigurationFailureList-RL-ReconfFailure    OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { RLSpecificCauseItem-RL-ReconfFailure-ExtIEs} }      OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-ReconfFailure-ExtIEs  RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-ReconfigurationFailureList-RL-ReconfFailure ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-ReconfigurationFailure-RL-
ReconfFailure-IEs} }

RL-ReconfigurationFailure-RL-ReconfFailure-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-ReconfigurationFailure-RL-ReconfFail CRITICALITY ignore TYPE RL-ReconfigurationFailure-RL-ReconfFail PRESENCE mandatory }
}

RL-ReconfigurationFailure-RL-ReconfFail ::= SEQUENCE {
    rL-ID                RL-ID,
    cause                Cause,
    iE-Extensions                ProtocolExtensionContainer { {RL-ReconfigurationFailure-RL-ReconfFailure-ExtIEs} } OPTIONAL,
    ...
}

RL-ReconfigurationFailure-RL-ReconfFailure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RadioLinkReconfigurationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION CANCEL
--
-- *****

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

```



```

}

RadioLinkReconfigurationCancel-IEs RNSAP-PROTOCOL-IES ::= {
  ...
}

RadioLinkReconfigurationCancel-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST FDD
--
-- *****

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

RadioLinkReconfigurationRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-AllowedQueuingTime          CRITICALITY reject TYPE AllowedQueuingTime          PRESENCE optional } |
  { ID id-UL-DPCH-Information-RL-ReconfRqstFDD          CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfRqstFDD PRESENCE optional } |
  { ID id-DL-DPCH-Information-RL-ReconfRqstFDD          CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfRqstFDD PRESENCE optional } |
  { ID id-FDD-DCHs-to-Modify          CRITICALITY reject TYPE FDD-DCHs-to-Modify          PRESENCE optional } |
  { ID id-DCHs-to-Add-FDD             CRITICALITY reject TYPE DCH-FDD-Information          PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfRqstFDD          CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD          PRESENCE optional } |
  { ID id-Transmission-Gap-Pattern-Sequence-Information          CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE optional },
  ...
}

UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
  tFCS          TFCS          OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
  ...
}

UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCHIndicatorEDCH          CRITICALITY reject EXTENSION UL-DPCHIndicatorEDCH PRESENCE conditional },
  -- This IE shall be present if E-DPCH Information IE is present.
  ...
}

DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
  tFCS          TFCS          OPTIONAL,
  tFCI-SignallingMode          TFCI-SignallingMode OPTIONAL,
  limitedPowerIncrease          LimitedPowerIncrease          OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,

```

```

}
...
}
DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
DCH-DeleteList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstFDD
DCH-DeleteItem-RL-ReconfRqstFDD ::= SEQUENCE {
dCH-ID DCH-ID,
iE-Extensions ProtocolExtensionContainer { {DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs} } OPTIONAL,
...
}
DCH-DeleteItem-RL-ReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
RadioLinkReconfigurationRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-RL-ReconfigurationRequestFDD-RL-InformationList CRITICALITY ignore EXTENSION RL-ReconfigurationRequestFDD-RL-InformationList PRESENCE optional}|
{ ID id-DL-ReferencePowerInformation CRITICALITY ignore EXTENSION DL-ReferencePowerInformation PRESENCE optional }|
{ ID id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation CRITICALITY ignore EXTENSION UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation PRESENCE optional}|
{ ID id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH CRITICALITY ignore EXTENSION UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH PRESENCE optional}|
{ ID id-HSDSCH-FDD-Information CRITICALITY reject EXTENSION HSDSCH-FDD-Information PRESENCE optional}|
{ ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify-Unsynchronised PRESENCE optional}|
{ ID id-HSDSCH-MACdFlows-to-Add CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information PRESENCE optional}|
{ ID id-HSDSCH-MACdFlows-to-Delete CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete PRESENCE optional}|
{ ID id-HSPDSCH-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE optional}|
{ ID id-EDPCH-Information-RLReconfRequest-FDD CRITICALITY reject EXTENSION E-TFCS PRESENCE optional}|
{ ID id-EDCH-FDD-Information CRITICALITY reject EXTENSION EDCH-FDD-Information PRESENCE optional}|
{ ID id-EDCH-FDD-Information-To-Modify CRITICALITY reject EXTENSION EDCH-FDD-Information-To-Modify PRESENCE optional}|
{ ID id-EDCH-MACdFlows-To-Delete CRITICALITY reject EXTENSION EDCH-MACdFlows-To-Delete PRESENCE optional}|
...
}
RL-ReconfigurationRequestFDD-RL-InformationList ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container {
{RL-ReconfigurationRequestFDD-RL-Information-ListItem} }
RL-ReconfigurationRequestFDD-RL-Information-ListItem RNSAP-PROTOCOL-IES ::= {
{ ID id-RL-ReconfigurationRequestFDD-RL-Information-IES CRITICALITY ignore TYPE RL-ReconfigurationRequestFDD-RL-Information-IES PRESENCE optional }
}
RL-ReconfigurationRequestFDD-RL-Information-IES ::= SEQUENCE {
rL-ID RL-ID,

```

```

    rL-Specific-DCH-Info    RL-Specific-DCH-Info OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { RL-ReconfigurationRequestFDD-RL-Information-ExtIEs} } OPTIONAL,
    ...
}

RL-ReconfigurationRequestFDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-RL-Specific-EDCH-Information    CRITICALITY reject    EXTENSION RL-Specific-EDCH-Information    PRESENCE optional } |
  { ID id-EDCH-RL-Indication              CRITICALITY reject    EXTENSION EDCH-RL-Indication              PRESENCE optional } |
  { ID id-EDCH-MACdFlows-To-Add           CRITICALITY reject    EXTENSION RL-Specific-EDCH-Information    PRESENCE optional },
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

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

RadioLinkReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-AllowedQueuingTime              CRITICALITY reject    TYPE AllowedQueuingTime              PRESENCE optional } |
  optional { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD    CRITICALITY notify    TYPE UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD    PRESENCE optional } |
  optional { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD    CRITICALITY notify    TYPE UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD    PRESENCE optional } |
  optional { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD    CRITICALITY notify    TYPE DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD    PRESENCE optional } |
  optional { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD    CRITICALITY notify    TYPE DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD    PRESENCE optional } |
  { ID id-TDD-DCHs-to-Modify              CRITICALITY reject    TYPE TDD-DCHs-to-Modify              PRESENCE optional } |
  { ID id-DCHs-to-Add-TDD                  CRITICALITY reject    TYPE DCH-TDD-Information              PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfRqstTDD CRITICALITY reject    TYPE DCH-DeleteList-RL-ReconfRqstTDD    PRESENCE optional },
  ...
}

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IEs} }

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
  mandatory { ID id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD    CRITICALITY notify    TYPE UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD    PRESENCE mandatory }
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,

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    tFCS                TFCS                OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-SIRTarget    CRITICALITY reject    EXTENSION    UL-SIR    PRESENCE    optional    },
  -- Applicable to 1.28Mcps TDD only
  ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD-IEs} }

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD    CRITICALITY notify    TYPE UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD    PRESENCE
mandatory    }
}

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

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD-IEs} }

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD    CRITICALITY notify    TYPE DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD    PRESENCE
mandatory    }
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID                CCTrCH-ID,
  tFCS                    TFCS                OPTIONAL,
  iE-Extensions           ProtocolExtensionContainer { {DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {DL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD-IEs} }

```

```

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD    CRITICALITY notify   TYPE DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD  PRESENCE
  mandatory }
}

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

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DCH-DeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE(0..maxNrOfDCHs)) OF DCH-DeleteItem-RL-ReconfRqstTDD

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

DCH-DeleteItem-RL-ReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RadioLinkReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-RL-ReconfigurationRequestTDD-RL-Information    CRITICALITY ignore   EXTENSION Multiple-RL-ReconfigurationRequestTDD-RL-Information
  PRESENCE optional}|
  { ID id-HSDSCH-TDD-Information                CRITICALITY reject   EXTENSION HSDSCH-TDD-Information                PRESENCE optional}|
  { ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject   EXTENSION HSDSCH-Information-to-Modify-UnsynchronisedPRESENCE
  optional}|
  { ID id-HSDSCH-MACdFlows-to-Add                CRITICALITY reject   EXTENSION HSDSCH-MACdFlows-Information                PRESENCE optional}|
  { ID id-HSDSCH-MACdFlows-to-Delete            CRITICALITY reject   EXTENSION HSDSCH-MACdFlows-to-Delete            PRESENCE optional}|
  { ID id-HSPDSCH-RL-ID                          CRITICALITY reject   EXTENSION RL-ID                          PRESENCE optional},
  ...
}

Multiple-RL-ReconfigurationRequestTDD-RL-Information ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF RL-ReconfigurationRequestTDD-RL-Information

RL-ReconfigurationRequestTDD-RL-Information ::= SEQUENCE {
  rL-ID                RL-ID,
  rL-Specific-DCH-Info  RL-Specific-DCH-Info OPTIONAL,
  iE-Extensions            ProtocolExtensionContainer { { RL-ReconfigurationRequestTDD-RL-Information-ExtIEs} } OPTIONAL,
  ...
}

RL-ReconfigurationRequestTDD-RL-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-UL-Synchronisation-Parameters-LCR          CRITICALITY ignore      EXTENSION  UL-Synchronisation-Parameters-LCR      PRESENCE
    optional    }, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION RESPONSE FDD
--
-- *****

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

RadioLinkReconfigurationResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseList-RL-ReconfRspFDD      CRITICALITY ignore  TYPE RL-InformationResponseList-RL-ReconfRspFDD      PRESENCE optional
    } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics          PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-ReconfRspFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponse-RL-
ReconfRspFDD-IEs} }

RL-InformationResponse-RL-ReconfRspFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfRspFDD      CRITICALITY ignore  TYPE RL-InformationResponseItem-RL-ReconfRspFDD      PRESENCE mandatory
    }
}

RL-InformationResponseItem-RL-ReconfRspFDD ::= SEQUENCE {
    rL-ID              RL-ID,
    max-UL-SIR         UL-SIR          OPTIONAL,
    min-UL-SIR         UL-SIR          OPTIONAL,
    maximumDLTxPower   DL-Power       OPTIONAL,
    minimumDLTxPower   DL-Power       OPTIONAL,
    secondary-CCPCH-Info Secondary-CCPCH-Info    OPTIONAL,
    dCHsInformationResponseList DCH-InformationResponseList-RL-ReconfRspFDD OPTIONAL,
    dL-CodeInformationList-RL-ReconfResp DL-CodeInformationList-RL-ReconfRspFDD OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { {RL-InformationResponseItem-RL-ReconfRspFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-UpdatedIndicator CRITICALITY ignore      EXTENSION  DL-PowerBalancing-UpdatedIndicator      PRESENCE optional } |
    { ID id-EDCH-FDD-InformationResponse      CRITICALITY ignore      EXTENSION  EDCH-FDD-InformationResponse            PRESENCE optional } |
    { ID id-EDCH-RLSet-Id                    CRITICALITY ignore      EXTENSION  RL-Set-ID                              PRESENCE optional } |
    { ID id-EDCH-FDD-DL-ControlChannelInformation CRITICALITY ignore      EXTENSION  EDCH-FDD-DL-ControlChannelInformation    PRESENCE optional } ,
}

```

```

}
...
DCH-InformationResponseList-RL-ReconfRspFDD ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfRspFDD} }

DCH-InformationResponseListIEs-RL-ReconfRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse      CRITICALITY ignore TYPE DCH-InformationResponse      PRESENCE mandatory }
}

DL-CodeInformationList-RL-ReconfRspFDD ::= ProtocolIE-Single-Container { { DL-CodeInformationListIEs-RL-ReconfRspFDD } }

DL-CodeInformationListIEs-RL-ReconfRspFDD RNSAP-PROTOCOL-IES ::= {
  { ID id-FDD-DL-CodeInformation      CRITICALITY ignore TYPE FDD-DL-CodeInformation      PRESENCE optional }
}

RadioLinkReconfigurationResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-HSDSCH-RNTI                CRITICALITY ignore      EXTENSION HSDSCH-RNTI                PRESENCE optional } |
  { ID id-HSDSCH-FDD-Information-Response  CRITICALITY ignore      EXTENSION HSDSCH-FDD-Information-Response  PRESENCE optional } |
  { ID id-MACHs-ResetIndicator          CRITICALITY ignore      EXTENSION MACHs-ResetIndicator          PRESENCE optional } ,
  ...
}

-- *****
--
-- RADIO LINK RECONFIGURATION RESPONSE TDD
--
-- *****

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

RadioLinkReconfigurationResponseTDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationResponse-RL-ReconfRspTDD      CRITICALITY ignore TYPE RL-InformationResponse-RL-ReconfRspTDD      PRESENCE optional } |
  --This RL-InformationResponse-RL-ReconfRspTDD is for the first RL repetition in the list.
  --Repetitions 2 and on are defined in Multiple-RL-InformationResponse-RL-ReconfRspTDD.
  { ID id-CriticalityDiagnostics          CRITICALITY ignore TYPE CriticalityDiagnostics          PRESENCE optional } ,
  ...
}

RL-InformationResponse-RL-ReconfRspTDD ::= SEQUENCE {
  rL-ID                RL-ID,
  max-UL-SIR           UL-SIR          OPTIONAL,
  min-UL-SIR           UL-SIR          OPTIONAL,
  maximumDLTxPower     DL-Power        OPTIONAL,
  minimumDLTxPower     DL-Power        OPTIONAL,
  dCHsInformationResponseList  DCH-InformationResponseList-RL-ReconfRspTDD OPTIONAL,
  iE-Extensions        ProtocolExtensionContainer { {RL-InformationResponse-RL-ReconfRspTDD-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
RL-InformationResponse-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-CCTrCH-InformationList-RL-ReconfRspTDD CRITICALITY ignore EXTENSION DL-CCTrCH-InformationList-RL-ReconfRspTDD PRESENCE optional }
  { ID id-UL-TimingAdvanceCtrl-LCR CRITICALITY ignore EXTENSION UL-TimingAdvanceCtrl-LCR PRESENCE optional },
  --For 1.28Mcps TDD only
  ...
}
DL-CCTrCH-InformationList-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-ReconfRspTDD
DL-CCTrCH-InformationItem-RL-ReconfRspTDD ::= SEQUENCE {
  cCTrCH-ID CCTrCH-ID,
  dl-DPCH-ModifyInformation-LCR DL-DPCH-InformationModifyList-LCR-RL-ReconfRspTDD OPTIONAL,
  --For 1.28Mcps TDD only
  cCTrCH-Maximum-DL-Power DL-Power OPTIONAL,
  --For 3.84Mcps TDD only, this is a DCH type CCTrCH power
  cCTrCH-Minimum-DL-Power DL-Power OPTIONAL,
  --For 3.84Mcps TDD only, this is a DCH type CCTrCH power
  iE-Extensions ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-ReconfRspTDD-ExtIEs } } OPTIONAL,
  ...
}
DL-CCTrCH-InformationItem-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
DL-DPCH-InformationModifyList-LCR-RL-ReconfRspTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationModifyListIEs-LCR-RL-ReconfRspTDD } }
DL-DPCH-InformationModifyListIEs-LCR-RL-ReconfRspTDD RNSAP-PROTOCOL-IES ::= {
  {ID id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD CRITICALITY ignore TYPE DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD PRESENCE optional },
  ...
}
DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD ::= SEQUENCE {
  dL-Timeslot-LCR-InformationModifyList-RL-ReconfRstTDD DL-Timeslot-LCR-InformationModifyList-RL-ReconfRspTDD OPTIONAL,
  iE-ExtensionsProtocolExtensionContainer { { DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD-ExtIEs } } OPTIONAL,
  ...
}
DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
DL-Timeslot-LCR-InformationModifyList-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD
DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD ::= SEQUENCE {
  timeSlotLCR TimeSlotLCR,

```



```

maxPowerLCR          DL-Power    OPTIONAL,
minPowerLCR          DL-Power    OPTIONAL,
iE-Extensions        ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD-ExtIEs} } OPTIONAL,
...
}

DL-Timeslot-LCR-InformationModifyItem-RL-ReconfRspTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

DCH-InformationResponseList-RL-ReconfRspTDD ::= ProtocolIE-Single-Container { {DCH-InformationResponseListIEs-RL-ReconfRspTDD} }

DCH-InformationResponseListIEs-RL-ReconfRspTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE optional }
}

RadioLinkReconfigurationResponseTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-HSDSCH-RNTI CRITICALITY ignore EXTENSION HSDSCH-RNTI PRESENCE optional } |
  { ID id-HSDSCH-TDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response PRESENCE optional } |
  { ID id-MACHs-ResetIndicator CRITICALITY ignore EXTENSION MACHs-ResetIndicator PRESENCE optional } |
  { ID id-RL-ReconfigurationResponseTDD-RL-Information CRITICALITY ignore EXTENSION Multiple-RL-InformationResponse-RL-ReconfRspTDD PRESENCE optional },
  ...
}

Multiple-RL-InformationResponse-RL-ReconfRspTDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF RL-InformationResponse-RL-ReconfRspTDD
--Includes the 2nd through the max number of radio link information repetitions.

-- *****
--
-- RADIO LINK FAILURE INDICATION
--
-- *****

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

RadioLinkFailureIndication-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-Reporting-Object-RL-FailureInd CRITICALITY ignore TYPE Reporting-Object-RL-FailureInd PRESENCE mandatory },
  ...
}

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

```

```

}

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

RLItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-FailureInd-IEs} }

RL-Information-RL-FailureInd-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-RL-FailureInd    CRITICALITY ignore    TYPE RL-Information-RL-FailureInd    PRESENCE mandatory }
}

RL-Information-RL-FailureInd ::= SEQUENCE {
    rL-ID                                RL-ID,
    cause                                Cause,
    iE-Extensions                       ProtocolExtensionContainer { {RL-Information-RL-FailureInd-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-RL-FailureInd ::= SEQUENCE {
    rL-Set-InformationList-RL-FailureInd    RL-Set-InformationList-RL-FailureInd,
    iE-Extensions                       ProtocolExtensionContainer { { RL-SetItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}

RL-SetItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Set-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-RL-FailureInd-IEs} }

RL-Set-Information-RL-FailureInd-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Set-Information-RL-FailureInd    CRITICALITY ignore    TYPE RL-Set-Information-RL-FailureInd    PRESENCE mandatory }
}

RL-Set-Information-RL-FailureInd ::= SEQUENCE {
    rL-Set-ID                                RL-Set-ID,
    cause                                Cause,
    iE-Extensions                       ProtocolExtensionContainer { {RL-Set-Information-RL-FailureInd-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
RL-Set-Information-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
RadioLinkFailureIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
...
}
CCTrCH-RL-FailureInd ::= SEQUENCE {
    rL-ID                               RL-ID,
    cCTrCH-InformationList-RL-FailureInd CCTrCH-InformationList-RL-FailureInd,
    iE-Extensions                       ProtocolExtensionContainer { { CCTrCHItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}
CCTrCHItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
CCTrCH-InformationList-RL-FailureInd ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ CCTrCH-InformationItemIE-RL-FailureInd}}
CCTrCH-InformationItemIE-RL-FailureInd RNSAP-PROTOCOL-IES ::= {
    { ID      id-CCTrCH-InformationItem-RL-FailureInd      CRITICALITY   ignore          TYPE CCTrCH-InformationItem-RL-FailureInd      PRESENCE
    mandatory}
}
CCTrCH-InformationItem-RL-FailureInd ::= SEQUENCE {
    cCTrCH-ID                               CCTrCH-ID,
    cause                                    Cause,
    iE-Extensions                           ProtocolExtensionContainer { { CCTrCH-InformationItem-RL-FailureInd-ExtIEs } } OPTIONAL,
    ...
}
CCTrCH-InformationItem-RL-FailureInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
-- *****
--
-- RADIO LINK PREEMPTION REQUIRED INDICATION
--
-- *****

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

```

```

}

RadioLinkPreemptionRequiredIndication-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationList-RL-PreemptRequiredInd CRITICALITY ignore TYPE RL-InformationList-RL-PreemptRequiredInd PRESENCE optional },
  ...
}

RL-InformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-PreemptRequiredInd} }

RL-InformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-PreemptRequiredInd CRITICALITY ignore TYPE RL-InformationItem-RL-PreemptRequiredInd PRESENCE mandatory }
}

RL-InformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
  rL-ID RL-ID,
  iE-Extensions ProtocolExtensionContainer { {RL-Information-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
  ...
}

RL-Information-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-EDCH-MacdFlowSpecificInformationList-RL-PreemptRequiredInd CRITICALITY ignore EXTENSION EDCH-MacdFlowSpecificInformationList-RL-PreemptRequiredInd PRESENCE optional }, ...
}

RadioLinkPreemptionRequiredIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd CRITICALITY ignore EXTENSION HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd PRESENCE optional },
  ...
}

HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1.. maxNrOfMACdFlows)) OF ProtocolIE-Single-Container {
  {HSDSCHMacdFlowSpecificInformationItemIEs-RL-PreemptRequiredInd} }

HSDSCHMacdFlowSpecificInformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
  { ID id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd CRITICALITY ignore TYPE HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd PRESENCE mandatory }
}

HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
  hSDSCH-MACdFlow-ID HSDSCH-MACdFlow-ID,
  iE-Extensions ProtocolExtensionContainer { { HSDSCHMacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
  ...
}

HSDSCHMacdFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```
EDCH-MacFlowSpecificInformationList-RL-PreemptRequiredInd ::= SEQUENCE (SIZE (1.. maxNrOfMACdFlows)) OF ProtocolIE-Single-Container { {EDCH-
MacFlowSpecificInformationItemIEs-RL-PreemptRequiredInd} }
```

```
EDCH-MacFlowSpecificInformationItemIEs-RL-PreemptRequiredInd RNSAP-PROTOCOL-IES ::= {
  { ID id-EDCH-MacFlowSpecificInformationItem-RL-PreemptRequiredInd CRITICALITY ignore TYPE EDCH-MacFlowSpecificInformationItem-RL-
PreemptRequiredInd PRESENCE mandatory }
}
```

```
EDCH-MacFlowSpecificInformationItem-RL-PreemptRequiredInd ::= SEQUENCE {
  eDCH-MACdFlow-ID EDCH-MACdFlow-ID,
  iE-Extensions ProtocolExtensionContainer { { EDCH-MacFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs} } OPTIONAL,
  ...
}
```

```
EDCH-MacFlowSpecificInformation-RL-PreemptRequiredInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

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

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

```
RadioLinkRestoreIndication-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-Reporting-Object-RL-RestoreInd CRITICALITY ignore TYPE Reporting-Object-RL-RestoreInd PRESENCE mandatory },
  ...
}
```

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

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

```
RLItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```

}
...
}
RL-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-Information-RL-RestoreInd-IEs} }
RL-Information-RL-RestoreInd-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Information-RL-RestoreInd          CRITICALITY ignore  TYPE RL-Information-RL-RestoreInd          PRESENCE mandatory  }
}
RL-Information-RL-RestoreInd ::= SEQUENCE {
  rL-ID                RL-ID,
  iE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-RestoreInd-ExtIEs} } OPTIONAL,
  ...
}
RL-Information-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
RL-Set-RL-RestoreInd ::= SEQUENCE {
  rL-Set-InformationList-RL-RestoreInd  RL-Set-InformationList-RL-RestoreInd,
  iE-Extensions                          ProtocolExtensionContainer { { RL-SetItem-RL-RestoreInd-ExtIEs} } OPTIONAL,
  ...
}
RL-SetItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
RL-Set-InformationList-RL-RestoreInd ::= SEQUENCE (SIZE (1..maxNrOfRLSets)) OF ProtocolIE-Single-Container { {RL-Set-Information-RL-RestoreInd-IEs} }
RL-Set-Information-RL-RestoreInd-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Set-Information-RL-RestoreInd          CRITICALITY ignore  TYPE RL-Set-Information-RL-RestoreInd          PRESENCE mandatory  }
}
RL-Set-Information-RL-RestoreInd ::= SEQUENCE {
  rL-Set-ID                RL-Set-ID,
  iE-Extensions            ProtocolExtensionContainer { {RL-Set-Information-RL-RestoreInd-ExtIEs} } OPTIONAL,
  ...
}
RL-Set-Information-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
RadioLinkRestoreIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

CCTrCH-RL-RestoreInd ::= SEQUENCE {
    rL-ID                               RL-ID,
    cCTrCH-InformationList-RL-RestoreInd CCTrCH-InformationList-RL-RestoreInd,
    iE-Extensions                       ProtocolExtensionContainer { { CCTrCHItem-RL-RestoreInd-ExtIEs } } OPTIONAL,
    ...
}

CCTrCHItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

CCTrCH-InformationItemIE-RL-RestoreInd RNSAP-PROTOCOL-IES ::= {
    { ID id-CCTrCH-InformationItem-RL-RestoreInd          CRITICALITY ignore          TYPE CCTrCH-InformationItem-RL-RestoreInd          PRESENCE
    mandatory}
}

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

CCTrCH-InformationItem-RL-RestoreInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DOWNLINK POWER CONTROL REQUEST
--
-- *****

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

DL-PowerControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-PowerAdjustmentType          CRITICALITY ignore TYPE PowerAdjustmentType          PRESENCE mandatory} |
    { ID id-DLReferencePower             CRITICALITY ignore TYPE DL-Power                    PRESENCE conditional} |
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
    { ID id-InnerLoopDLPCStatus          CRITICALITY ignore TYPE InnerLoopDLPCStatus          PRESENCE optional } |
    { ID id-DLReferencePowerList-DL-PC-Rqst CRITICALITY ignore TYPE DL-ReferencePowerInformationList-DL-PC-Rqst PRESENCE conditional} |
    -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
    { ID id-MaxAdjustmentStep            CRITICALITY ignore TYPE MaxAdjustmentStep            PRESENCE conditional} |
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    { ID id-AdjustmentPeriod             CRITICALITY ignore TYPE AdjustmentPeriod             PRESENCE conditional} |
}

```

```

-- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
{ ID id-AdjustmentRatio          CRITICALITY ignore  TYPE ScaledAdjustmentRatio          PRESENCE conditional },
-- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
...
}

DL-ReferencePowerInformationList-DL-PC-Rqst ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {DL-ReferencePowerInformation-
DL-PC-Rqst-IEs} }

DL-ReferencePowerInformation-DL-PC-Rqst-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-ReferencePowerInformation-DL-PC-Rqst CRITICALITY ignore  TYPE DL-ReferencePowerInformation-DL-PC-Rqst  PRESENCE mandatory  }
}

DL-ReferencePowerInformation-DL-PC-Rqst ::= SEQUENCE {
  rL-ID          RL-ID,
  dl-Reference-Power          DL-Power,
  iE-Extensions          ProtocolExtensionContainer { {DL-ReferencePowerInformation-DL-PC-Rqst-ExtIEs} } OPTIONAL,
  ...
}

DL-ReferencePowerInformation-DL-PC-Rqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-PowerControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- DOWNLINK POWER TIMESLOT CONTROL REQUEST TDD
--
-- *****

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

DL-PowerTimeslotControlRequest-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-timeSlot-ISCP CRITICALITY ignore  TYPE DL-TimeSlot-ISCP-Info  PRESENCE optional},
  --Mandatory for 3.84Mcps TDD only
  ...
}

DL-PowerTimeslotControlRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD CRITICALITY ignore  EXTENSION DL-TimeSlot-ISCP-LCR-Information  PRESENCE optional}|
  --Mandatory for 1.28Mcps TDD only
  { ID id-PrimCCPCH-RSCP-DL-PC-RqstTDD CRITICALITY ignore  EXTENSION PrimaryCCPCH-RSCP  PRESENCE optional }|
}

```



```

    { ID id-PrimaryCCPCH-RSCP-Delta    CRITICALITY ignore    EXTENSION    PrimaryCCPCH-RSCP-Delta    PRESENCE    optional },
    ...
}
-- *****
--
-- PHYSICAL CHANNEL RECONFIGURATION REQUEST FDD
--
-- *****

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

PhysicalChannelReconfigurationRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-PhyChReconfRqstFDD    CRITICALITY reject    TYPE RL-Information-PhyChReconfRqstFDD    PRESENCE mandatory    },
    ...
}

RL-Information-PhyChReconfRqstFDD ::= SEQUENCE {
    rL-ID                        RL-ID,
    dl-CodeInformation            DL-CodeInformationList-PhyChReconfRqstFDD,
    iE-Extensions                ProtocolExtensionContainer { {RL-Information-PhyChReconfRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-PhyChReconfRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CodeInformationList-PhyChReconfRqstFDD ::= ProtocolIE-Single-Container { {DL-CodeInformationListIEs-PhyChReconfRqstFDD} }

DL-CodeInformationListIEs-PhyChReconfRqstFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-FDD-DL-CodeInformation    CRITICALITY notify    TYPE FDD-DL-CodeInformation    PRESENCE mandatory    }
}

PhysicalChannelReconfigurationRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
-- *****
--
-- PHYSICAL CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****

PhysicalChannelReconfigurationRequestTDD ::= SEQUENCE {
    protocolIEs                ProtocolIE-Container    {{PhysicalChannelReconfigurationRequestTDD-IEs}},

```

```

    protocolExtensions          ProtocolExtensionContainer {{PhysicalChannelReconfigurationRequestTDD-Extensions}}
    ...
}
PhysicalChannelReconfigurationRequestTDD-IES RNSAP-PROTOCOL-IES ::= {
  { ID id-RL-Information-PhyChReconfRqstTDD  CRITICALITY reject  TYPE RL-Information-PhyChReconfRqstTDD  PRESENCE mandatory  },
  ...
}
RL-Information-PhyChReconfRqstTDD ::= SEQUENCE {
  rL-ID                          RL-ID,
  ul-CCTrCH-Information          UL-CCTrCH-InformationList-PhyChReconfRqstTDD  OPTIONAL,
  dl-CCTrCH-Information          DL-CCTrCH-InformationList-PhyChReconfRqstTDD  OPTIONAL,
  iE-Extensions                  ProtocolExtensionContainer { {RL-Information-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}
RL-Information-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD  CRITICALITY reject  EXTENSION HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD
  PRESENCE optional } |
  --For 3.84Mcps TDD only
  { ID id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD  CRITICALITY reject  EXTENSION HSPDSCH-Timeslot-InformationListLCR-
  PhyChReconfRqstTDD  PRESENCE optional },
  --For 1.28Mcps TDD only
  ...
}
UL-CCTrCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container { {UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} }
UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD  CRITICALITY reject  TYPE UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD  PRESENCE
  mandatory  }
}
UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-PhyChReconfRqstTDD
UL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID                      CCTrCH-ID,
  ul-DPCH-Information            UL-DPCH-InformationList-PhyChReconfRqstTDD,
  iE-Extensions                  ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}
UL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
UL-DPCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationListIEs-PhyChReconfRqstTDD}}
UL-DPCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {

```

```

    { ID id-UL-DPCH-InformationItem-PhyChReconfRqstTDD    CRITICALITY notify TYPE UL-DPCH-InformationItem-PhyChReconfRqstTDD    PRESENCE mandatory }
}

UL-DPCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    repetitionPeriod          RepetitionPeriod          OPTIONAL,
    repetitionLength          RepetitionLength           OPTIONAL,
    tDD-DPCHOffset            TDD-DPCHOffset            OPTIONAL,
    uL-Timeslot-InformationList-PhyChReconfRqstTDD        UL-Timeslot-InformationList-PhyChReconfRqstTDD    OPTIONAL,
    --For 3.84Mcps TDD only
    iE-Extensions              ProtocolExtensionContainer { {UL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD    CRITICALITY reject    EXTENSION    UL-TimeslotLCR-InformationList-PhyChReconfRqstTDD
    PRESENCE optional },
    --For 1.28Mcps TDD only
    ...
}

UL-TimeslotLCR-InformationList-PhyChReconfRqstTDD ::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD

UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR            MidambleShiftLCR    OPTIONAL,
    tFCI-Presence                TFCI-Presence    OPTIONAL,
    uL-Code-LCR-Information        TDD-UL-Code-LCR-Information    OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { {UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationList-PhyChReconfRqstTDD ::= SEQUENCE ( SIZE (1..maxNrOfTs)) OF UL-Timeslot-InformationItem-PhyChReconfRqstTDD

UL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlot                    TimeSlot,
    midambleShiftAndBurstType    MidambleShiftAndBurstType    OPTIONAL,
    tFCI-Presence                TFCI-Presence    OPTIONAL,
    uL-Code-Information            TDD-UL-Code-Information    OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { {UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

DL-CCTrCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container { {DL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} }

DL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD CRITICALITY reject TYPE DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD PRESENCE
  mandatory }
}

DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-PhyChReconfRqstTDD

DL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID CCTrCH-ID,
  dl-DPCH-Information DL-DPCH-InformationList-PhyChReconfRqstTDD,
  iE-Extensions ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-DPCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationListIEs-PhyChReconfRqstTDD}}

DL-DPCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationItem-PhyChReconfRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-PhyChReconfRqstTDD PRESENCE mandatory }
}

DL-DPCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod OPTIONAL,
  repetitionLength RepetitionLength OPTIONAL,
  tDD-DPCHOffset TDD-DPCHOffset OPTIONAL,
  dL-Timeslot-InformationList-PhyChReconfRqstTDD DL-Timeslot-InformationList-PhyChReconfRqstTDD OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD CRITICALITY reject EXTENSION DL-TimeslotLCR-InformationList-PhyChReconfRqstTDD
  PRESENCE optional },
  --For 1.28Mcps TDD only
  ...
}

DL-TimeslotLCR-InformationList-PhyChReconfRqstTDD ::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD

DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
  timeSlotLCR TimeSlotLCR,
  midambleShiftLCR MidambleShiftLCR OPTIONAL,
  tFCI-Presence TFCI-Presence OPTIONAL,
  dL-Code-LCR-Information TDD-DL-Code-LCR-Information OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { {DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
DL-Timeslot-InformationList-PhyChReconfRqstTDD ::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem-PhyChReconfRqstTDD
DL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
timeSlot TimeSlot,
midambleShiftAndBurstType MidambleShiftAndBurstType OPTIONAL,
tFCI-Presence TFCI-Presence OPTIONAL,
dL-Code-Information TDD-DL-Code-Information OPTIONAL,
iE-Extensions ProtocolExtensionContainer { {DL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
...
}
DL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD
HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
timeslot TimeSlot,
midambleShiftAndBurstType MidambleShiftAndBurstType,
iE-Extensions ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs } }
OPTIONAL,
...
}
HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD
HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD ::= SEQUENCE {
timeslotLCR TimeSlotLCR,
midambleShiftLCR MidambleShiftLCR,
iE-Extensions ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD-ExtIEs } }
OPTIONAL,
...
}
HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

PhysicalChannelReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- PHYSICAL CHANNEL RECONFIGURATION COMMAND
--
-- *****

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

PhysicalChannelReconfigurationCommand-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CFN          CRITICALITY ignore TYPE CFN          PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

PhysicalChannelReconfigurationCommand-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- PHYSICAL CHANNEL RECONFIGURATION FAILURE
--
-- *****

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

PhysicalChannelReconfigurationFailure-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-Cause          CRITICALITY ignore TYPE Cause          PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics PRESENCE optional },
    ...
}

PhysicalChannelReconfigurationFailure-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--

```

```

-- RADIO LINK CONGESTION INDICATION
--
-- *****

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

RadioLinkCongestionIndication-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-CongestionCause          CRITICALITY ignore  TYPE CongestionCause          PRESENCE optional }|
    { ID id-RL-InformationList-RL-CongestInd  CRITICALITY ignore  TYPE RL-InformationList-RL-CongestInd  PRESENCE mandatory },
    ...
}

RL-InformationList-RL-CongestInd ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-CongestInd} }

RL-InformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-CongestInd          CRITICALITY ignore  TYPE RL-InformationItem-RL-CongestInd  PRESENCE mandatory }
}

RL-InformationItem-RL-CongestInd ::= SEQUENCE {
    rL-ID          RL-ID,
    dCH-Rate-Information  DCH-Rate-Information-RL-CongestInd,
    iE-Extensions        ProtocolExtensionContainer { {RL-Information-RL-CongestInd-ExtIEs} } OPTIONAL,
    ...
}

DCH-Rate-Information-RL-CongestInd ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF ProtocolIE-Single-Container { {DCH-Rate-InformationItemIEs-RL-CongestInd} }

DCH-Rate-InformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {
    { ID id-DCH-Rate-InformationItem-RL-CongestInd          CRITICALITY ignore  TYPE DCH-Rate-InformationItem-RL-CongestInd          PRESENCE mandatory }
}

DCH-Rate-InformationItem-RL-CongestInd ::= SEQUENCE {
    dCH-ID          DCH-ID,
    allowed-Rate-Information  Allowed-Rate-Information OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { {DCH-Rate-InformationItem-RL-CongestInd-ExtIEs} } OPTIONAL,
    ...
}

DCH-Rate-InformationItem-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-EDCH-MacdFlowSpecificInformationList-RL-CongestInd  CRITICALITY ignore  EXTENSION EDCH-MacdFlowSpecificInformationList-RL-CongestInd  PRESENCE optional },
}

```

```

}
}

RadioLinkCongestionIndication-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

EDCH-MacFlowSpecificInformationList-RL-CongestInd ::= SEQUENCE (SIZE (1.. maxNrOfMACdFlows)) OF ProtocolIE-Single-Container { {EDCH-
MacFlowSpecificInformationItemIEs-RL-CongestInd} }

EDCH-MacFlowSpecificInformationItemIEs-RL-CongestInd RNSAP-PROTOCOL-IES ::= {
  { ID id-EDCH-MacFlowSpecificInformationItem-RL-CongestInd CRITICALITY ignore TYPE EDCH-MacFlowSpecificInformationItem-RL-CongestInd
  PRESENCE mandatory }
}

EDCH-MacFlowSpecificInformationItem-RL-CongestInd ::= SEQUENCE {
  eDCH-MACdFlow-ID EDCH-MACdFlow-ID,
  iE-Extensions ProtocolExtensionContainer { { EDCH-MacFlowSpecificInformation-RL-CongestInd-ExtIEs } } OPTIONAL,
  ...
}

EDCH-MacFlowSpecificInformation-RL-CongestInd-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- UPLINK SIGNALLING TRANSFER INDICATION FDD
--
-- *****

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

UplinkSignallingTransferIndicationFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UC-ID CRITICALITY ignore TYPE UC-ID PRESENCE mandatory } |
  { ID id-SAI CRITICALITY ignore TYPE SAI PRESENCE mandatory } |
  { ID id-GA-Cell CRITICALITY ignore TYPE GA-Cell PRESENCE optional } |
  { ID id-C-RNTI CRITICALITY ignore TYPE C-RNTI PRESENCE mandatory } |
  { ID id-S-RNTI CRITICALITY ignore TYPE S-RNTI PRESENCE mandatory } |
  { ID id-D-RNTI CRITICALITY ignore TYPE D-RNTI PRESENCE optional } |
  { ID id-PropagationDelay CRITICALITY ignore TYPE PropagationDelay PRESENCE mandatory } |
  { ID id-STTD-SupportIndicator CRITICALITY ignore TYPE STTD-SupportIndicator PRESENCE mandatory } |
  { ID id-ClosedLoopModel1-SupportIndicator CRITICALITY ignore TYPE ClosedLoopModel1-SupportIndicator PRESENCE mandatory } |
  { ID id-ClosedLoopMode2-SupportIndicator CRITICALITY ignore TYPE ClosedLoopMode2-SupportIndicator PRESENCE mandatory } |
  { ID id-L3-Information CRITICALITY ignore TYPE L3-Information PRESENCE mandatory } |
  { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
}

```



```

    { ID id-CN-CS-DomainIdentifier          CRITICALITY ignore TYPE CN-CS-DomainIdentifier          PRESENCE optional } |
    { ID id-URA-Information                 CRITICALITY ignore TYPE URA-Information                 PRESENCE optional },
    ...
}

UplinkSignallingTransferIndicationFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes          CRITICALITY ignore EXTENSION GA-CellAdditionalShapes          PRESENCE optional } |
    { ID id-DPC-Mode-Change-SupportIndicator CRITICALITY ignore EXTENSION DPC-Mode-Change-SupportIndicator PRESENCE optional } |
    { ID id-CommonTransportChannelResourcesInitialisationNotRequired CRITICALITY ignore EXTENSION
CommonTransportChannelResourcesInitialisationNotRequired PRESENCE optional } |
    { ID id-CellCapabilityContainer-FDD      CRITICALITY ignore EXTENSION CellCapabilityContainer-FDD      PRESENCE optional } |
    { ID id-SNA-Information                 CRITICALITY ignore EXTENSION SNA-Information                 PRESENCE optional } |
    { ID id-CellPortionID                  CRITICALITY ignore EXTENSION CellPortionID                  PRESENCE optional } |
    { ID id-Active-MBMS-Bearer-Service-UplinkSigTrFDD CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-List-UplinkSigTrFDD PRESENCE
optional},
    ...
}

Active-MBMS-Bearer-Service-List-UplinkSigTrFDD ::= SEQUENCE (SIZE (1..maxNrOfActiveMBMSServices)) OF MBMS-Bearer-ServiceItem-UplinkSigTrFDD

MBMS-Bearer-ServiceItem-UplinkSigTrFDD ::=SEQUENCE{
    tmgi          TMGI,
    transmissionMode  TransmissionMode,
    iE-Extensions  ProtocolExtensionContainer { { MBMS-Bearer-ServiceItem-UplinkSigTrFDD-ExtIEs } } OPTIONAL,
    ...
}

MBMS-Bearer-ServiceItem-UplinkSigTrFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- UPLINK SIGNALLING TRANSFER INDICATION TDD
--
-- *****

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

UplinkSignallingTransferIndicationTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UC-ID          CRITICALITY ignore TYPE UC-ID          PRESENCE mandatory } |
    { ID id-SAI           CRITICALITY ignore TYPE SAI           PRESENCE mandatory } |
    { ID id-GA-Cell       CRITICALITY ignore TYPE GA-Cell       PRESENCE optional } |
    { ID id-C-RNTI        CRITICALITY ignore TYPE C-RNTI        PRESENCE mandatory } |
    { ID id-S-RNTI        CRITICALITY ignore TYPE S-RNTI        PRESENCE mandatory } |
    { ID id-D-RNTI        CRITICALITY ignore TYPE D-RNTI        PRESENCE optional } |
    { ID id-RxTimingDeviationForTA CRITICALITY ignore TYPE RxTimingDeviationForTA PRESENCE mandatory } |

```

```

    { ID id-L3-Information          CRITICALITY ignore TYPE L3-Information          PRESENCE mandatory } |
    { ID id-CN-PS-DomainIdentifier   CRITICALITY ignore TYPE CN-PS-DomainIdentifier   PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier   CRITICALITY ignore TYPE CN-CS-DomainIdentifier   PRESENCE optional } |
    { ID id-URA-Information          CRITICALITY ignore TYPE URA-Information          PRESENCE optional },
    ...
}

UplinkSignallingTransferIndicationTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes          CRITICALITY ignore EXTENSION GA-CellAdditionalShapes          PRESENCE optional } |
    { ID id-CommonTransportChannelResourcesInitialisationNotRequired CRITICALITY ignore EXTENSION
CommonTransportChannelResourcesInitialisationNotRequired PRESENCE optional } |
    { ID id-CellCapabilityContainer-TDD      CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD      PRESENCE optional } |
      -- Applicable to 3.84Mcps TDD only
    { ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore EXTENSION CellCapabilityContainer-TDD-LCR      PRESENCE optional } |
      -- Applicable to 1.28Mcps TDD only
    { ID id-SNA-Information                 CRITICALITY ignore EXTENSION SNA-Information                 PRESENCE optional } |
    { ID id-Active-MBMS-Bearer-Service-UplinkSigTrTDD CRITICALITY ignore EXTENSION Active-MBMS-Bearer-Service-List-UplinkSigTrTDD PRESENCE
optional},
    ...
}

Active-MBMS-Bearer-Service-List-UplinkSigTrTDD ::= SEQUENCE (SIZE (1..maxNrOfActiveMBMSServices)) OF MBMS-Bearer-ServiceItem-UplinkSigTrTDD

MBMS-Bearer-ServiceItem-UplinkSigTrTDD ::=SEQUENCE{
    tmgi          TMGI,
    transmissionMode      TransmissionMode,
    iE-Extensions          ProtocolExtensionContainer { { MBMS-Bearer-ServiceItem-UplinkSigTrTDD-ExtIEs} } OPTIONAL,
    ...
}

MBMS-Bearer-ServiceItem-UplinkSigTrTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- *****
--
-- DOWNLINK SIGNALLING TRANSFER REQUEST
--
-- *****

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

DownlinkSignallingTransferRequest-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-C-ID          CRITICALITY ignore TYPE C-ID          PRESENCE mandatory } |

```

```

-- May be a GERAN cell identifier
{ ID id-D-RNTI          CRITICALITY ignore TYPE D-RNTI          PRESENCE mandatory } |
{ ID id-L3-Information  CRITICALITY ignore TYPE L3-Information  PRESENCE mandatory } |
{ ID id-D-RNTI-ReleaseIndication  CRITICALITY ignore TYPE D-RNTI-ReleaseIndication  PRESENCE mandatory },
...
}

DownlinkSignallingTransferRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-URA-ID          CRITICALITY ignore EXTENSION URA-ID PRESENCE optional}|
  { ID id-MBMS-Bearer-Service-List  CRITICALITY ignore EXTENSION MBMS-Bearer-Service-List  PRESENCE optional}|
  { ID id-Old-URA-ID          CRITICALITY ignore EXTENSION URA-ID PRESENCE optional}|
  { ID id-SRNC-ID          CRITICALITY ignore EXTENSION RNC-ID PRESENCE conditional}, -- This IE shall be present if the URA-ID IE or Old
  URA-ID IE is present.
  ...
}

-- *****
--
-- RELOCATION COMMIT
--
-- *****

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

RelocationCommit-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-D-RNTI          CRITICALITY ignore TYPE D-RNTI          PRESENCE optional } |
  { ID id-RANAP-RelocationInformation  CRITICALITY ignore TYPE RANAP-RelocationInformation  PRESENCE optional },
  ...
}

RelocationCommit-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

-- *****
--
-- PAGING REQUEST
--
-- *****

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

```

```

PagingRequest-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-PagingArea-PagingRqst          CRITICALITY ignore  TYPE PagingArea-PagingRqst          PRESENCE mandatory  } |
  { ID id-SRNC-ID                        CRITICALITY ignore  TYPE RNC-ID          PRESENCE mandatory  } | -- May be a BSC-Id.
  { ID id-S-RNTI                          CRITICALITY ignore  TYPE S-RNTI         PRESENCE mandatory  } |
  { ID id-IMSI                            CRITICALITY ignore  TYPE IMSI           PRESENCE mandatory  } |
  { ID id-DRXCycleLengthCoefficient       CRITICALITY ignore  TYPE DRXCycleLengthCoefficient       PRESENCE mandatory  } |
  { ID id-CNOriginatedPage-PagingRqst    CRITICALITY ignore  TYPE CNOriginatedPage-PagingRqst    PRESENCE optional   },
  ...
}

PagingArea-PagingRqst ::= CHOICE {
  uRA          URA-PagingRqst, -- May be a GRA-ID.
  cell        Cell-PagingRqst, -- UTRAN only
  ...
}

URA-PagingRqst ::= SEQUENCE {
  uRA-ID          URA-ID,
  iE-Extensions  ProtocolExtensionContainer { { URAItem-PagingRqst-ExtIEs } } OPTIONAL,
  ...
}

URAItem-PagingRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

Cell-PagingRqst ::= SEQUENCE {
  c-ID          C-ID,
  iE-Extensions ProtocolExtensionContainer { { CellItem-PagingRqst-ExtIEs } } OPTIONAL,
  ...
}

CellItem-PagingRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

CNOriginatedPage-PagingRqst ::= SEQUENCE {
  pagingCause          PagingCause,
  cNDomainType        CNDomainType,
  pagingRecordType    PagingRecordType,
  iE-Extensions       ProtocolExtensionContainer { { CNOriginatedPage-PagingRqst-ExtIEs } } OPTIONAL,
  ...
}

CNOriginatedPage-PagingRqst-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

PagingRequest-Extensions RNSAP-PROTOCOL-EXTENSION ::= {

```

```
} ...
```

```
/* Unaffected parts omitted */
```

```
END
```

### 9.3.4 Information Element Definitions

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

```
RNSAP-IEs {  
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)  
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-IEs (2) }
```

```
DEFINITIONS AUTOMATIC TAGS ::=
```

```
BEGIN
```

```
IMPORTS
```

```
maxCodeNumComp-1,  
maxNrOfFACHs,  
maxFACHCountPlus1,  
maxIBSEg,  
maxNoOfDSCHs,  
maxNoOfDSCHs-1,  
maxNoOfUSCHs,  
maxNoTFCIGroups,  
maxNoCodeGroups,  
maxNrOfDCHs,  
maxNrOfDL-Codes,  
maxNrOfDLTs,  
maxNrOfDLTsLCR,  
maxNrOfDPCHs,  
maxNrOfDPCHsLCR,  
maxNrOfErrors,  
maxNrOfFDDNeighboursPerRNC,  
maxNrOfMACcshSDU-Length,  
maxNrOfNeighbouringRNCs,  
maxNrOfTDDNeighboursPerRNC,
```

maxNrOfLCRTDDNeighboursPerRNC,  
maxNrOfTS,  
maxNrOfTsLCR,  
maxNrOfULTs,  
maxNrOfULTsLCR,  
maxNrOfGSMNeighboursPerRNC,  
maxRateMatching,  
maxNrOfPoints,  
maxNoOfRB,  
maxNrOfRLs,  
maxNrOfTFCs,  
maxNrOfTFs,  
maxCTFC,  
maxRNCinURA-1,  
maxNrOfSCCPCHs,  
maxTFCI1Combs,  
maxTFCI2Combs,  
maxTFCI2Combs-1,  
maxTGPS,  
maxTTI-Count,  
maxNoGPSTypes,  
maxNoSat,  
maxNrOfSNAs,  
maxNrOfHARQProc,  
maxNrOfHSSCCHCodes,  
maxNrOfMACdFlows,  
maxNrOfMACdFlows-1,  
maxNrOfMBMSServices,  
maxNrOfPDUIndexes,  
maxNrOfPDUIndexes-1,  
maxNrOfPrioQueues,  
maxNrOfPrioQueues-1,  
maxNrOfSatAlmanac-maxNoSat,  
maxNrOfGERANSI,  
maxNrOfDDIs,  
maxNrOfSigSeqERGHICH-1,

id-Allowed-Rate-Information,  
id-AntennaColocationIndicator,  
id-BindingID,  
id-Cell-Capacity-Class-Value,  
id-CellCapabilityContainer-FDD,  
id-CellCapabilityContainer-TDD,  
id-CellCapabilityContainer-TDD-LCR,  
id-CoverageIndicator,  
id-DPC-Mode-Change-SupportIndicator,  
id-DSCH-Specific-FDD-Additional-List,  
id-GERAN-Cell-Capability,  
id-GERAN-Classmark,  
id-Guaranteed-Rate-Information,  
id-HCS-Prio,

id-Load-Value,  
id-Load-Value-IncrDecrThres,  
id-Neighbouring-GSM-CellInformation,  
id-Neighbouring-UMTS-CellInformationItem,  
id-neighbouring-LCR-TDD-CellInformation,  
id-NRT-Load-Information-Value,  
id-NRT-Load-Information-Value-IncrDecrThres,  
id-OnModification,  
id-Received-Total-Wideband-Power-Value,  
id-Received-Total-Wideband-Power-Value-IncrDecrThres,  
id-RT-Load-Value,  
id-RT-Load-Value-IncrDecrThres,  
id-SFNFSNMeasurementThresholdInformation,  
id-SNA-Information,  
id-TrafficClass,  
id-Transmitted-Carrier-Power-Value,  
id-Transmitted-Carrier-Power-Value-IncrDecrThres,  
id-TUTRANGPSMeasurementThresholdInformation,  
id-UL-Timeslot-ISCP-Value,  
id-UL-Timeslot-ISCP-Value-IncrDecrThres,  
maxNrOfLevels,  
maxNrOfMeasNCell,  
maxNrOfMeasNCell-1,  
id-MessageStructure,  
id-EnhancedDSCHPC,  
id-RestrictionStateIndicator,  
id-Rx-Timing-Deviation-Value-LCR,  
id-TransportLayerAddress,  
id-TypeOfError,  
id-Angle-Of-Arrival-Value-LCR,  
id-IPDL-TDD-ParametersLCR,  
id-DSCH-InitialWindowSize,  
id-Maximum-DL-Power-TimeslotLCR-InformationItem,  
id-Minimum-DL-Power-TimeslotLCR-InformationItem,  
id-HS-SICH-Reception-Quality,  
id-HS-SICH-Reception-Quality-Measurement-Value,  
id-ExtendedGSMCellIndividualOffset,  
id-Unidirectional-DCH-Indicator,  
id-RTLloadValue,  
id-NRTLloadInformationValue,  
id-Satellite-Almanac-Information-ExtItem,  
id-TnlQos,  
id-UpPTSInterferenceValue,  
id-NACC-Related-Data,  
id-HARQ-Preamble-Mode

FROM RNSAP-Constants

Criticality,  
ProcedureID,  
ProtocolIE-ID,

```

    TransactionID,
    TriggeringMessage
FROM RNSAP-CommonDataTypes

    ProtocolIE-Single-Container{},
    ProtocolExtensionContainer{},
    RNSAP-PROTOCOL-IES,
    RNSAP-PROTOCOL-EXTENSION
FROM RNSAP-Containers;

-- A

AccessPointName      ::= OCTET STRING (SIZE (1..100,...))

AckNack-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1

Ack-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [21] subclause 4.2.1

Active-Pattern-Sequence-Information ::= SEQUENCE {
    cmConfigurationChangeCFN      CFN,
    transmission-Gap-Pattern-Sequence-Status  Transmission-Gap-Pattern-Sequence-Status-List  OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { {Active-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}

Active-Pattern-Sequence-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

AdjustmentPeriod      ::= INTEGER(1..256)
-- Unit Frame

AllocationRetentionPriority ::= SEQUENCE {
    priorityLevel      PriorityLevel,
    pre-emptionCapability  Pre-emptionCapability,
    pre-emptionVulnerability  Pre-emptionVulnerability,
    iE-Extensions      ProtocolExtensionContainer { {AllocationRetentionPriority-ExtIEs} } OPTIONAL,
    ...
}

AllocationRetentionPriority-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Allowed-Rate-Information ::= SEQUENCE {
    allowed-UL-Rate      Allowed-Rate OPTIONAL,
    allowed-DL-Rate      Allowed-Rate OPTIONAL,
    iE-Extensions      ProtocolExtensionContainer { {Allowed-Rate-Information-ExtIEs} } OPTIONAL,

```



```

}
...
}
Allowed-Rate-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
Allowed-Rate ::= INTEGER (1..maxNrOfTFs)
-- "1": TFI 0, "2": TFI 1, "3": TFI 2, ...
AllowedQueueingTime ::= INTEGER (1..60)
-- seconds
AlphaValue ::= INTEGER (0..8)
-- Actual value = Alpha / 8
Angle-Of-Arrival-Value-LCR ::= SEQUENCE {
  aOA-LCR AOA-LCR,
  aOA-LCR-Accuracy-Class AOA-LCR-Accuracy-Class,
  iE-Extensions ProtocolExtensionContainer { {Angle-Of-Arrival-Value-LCR-ExtIEs} } OPTIONAL,
  ...
}
Angle-Of-Arrival-Value-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
AOA-LCR ::= INTEGER (0..719)
-- Angle Of Arrival for 1.28Mcps TDD
AOA-LCR-Accuracy-Class ::= ENUMERATED {a,b,c,d,e,f,g,h,...}
AntennaColocationIndicator ::= ENUMERATED {
  co-located,
  ...
}
-- B
BadSatellites ::= SEQUENCE {
  badSatelliteInformation SEQUENCE (SIZE (1..maxNoSat)) OF
    SEQUENCE {
      badSAT-ID SAT-ID,
      iE-Extensions ProtocolExtensionContainer { { BadSatelliteInformation-ExtIEs} } OPTIONAL,
      ...
    },
  iE-Extensions ProtocolExtensionContainer { { BadSatellites-ExtIEs} } OPTIONAL,
  ...
}

```

```

BadSatelliteInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

BadSatellites-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Band-Indicator ::= ENUMERATED {
    dcs1800Band,
    pcs1900Band,
    ...
}

BCC ::= BIT STRING (SIZE (3))

BCCH-ARFCN ::= INTEGER (0..1023)

BetaCD ::= INTEGER (0..15)

BindingID
    ::= OCTET STRING (SIZE (1..4,...))
-- If the Binding ID includes an UDP port, the UDP port is included in octet 1 and 2.

BLER
    ::= INTEGER (-63..0)
-- Step 0.1 (Range -6.3..0). It is the Log10 of the BLER

SCTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

BSIC ::= SEQUENCE {
    nCC      NCC,
    bCC      BCC
}

BurstModeParameters ::= SEQUENCE {
    burstStart      INTEGER (0..15),
    burstLength     INTEGER (10..25),
    burstFreq       INTEGER (1..16),
    iE-Extensions  ProtocolExtensionContainer { { BurstModeParameters-ExtIEs} } OPTIONAL,
    ...
}

BurstModeParameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- C

```

```
Cause ::= CHOICE {
    radioNetwork      CauseRadioNetwork,
    transport         CauseTransport,
    protocol          CauseProtocol,
    misc              CauseMisc,
    ...
}

CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    om-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
    ...
}

CauseProtocol ::= ENUMERATED {
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    abstract-syntax-error-falsely-constructed-message,
    ...
}

CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
    power-level-not-supported,
    ul-scrambling-code-already-in-use,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available,
    measurement-not-supported-for-the-object,
    combining-resources-not-available,
    combining-not-supported,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,
    requested-tx-diversity-mode-not-supported,
    measurement-temporarily-not-available,
    unspecified,
    invalid-CM-settings,
    reconfiguration-CFN-not-elapsed,
    number-of-DL-codes-not-supported,
    dedicated-transport-channel-type-not-supported,
    dl-shared-channel-type-not-supported,
    ul-shared-channel-type-not-supported,
}
```

```

common-transport-channel-type-not-supported,
ul-spreading-factor-not-supported,
dl-spreading-factor-not-supported,
cm-not-supported,
transaction-not-supported-by-destination-node-b,
rl-already-activated-or-allocated,
...,
number-of-UL-codes-not-supported,
cell-reserved-for-operator-use,
dpc-mode-change-not-supported,
information-temporarily-not-available,
information-provision-not-supported-for-the-object,
power-balancing-status-not-compatible,
delayed-activation-not-supported,
rl-timing-adjustment-not-supported,
unknown-RNTI,
measurement-repetition-rate-not-compatible,
ue-not-capable-of-support,
harq-preamble-mode-not-supported
}

CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified,
    ...
}

CellCapabilityContainer-FDD ::= BIT STRING (SIZE (32))
-- First bit: Flexible Hard Split Support Indicator
-- Second bit: Delayed Activation Support Indicator
-- Third bit: HS-DSCH Support Indicator
-- Fourth bit: DSCH Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

CellCapabilityContainer-TDD ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Second bit: HS-DSCH Support Indicator
-- Third bit: DSCH Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

CellCapabilityContainer-TDD-LCR ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Second bit: HS-DSCH Support Indicator
-- Third bit: DSCH Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

C-ID                ::= INTEGER (0..65535)

CCTrCH-ID           ::= INTEGER (0..15)

```

```

Cell-Capacity-Class-Value ::= SEQUENCE {
    uplinkCellCapacityClassValue    INTEGER(1..100,...),
    downlinkCellCapacityClassValue  INTEGER(1..100,...)
}

CellIndividualOffset    ::= INTEGER (-20..20)

CellParameterID        ::= INTEGER (0..127,...)

CellPortionID          ::= INTEGER (0..63,...)

CFN                     ::= INTEGER (0..255)

CGI ::= SEQUENCE {
    LAI      SEQUENCE {
        pLMN-Identity  PLMN-Identity,
        lAC            LAC,
        iE-Extensions  ProtocolExtensionContainer { {LAI-ExtIEs} } OPTIONAL,
        ...
    },
    cI      CI,
    iE-Extensions  ProtocolExtensionContainer { {CGI-ExtIEs} } OPTIONAL
}

LAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

ChannelCodingType ::= ENUMERATED {
    no-codingTDD,
    convolutional-coding,
    turbo-coding,
    ...
}

ChipOffset          ::= INTEGER (0..38399)

CI                  ::= OCTET STRING (SIZE (2))

ClosedLoopModel-SupportIndicator ::= ENUMERATED {
    closedLoop-Model-Supported,
    closedLoop-Model-not-Supported
}

ClosedLoopMode2-SupportIndicator ::= ENUMERATED {

```

```

    closedLoop-Mode2-Supported,
    closedLoop-Mode2-not-Supported
}

Closedlooptimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
    ...
}

CodeNumber ::= INTEGER (0..maxCodeNumComp-1)

CodingRate ::= ENUMERATED {
    half,
    third,
    ...
}

CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass    TUTRANGPSAccuracyClass,
    ...
}

CommonMeasurementType ::= ENUMERATED {
    uTRAN-GPS-timing-of-cell-frames-for-UE-Positioning,
    sFN-SFN-observerd-time-difference,
    load,
    transmitted-carrier-power,
    received-total-wide-band-power,
    uplink-timeslot-iscp,
    ...,
    rT-load,
    nRT-load-Information,
    upPTSInterference
}
-- For measurements on the Iur-g interface, only load, RT Load and NRT Load information are requested.

CommonMeasurementValue ::= CHOICE {
    tUTRANGPSMeasurementValueInformation    TUTRANGPSMeasurementValueInformation,
    sFNSFNMeasurementValueInformation      SFNSFNMeasurementValueInformation,
    loadValue                               LoadValue,
    transmittedCarrierPowerValue           INTEGER(0..100),
    receivedTotalWideBandPowerValue       INTEGER(0..621),
    uplinkTimeslotISCPValue               UL-TimeslotISCP,
    ...,
    extension-CommonMeasurementValue      Extension-CommonMeasurementValue
}

Extension-CommonMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementValueIE }}

```

```

Extension-CommonMeasurementValueIE RNSAP-PROTOCOL-IES ::= {
  { ID id-RTLoadValue CRITICALITY ignore TYPE RTLoadValue PRESENCE mandatory }|
  { ID id-NRTLLoadInformationValue CRITICALITY ignore TYPE NRTLLoadInformationValue PRESENCE mandatory }|
  { ID id-UpPTSInterferenceValue CRITICALITY reject TYPE UpPTSInterferenceValue PRESENCE mandatory }
}

-- For measurements on the Iur-g interface, only load, RT Load and NRT Load values are reported.

CommonMeasurementValueInformation ::= CHOICE {
  measurementAvailable CommonMeasurementAvailable,
  measurementnotAvailable NULL
}

CommonMeasurementAvailable ::= SEQUENCE {
  commonMeasurementValue CommonMeasurementValue,
  iE-Extensions ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} } OPTIONAL,
  ...
}

CommonMeasurementAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

CongestionCause ::= ENUMERATED {
  uTRAN-dynamic-resources,
  uTRAN-semistatic-resources,
  ...
}

CommonTransportChannelResourcesInitialisationNotRequired ::= ENUMERATED {
  not-Required
}

CoverageIndicator ::= ENUMERATED {
  overlap,
  covers,
  containedIn,
  ...
}

CRC-Size ::= ENUMERATED {
  v0,
  v8,
  v12,
  v16,
  v24,
  ...
}

CriticalityDiagnostics ::= SEQUENCE {

```

```

procedureID          ProcedureID          OPTIONAL,
triggeringMessage    TriggeringMessage    OPTIONAL,
procedureCriticality Criticality          OPTIONAL,
transactionID        TransactionID        OPTIONAL,
iEsCriticalityDiagnostics CriticalityDiagnostics-IE-List OPTIONAL,
iE-Extensions        ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} } OPTIONAL,
...
}

CriticalityDiagnostics-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
SEQUENCE {
    iECriticality          Criticality,
    iE-ID                  ProtocolIE-ID,
    repetitionNumber       RepetitionNumber0 OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,
    ...
}

CriticalityDiagnostics-IE-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-MessageStructure CRITICALITY ignore EXTENSION MessageStructure PRESENCE optional }|
{ ID id-TypeOfError       CRITICALITY ignore EXTENSION TypeOfError PRESENCE mandatory },
...
}

MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
SEQUENCE {
    iE-ID                  ProtocolIE-ID,
    repetitionNumber       RepetitionNumber1 OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
    ...
}

MessageStructure-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

CN-CS-DomainIdentifier ::= SEQUENCE {
    pLMN-Identity          PLMN-Identity,
    LAC                    LAC,
    iE-Extensions          ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

```



```

CN-PS-DomainIdentifier ::= SEQUENCE {
    pLMN-Identity      PLMN-Identity,
    LAC                LAC,
    rAC                RAC,
    iE-Extensions     ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

CNDomainType ::= ENUMERATED {
    cs-domain,
    ps-domain,
    dont-care,
    ...
}
-- See in [16]

CQI-Feedback-Cycle ::= ENUMERATED {v0, v2, v4, v8, v10, v20, v40, v80, v160,...}

CQI-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [21] subclause 4.2.1

CQI-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1

C-RNTI ::= INTEGER (0..65535)

-- D
DATA-ID ::= INTEGER (0..3)

Data-Description-IndicatorList ::= SEQUENCE (SIZE (1..maxNrofDDIs)) OF Data-Description-IndicatorItem
Data-Description-IndicatorItem ::= SEQUENCE {
    eDCH-DDI-Value          EDCH-DDI-Value,
    associated-EDCH-MACdFlow-ID EDCH-MACdFlow-ID,
    mACdPDU-Size            MACdPDU-Size,
    schedulingPriorityIndicator SchedulingPriorityIndicator,
    mACes-GuaranteedBitRate MACes-Guaranteed-Bitrate OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { Data-Description-IndicatorItem-ExtIEs} } OPTIONAL,
    ...
}

Data-Description-IndicatorItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem

```

```

DCH-FDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator      PayloadCRC-PresenceIndicator,
    ul-FP-Mode                        UL-FP-Mode,
    toAWS                             ToAWS,
    toAWE                             ToAWE,
    dCH-SpecificInformationList       DCH-Specific-FDD-InformationList,
    iE-Extensions                     ProtocolExtensionContainer { {DCH-FDD-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

DCH-FDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlQos          CRITICALITY ignore     EXTENSION TnlQos          PRESENCE optional },
    ...
}

DCH-Specific-FDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-FDD-Item

DCH-Specific-FDD-Item ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    trCH-SrcStatisticsDescr         TrCH-SrcStatisticsDescr,
    ul-transportFormatSet           TransportFormatSet,
    dl-transportFormatSet           TransportFormatSet,
    ul-BLER                         BLER,
    dl-BLER                         BLER,
    allocationRetentionPriority      AllocationRetentionPriority,
    frameHandlingPriority           FrameHandlingPriority,
    qE-Selector                     QE-Selector,
    dRACControl                     DRACControl,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-FDD-SpecificItem-ExtIEs} } OPTIONAL,
    ...
}

DCH-FDD-SpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Guaranteed-Rate-Information    CRITICALITY ignore EXTENSION Guaranteed-Rate-Information    PRESENCE optional }|
    { ID id-TrafficClass                  CRITICALITY ignore EXTENSION TrafficClass PRESENCE mandatory }|
    { ID id-Unidirectional-DCH-Indicator   CRITICALITY reject EXTENSION Unidirectional-DCH-Indicator   PRESENCE optional },
    ...
}

DCH-ID ::= INTEGER (0..255)

DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem

DCH-InformationResponseItem ::= SEQUENCE {
    dCH-ID                          DCH-ID,
    bindingID                        BindingID OPTIONAL,
    transportLayerAddress            TransportLayerAddress OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {DCH-InformationResponseItem-ExtIEs} } OPTIONAL,
    ...
}

```

```

}

DCH-InformationResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Allowed-Rate-Information      CRITICALITY ignore  EXTENSION Allowed-Rate-Information      PRESENCE optional },
  ...
}

DCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-TDD-InformationItem

DCH-TDD-InformationItem ::= SEQUENCE {
  payloadCRC-PresenceIndicator      PayloadCRC-PresenceIndicator,
  ul-FP-Mode                          UL-FP-Mode,
  toAWS                               ToAWS,
  toAWE                               ToAWE,
  dCH-SpecificInformationList        DCH-Specific-TDD-InformationList,
  iE-Extensions                       ProtocolExtensionContainer { {DCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
  ...
}

DCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TnlQos                      CRITICALITY ignore  EXTENSION TnlQos      PRESENCE optional },
  ...
}

DCH-Specific-TDD-InformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-Specific-TDD-Item

DCH-Specific-TDD-Item ::= SEQUENCE {
  dCH-ID                              DCH-ID,
  ul-cCTrCH-ID                       CCTrCH-ID, -- UL CCTrCH in which the DCH is mapped
  dl-cCTrCH-ID                       CCTrCH-ID, -- DL CCTrCH in which the DCH is mapped
  trCH-SrcStatisticsDescr             TrCH-SrcStatisticsDescr,
  ul-transportFormatSet               TransportFormatSet,
  dl-transportFormatSet               TransportFormatSet,
  ul-BLER                             BLER,
  dl-BLER                             BLER,
  allocationRetentionPriority          AllocationRetentionPriority,
  frameHandlingPriority               FrameHandlingPriority,
  qE-Selector                         QE-Selector OPTIONAL,
  -- This IE shall be present if DCH is part of set of Co-ordinated DCHs
  iE-Extensions                       ProtocolExtensionContainer { {DCH-Specific-TDD-Item-ExtIEs} } OPTIONAL,
  ...
}

DCH-Specific-TDD-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Guaranteed-Rate-Information  CRITICALITY ignore  EXTENSION Guaranteed-Rate-Information  PRESENCE optional }|
  { ID id-TrafficClass                 CRITICALITY ignore  EXTENSION TrafficClass PRESENCE mandatory}|
  { ID id-Unidirectional-DCH-Indicator CRITICALITY reject  EXTENSION Unidirectional-DCH-Indicator PRESENCE optional },
  ...
}

```

```

DedicatedMeasurementType ::= ENUMERATED {
    sir,
    sir-error,
    transmitted-code-power,
    rSCP,
    rx-timing-deviation,
    round-trip-time,
    ...,
    rx-timing-deviation-LCR,
    angle-Of-Arrival-LCR,
    hs-sich-quality
}

DedicatedMeasurementValue ::= CHOICE {
    sIR-Value          SIR-Value,
    sIR-ErrorValue    SIR-Error-Value,
    transmittedCodePowerValue  Transmitted-Code-Power-Value,
    rSCP              RSCP-Value, -- TDD only
    rxTimingDeviationValue  Rx-Timing-Deviation-Value, -- 3.84Mcps TDD only
    roundTripTime      Round-Trip-Time-Value, -- FDD only
    ...,
    extension-DedicatedMeasurementValue      Extension-DedicatedMeasurementValue
}

Extension-DedicatedMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-DedicatedMeasurementValueIE }}

Extension-DedicatedMeasurementValueIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Rx-Timing-Deviation-Value-LCR  CRITICALITY reject  TYPE Rx-Timing-Deviation-Value-LCR  PRESENCE mandatory }|
    { ID id-Angle-Of-Arrival-Value-LCR     CRITICALITY reject  TYPE Angle-Of-Arrival-Value-LCR  PRESENCE mandatory }|
    { ID id-HS-SICH-Reception-Quality      CRITICALITY reject  TYPE HS-SICH-Reception-Quality-Value PRESENCE mandatory },
    ...
}

DedicatedMeasurementValueInformation ::= CHOICE {
    measurementAvailable      DedicatedMeasurementAvailable,
    measurementnotAvailable   DedicatedMeasurementnotAvailable
}

DedicatedMeasurementAvailable ::= SEQUENCE {
    dedicatedmeasurementValue      DedicatedMeasurementValue,
    cFN                             CFN                             OPTIONAL,
    ie-Extensions                  ProtocolExtensionContainer { { DedicatedMeasurementAvailableItem-ExtIEs} }  OPTIONAL,
    ...
}

DedicatedMeasurementAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DedicatedMeasurementnotAvailable ::= NULL

```

```

DelayedActivation ::= CHOICE {
    cfn                CFN,
    separate-indication  NULL
}

DelayedActivationUpdate ::= CHOICE {
    activate          Activate-Info,
    deactivate        Deactivate-Info
}

Activate-Info ::= SEQUENCE {
    activation-type      Execution-Type,
    initial-dl-tx-power  DL-Power,
    firstRLS-Indicator   FirstRLS-Indicator                    OPTIONAL, --FDD Only
    propagation-delay    PropagationDelay                    OPTIONAL, --FDD Only
    iE-Extensions        ProtocolExtensionContainer { { Activate-Info-ExtIEs } }  OPTIONAL,
    ...
}

Activate-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Deactivate-Info ::= SEQUENCE {
    deactivation-type     Execution-Type,
    iE-Extensions        ProtocolExtensionContainer { { Deactivate-Info-ExtIEs } }  OPTIONAL,
    ...
}

Deactivate-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Execution-Type ::= CHOICE {
    synchronised    CFN,
    unsynchronised  NULL
}

DeltaSIR          ::= INTEGER (0..30)
-- Step 0.1 dB, Range 0..3 dB.

DGPSCorrections ::= SEQUENCE {
    gPSTOW                GPSTOW,
    gPS-Status-Health     GPS-Status-Health,
    satellite-DGPSCorrections-Information SEQUENCE (SIZE (1..maxNoSat)) OF
        SEQUENCE {
            sAT-ID                SAT-ID,

```

```

        iode-dgps          BIT STRING (SIZE (8)),
        uDRE              UDRE,
        pRC               PRC,
        range-Correction-Rate Range-Correction-Rate,
        iE-Extensions     ProtocolExtensionContainer { { Satellite-DGPSCorrections-Information-ExtIEs } } OPTIONAL,
        ...
    },
    iE-Extensions         ProtocolExtensionContainer { { DGPSCorrections-ExtIEs } } OPTIONAL,
    ...
}

Satellite-DGPSCorrections-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DGPSCorrections-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DGPSThreshold ::= SEQUENCE {
    pRCDeviation          PRCDeviation,
    iE-Extensions         ProtocolExtensionContainer { { DGPSThreshold-ExtIEs } } OPTIONAL,
    ...
}

DGPSThreshold-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DiscardTimer ::= ENUMERATED
{v20,v40,v60,v80,v100,v120,v140,v160,v180,v200,v250,v300,v400,v500,v750,v1000,v1250,v1500,v1750,v2000,v2500,v3000,v3500,v4000,v4500,v5000,v7500,
...
}

DiversityControlField ::= ENUMERATED {
    may,
    must,
    must-not
}

DiversityMode ::= ENUMERATED {
    none,
    sTTD,
    closedLoopModel,
    closedLoopMode2,
    ...
}

```

```

DL-DPCH-SlotFormat          ::= INTEGER (0..16,...)

DL-DPCH-TimingAdjustment ::= ENUMERATED {
    timing-advance,
    timing-delay
}

DL-Power                    ::= INTEGER (-350..150)
-- Value = DL-Power / 10
-- Unit dB, Range -35dB .. +15dB, Step 0.1dB

DL-PowerBalancing-Information ::= SEQUENCE {
    powerAdjustmentType      PowerAdjustmentType,
    dlReferencePower         DL-Power OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common'
    dlReferencePowerList     DL-ReferencePowerInformationList OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
    maxAdjustmentStep        MaxAdjustmentStep OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    adjustmentPeriod         AdjustmentPeriod OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    adjustmentRatio          ScaledAdjustmentRatio OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    iE-Extensions            ProtocolExtensionContainer { { DL-PowerBalancing-Information-ExtIEs } } OPTIONAL,
    ...
}

DL-PowerBalancing-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-ReferencePowerInformationList ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF DL-ReferencePowerInformationItem

DL-ReferencePowerInformationItem ::= SEQUENCE {
    rL-ID                    RL-ID,
    dl-Reference-Power       DL-Power,
    iE-Extensions            ProtocolExtensionContainer { {DL-ReferencePowerInformationItem-ExtIEs} } OPTIONAL,
    ...
}

DL-ReferencePowerInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-PowerBalancing-ActivationIndicator ::= ENUMERATED {
    dl-PowerBalancing-Activated
}

DL-PowerBalancing-UpdatedIndicator ::= ENUMERATED {

```

```

    dL-PowerBalancing-Updated
}

DL-ReferencePowerInformation ::= SEQUENCE {
    common-DL-ReferencePowerInformation    DL-Power            OPTIONAL,
    individual-DL-ReferencePowerInformation DL-ReferencePowerInformationList    OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { DL-ReferencePowerInformation-ExtIEs } } OPTIONAL,
    ...
}

DL-ReferencePowerInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

D-RNTI ::= INTEGER (0..1048575)

D-RNTI-ReleaseIndication ::= ENUMERATED {
    release-D-RNTI,
    not-release-D-RNTI
}

DL-ScramblingCode ::= INTEGER (0..15)

DL-FrameType ::= ENUMERATED {
    typeA,
    typeB,
    ...
}

DL-Timeslot-Information ::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem

DL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType    MidambleShiftAndBurstType,
    tFCI-Presence            TFCI-Presence,
    dL-Code-Information      TDD-DL-Code-Information,
    iE-Extensions            ProtocolExtensionContainer { {DL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

DL-Timeslot-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1.. maxNrOfDLTsLCR)) OF DL-TimeslotLCR-InformationItem

DL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    midambleShiftLCR            MidambleShiftLCR,
    tFCI-Presence                TFCI-Presence,
}

```



```

    dL-Code-LCR-Information          TDD-DL-Code-LCR-Information,
    iE-Extensions                    ProtocolExtensionContainer { { DL-TimeslotLCR-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

DL-TimeslotLCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-Maximum-DL-Power-TimeslotLCR-InformationItem    CRITICALITY ignore    EXTENSION DL-Power          PRESENCE optional }|
  -- Applicable to 1.28Mcps TDD only
  { ID id-Minimum-DL-Power-TimeslotLCR-InformationItem    CRITICALITY ignore    EXTENSION DL-Power          PRESENCE optional },
  ...
}

DL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF DL-TimeSlot-ISCP-InfoItem

DL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
  timeSlot          TimeSlot,
  dL-TimeslotISCP  DL-TimeslotISCP,
  iE-Extensions    ProtocolExtensionContainer { { DL-TimeSlot-ISCP-InfoItem-ExtIEs } } OPTIONAL,
  ...
}

DL-TimeSlot-ISCP-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-TimeSlot-ISCP-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF DL-TimeSlot-ISCP-LCR-InfoItem

DL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
  timeSlotLCR          TimeSlotLCR,
  dL-TimeslotISCP     DL-TimeslotISCP,
  iE-Extensions       ProtocolExtensionContainer { { DL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs } } OPTIONAL,
  ...
}

DL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-TimeslotISCP ::= INTEGER (0..91)
-- According to mapping in [24]

Downlink-Compressed-Mode-Method ::= ENUMERATED {
  puncturing,
  sFdiv2,
  higher-layer-scheduling,
  ...
}

DPC-Mode ::= ENUMERATED {

```

```

    mode0,
    mode1,
    ...
}

DPC-Mode-Change-SupportIndicator ::= ENUMERATED {
    dPC-ModeChangeSupported
}

DPCH-ID                ::= INTEGER (0..239)

DPCHConstantValue ::= INTEGER (-10..10)
-- Unit dB, Step 1dB

DRACControl           ::= ENUMERATED {
    requested,
    not-requested
}

DRXCycleLengthCoefficient ::= INTEGER (3..9)
-- See in [16]

DSCH-FDD-Information ::= SEQUENCE {
    dSCH-Specific-Information      DSCH-Specific-FDD-Item,
    -- This DSCH-Specific-FDD-Item is the first DSCH-Specific-FDD-Item in DSCH-FDD-Information. If more than one DSCH-Specific-FDD-Item/s should be defined
    in a DSCH-FDD-Information, from 2nd DSCH-Specific-FDD Item, they will be included in the DSCH-Specific-FDD-Additional-List in the DSCH-FDD-Information-
    ExtIEs.
    pdSCH-RL-ID                  RL-ID,
    tFCS                          TFCS,
    iE-Extensions                 ProtocolExtensionContainer { {DSCH-FDD-Information-ExtIEs} } OPTIONAL,
    ...
}

DSCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DSCH-Specific-FDD-Additional-List      CRITICALITY reject  EXTENSION DSCH-Specific-FDD-Additional-List      PRESENCE optional }|
    { ID id-EnhancedDSCHPC                        CRITICALITY ignore   EXTENSION EnhancedDSCHPC                PRESENCE optional },
    ...
}

DSCH-RNTI ::= INTEGER (0..65535)

DSCH-Specific-FDD-Item ::= SEQUENCE {
    dSCH-ID                      DSCH-ID,
    trChSourceStatisticsDescriptor TrCH-SrcStatisticsDescr,
    transportFormatSet           TransportFormatSet,
    allocationRetentionPriority   AllocationRetentionPriority,
    schedulingPriorityIndicator   SchedulingPriorityIndicator,
    bLER                          BLER,
    iE-Extensions                 ProtocolExtensionContainer { {DSCH-Specific-FDD-Item-ExtIEs} } OPTIONAL,
    ...
}

```

```

}

DSCH-Specific-FDD-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TrafficClass          CRITICALITY ignore EXTENSION TrafficClass          PRESENCE mandatory } |
  { ID id-BindingID            CRITICALITY ignore EXTENSION BindingID            PRESENCE optional } |
  -- Shall be ignored if bearer establishment with ALCAP.
  { ID id-TransportLayerAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
  -- Shall be ignored if bearer establishment with ALCAP.
  ...
}

DSCH-Specific-FDD-Additional-List ::= SEQUENCE (SIZE(1..maxNoOfDSCHs-1)) OF DSCH-Specific-FDD-Item

DSCH-FDD-InformationResponse ::= SEQUENCE {
  dsch-Specific-InformationResponse DSCH-Specific-FDD-InformationResponse,
  pdSCHCodeMapping                  PDSCHCodeMapping,
  iE-Extensions                      ProtocolExtensionContainer { { DSCH-FDD-InformationResponse-ExtIEs } } OPTIONAL,
  ...
}

DSCH-FDD-InformationResponse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-Specific-FDD-InformationResponse ::= SEQUENCE (SIZE(1..maxNoOfDSCHs)) OF DSCH-Specific-FDD-Response-Item

DSCH-Specific-FDD-Response-Item ::= SEQUENCE {
  dsch-ID                          DSCH-ID,
  dsch-FlowControlInformation       DSCH-FlowControlInformation,
  bindingID                          BindingID OPTIONAL,
  transportLayerAddress             TransportLayerAddress OPTIONAL,
  iE-Extensions                     ProtocolExtensionContainer { {DSCH-Specific-FDD-Response-Item-ExtIEs} } OPTIONAL,
  ...
}

DSCH-Specific-FDD-Response-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

DSCH-FlowControlInformation ::= SEQUENCE (SIZE(1..16)) OF DSCH-FlowControlItem

DSCH-FlowControlItem ::= SEQUENCE {
  dsch-SchedulingPriority           SchedulingPriorityIndicator,
  mac-c-sh-SDU-Lengths             MAC-c-sh-SDU-LengthList,
  iE-Extensions                     ProtocolExtensionContainer { {DSCH-FlowControlItem-ExtIEs} } OPTIONAL,
  ...
}

DSCH-FlowControlItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DSCH-InitialWindowSize CRITICALITY ignore EXTENSION DSCH-InitialWindowSize PRESENCE optional },

```

```

}
...
}
DSCH-ID ::= INTEGER (0..255)

DSCH-InitialWindowSize ::= INTEGER (1..255)
-- Number of MAC-c/sh SDUs.
-- 255 = Unlimited number of MAC-c/sh SDUs

DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNoOfDSCHs)) OF DSCH-TDD-InformationItem

DSCH-TDD-InformationItem ::= SEQUENCE {
    dSCH-ID DSCH-ID,
    dl-ccTrCHID CcTrCH-ID, -- DL CcTrCH in which the DSCH is mapped
    trChSourceStatisticsDescriptor TrCH-SourceStatisticsDescr,
    transportFormatSet TransportFormatSet,
    allocationRetentionPriority AllocationRetentionPriority,
    schedulingPriorityIndicator SchedulingPriorityIndicator,
    bLER BLER,
    iE-Extensions ProtocolExtensionContainer { {DSCH-TDD-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

DSCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TrafficClass CRITICALITY ignore EXTENSION TrafficClass PRESENCE mandatory } |
    { ID id-BindingID CRITICALITY ignore EXTENSION BindingID PRESENCE optional } |
    -- Shall be ignored if bearer establishment with ALCAP.
    { ID id-TransportLayerAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
    -- Shall be ignored if bearer establishment with ALCAP.
    ...
}

DsField ::= BIT STRING (SIZE (8))

-- E

EDCH-DDI-Value ::= INTEGER (0..63)

EDCH-FDD-DL-ControlChannelInformation ::= SEQUENCE {
    eAGCH-ERGCH-EHICH-FDD-ScramblingCode DL-ScramblingCode,
    eAGCH-ChannelisationCode FDD-DL-ChannelisationCodeNumber OPTIONAL,
    e-RNTI E-RNTI,
    eRGCH-EHICH-ChannelisationCode FDD-DL-ChannelisationCodeNumber OPTIONAL,
    eRGCH-SignatureSequence ERGCH-SignatureSequence,
    eHICH-SignatureSequence EHICH-SignatureSequence,
    iE-Extensions ProtocolExtensionContainer { { EDCH-FDD-DL-ControlChannelInformation-ExtIEs } } OPTIONAL,
    ...
}

EDCH-FDD-DL-ControlChannelInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

...
}

EDCH-FDD-Information ::= SEQUENCE {
    eDCH-MACdFlows-Information          EDCH-MACdFlows-Information,
    eDCH-UE-Capabilities-Information    EDCH-Physical-Layer-Category,
    iE-Extensions                       ProtocolExtensionContainer { { EDCH-FDD-Information-ExtIEs } } OPTIONAL,
    ...
}

EDCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EDCH-FDD-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF EDCH-FDD-InformationResponseItem

EDCH-FDD-InformationResponseItem ::= SEQUENCE {
    eDCH-MACdFlow-ID                    EDCH-MACdFlow-ID,
    bindingID                            BindingID OPTIONAL,
    transportLayerAddress                TransportLayerAddress OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { {EDCH-FDD-InformationResponseItem-ExtIEs} } OPTIONAL,
    ...
}

EDCH-FDD-InformationResponseItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EDCH-FDD-Information-To-Modify ::= SEQUENCE {
    eDCH-MACdFlow-Specific-Information    EDCH-MACdFlow-Specific-InfoList,
    data-Description-Indicator            Data-Description-IndicatorList,
    iE-Extensions                       ProtocolExtensionContainer { { EDCH-FDD-Information-To-Modify-ExtIEs } } OPTIONAL,
    ...
}

EDCH-FDD-Information-To-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EDCH-FDD-Update-Information ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF EDCH-FDD-Update-InfoItem

EDCH-FDD-Update-InfoItem ::= SEQUENCE {
    eDCH-FDD-DL-ControlChannelInformation EDCH-FDD-DL-ControlChannelInformation OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { EDCH-FDD-Update-InfoItem-ExtIEs } } OPTIONAL,
    ...
}

EDCH-FDD-Update-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

EDCH-MACdFlow-ID ::= INTEGER (0..7)

EDCH-MACdFlows-Information ::= SEQUENCE {
    eDCH-MACdFlow-Specific-Information          EDCH-MACdFlow-Specific-InfoList,
    data-Description-Indicator                 Data-Description-IndicatorList,
    iE-Extensions                             ProtocolExtensionContainer { { EDCH-MACdFlow-Specific-Information-ExtIEs } } OPTIONAL,
    ...
}

EDCH-MACdFlow-Specific-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EDCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF EDCH-MACdFlow-Specific-InfoItem

EDCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    eDSCH-MACdFlow-ID                         EDCH-MACdFlow-ID,
    allocationRetentionPriority                AllocationRetentionPriority OPTIONAL,
    tnlQoS                                     TnlQoS OPTIONAL,
    payloadCRC-PresenceIndicator              PayloadCRC-PresenceIndicator,
    maxNr-Retransmissions-EDCH                MaxNr-Retransmissions-EDCH OPTIONAL,
    iE-Extensions                             ProtocolExtensionContainer { { EDCH-MACdFlow-Specific-InfoItem-ExtIEs } } OPTIONAL,
    ...
}

EDCH-MACdFlow-Specific-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EDCH-MACdFlows-To-Delete ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF EDCH-MACdFlows-To-Delete-Item

EDCH-MACdFlows-To-Delete-Item ::= SEQUENCE {
    eDSCH-MACdFlow-ID                         EDCH-MACdFlow-ID,
    iE-Extensions                             ProtocolExtensionContainer { { EDCH-MACdFlows-To-Delete-Item-ExtIEs } } OPTIONAL,
    ...
}

EDCH-MACdFlows-To-Delete-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EDCH-Physical-Layer-Category ::= INTEGER -- FFS

EDCH-RL-Indication ::= ENUMERATED {
    eDCH,
    non-EDCH
}

EDPCH-Information-FDD ::= SEQUENCE {

```

```

minULChannelisationCodeLength-EDCH-FDD      MinULChannelisationCodeLength-EDCH-FDD,
maxNrUL-EDPDCHs                             MaxNrUL-EDPDCHs          OPTIONAL,
-- This IE is present if Minimum UL Channelisation Code Length for E-DCH IE is present.
punctureLimit                               PunctureLimit,
e-TFCS                                       E-TFCS,
e-TTI                                       E-TTI,
iE-Extensions                               ProtocolExtensionContainer { { EDPCH-Information-FDD-ExtIEs } } OPTIONAL,
...
}

EDPCH-Information-FDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

EHICH-SignatureSequence ::= INTEGER (0..maxNrofSigSeqERGHICH-1)

ERGCH-SignatureSequence ::= INTEGER (0..maxNrofSigSeqERGHICH-1)

E-RNTI ::= INTEGER (0..65535)

E-TFCS ::= SEQUENCE {
-- FFS
}

E-TTI ::= ENUMERATED {
tti10,
tti2
-- 10ms TTI, 2ms TTI
}

EnhancedDSCHPC ::= SEQUENCE {
enhancedDSCHPCWnd EnhancedDSCHPCWnd,
enhancedDSCHPCCounter EnhancedDSCHPCCounter,
enhancedDSCHPowerOffset EnhancedDSCHPowerOffset,
...
}

EnhancedDSCHPCCounter ::= INTEGER (1..50)

EnhancedDSCHPCIndicator ::= ENUMERATED {
enhancedDSCHPCActiveInTheUE,
enhancedDSCHPCNotActiveInTheUE
}

EnhancedDSCHPCWnd ::= INTEGER (1..10)

EnhancedDSCHPowerOffset ::= INTEGER (-15..0)

Enhanced-PrimaryCPICH-EcNo ::= INTEGER (0..49)

```

```

EventA ::= SEQUENCE {
    measurementTreshold      MeasurementThreshold,
    measurementHysteresisTime MeasurementHysteresisTime      OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {EventA-ExtIEs} } OPTIONAL,
    ...
}

EventA-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventB ::= SEQUENCE {
    measurementTreshold      MeasurementThreshold,
    measurementHysteresisTime MeasurementHysteresisTime      OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { {EventB-ExtIEs} } OPTIONAL,
    ...
}

EventB-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventC ::= SEQUENCE {
    measurementIncreaseDecreaseThreshold MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime      MeasurementChangeTime,
    iE-Extensions              ProtocolExtensionContainer { {EventC-ExtIEs} } OPTIONAL,
    ...
}

EventC-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventD ::= SEQUENCE {
    measurementIncreaseDecreaseThreshold MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime      MeasurementChangeTime,
    iE-Extensions              ProtocolExtensionContainer { {EventD-ExtIEs} } OPTIONAL,
    ...
}

EventD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventE ::= SEQUENCE {
    measurementThreshold1      MeasurementThreshold,
    measurementThreshold2      MeasurementThreshold      OPTIONAL,
    measurementHysteresisTime MeasurementHysteresisTime      OPTIONAL,
    reportPeriodicity          ReportPeriodicity          OPTIONAL,
}

```



```

    iE-Extensions          ProtocolExtensionContainer { {EventE-ExtIEs} } OPTIONAL,
    ...
}

EventE-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

EventF ::= SEQUENCE {
    measurementThreshold1      MeasurementThreshold,
    measurementThreshold2      MeasurementThreshold          OPTIONAL,
    measurementHysteresisTime  MeasurementHysteresisTime    OPTIONAL,
    reportPeriodicity          ReportPeriodicity            OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {EventF-ExtIEs} } OPTIONAL,
    ...
}

EventF-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

ExtendedGSMCellIndividualOffset ::= INTEGER (-50..-11|11..50)

-- F

FACH-FlowControlInformation ::= SEQUENCE (SIZE (1..16)) OF FACH-FlowControlInformationItem

FACH-FlowControlInformationItem ::= SEQUENCE {
    fACH-SchedulingPriority      SchedulingPriorityIndicator,
    mAC-c-sh-SDU-Lengths        MAC-c-sh-SDU-LengthList,
    fACH-InitialWindowSize      FACH-InitialWindowSize,
    iE-Extensions                ProtocolExtensionContainer { {FACH-FlowControlInformationItem-ExtIEs} } OPTIONAL,
    ...
}

FACH-FlowControlInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-InitialWindowSize          ::= INTEGER { unlimited(255) } (0..255)
-- Number of frames MAC-c-sh SDUs.
-- 255 = Unlimited number of FACH data frames

FACH-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfFACHs)) OF FACH-InformationItem

FACH-InformationItem ::= SEQUENCE {
    transportFormatSet          TransportFormatSet,
    iE-Extensions                ProtocolExtensionContainer { { FACH-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

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```

FACH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FACH-PCH-InformationList ::= SEQUENCE (SIZE(1..maxFACHCountPlus1)) OF FACH-PCH-InformationItem

FACH-PCH-InformationItem ::= SEQUENCE {
    transportFormatSet          TransportFormatSet,
    iE-Extensions               ProtocolExtensionContainer { { FACH-PCH-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

FACH-PCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FDD-DCHs-to-Modify          ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifyItem

FDD-DCHs-to-ModifyItem ::= SEQUENCE {
    ul-FP-Mode                UL-FP-Mode          OPTIONAL,
    toAWS                     ToAWS              OPTIONAL,
    toAWE                     ToAWE              OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    dCH-SpecificInformationList FDD-DCHs-to-ModifySpecificInformationList,
    iE-Extensions             ProtocolExtensionContainer { {FDD-DCHs-to-ModifyItem-ExtIEs} } OPTIONAL,
    ...
}

FDD-DCHs-to-ModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnlQos                CRITICALITY ignore     EXTENSION TnlQos PRESENCE optional },
    ...
}

FDD-DCHs-to-ModifySpecificInformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifySpecificItem

FDD-DCHs-to-ModifySpecificItem ::= SEQUENCE {
    dCH-ID                    DCH-ID,
    ul-TransportformatSet     TransportFormatSet          OPTIONAL,
    dl-TransportformatSet     TransportFormatSet          OPTIONAL,
    allocationRetentionPriority AllocationRetentionPriority  OPTIONAL,
    frameHandlingPriority     FrameHandlingPriority      OPTIONAL,
    dRACControl               DRACControl              OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { {FDD-DCHs-to-ModifySpecificItem-ExtIEs} } OPTIONAL,
    ...
}

FDD-DCHs-to-ModifySpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Guaranteed-Rate-Information CRITICALITY ignore EXTENSION Guaranteed-Rate-Information PRESENCE optional }|
    { ID id-TrafficClass                CRITICALITY ignore EXTENSION TrafficClass PRESENCE optional },
}

```

```

}
...
}

FDD-DL-ChannelisationCodeNumber ::= INTEGER (0..511)
-- According to the mapping in [27]. The maximum value is equal to the DL spreading factor -1--

FDD-DL-CodeInformation ::= SEQUENCE (SIZE (1..maxNrOfDL-Codes)) OF FDD-DL-CodeInformationItem

FDD-DL-CodeInformationItem ::= SEQUENCE {
    dl-ScramblingCode                DL-ScramblingCode,
    fdd-DL-ChannelisationCodeNumber  FDD-DL-ChannelisationCodeNumber,
    transmission-Gap-Pattern-Sequence-ScramblingCode-Information  Transmission-Gap-Pattern-Sequence-ScramblingCode-Information OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { {FDD-DL-CodeInformationItem-ExtIEs} } OPTIONAL,
    ...
}

FDD-DL-CodeInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

FDD-S-CCPCH-Offset ::= INTEGER (0..149)

FDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size0-5,
    step-size1,
    step-size1-5,
    step-size2,
    ...
}

SchedulingPriorityIndicator ::= INTEGER { lowest(0), highest(15) } (0..15)

FirstRLS-Indicator ::= ENUMERATED {
    first-RLS,
    not-first-RLS
}

FNReportingIndicator ::= ENUMERATED {
    fN-reporting-required,
    fN-reporting-not-required
}

FPACH-Information ::= SEQUENCE {
    timeSlotLCR                TimeSlotLCR,
    tDD-ChannelisationCodeLCR  TDD-ChannelisationCodeLCR,
    midambleShiftLCR          MidambleShiftLCR,
    wT                        INTEGER (1..4),
    ...
}

```

```

FrameHandlingPriority ::= INTEGER { lowest(0), highest(15) } (0..15)

FrameOffset ::= INTEGER (0..255)
-- Frames
-- G

GapLength ::= INTEGER (1..14)
-- Unit Slot

GapDuration ::= INTEGER (1..144,...)
-- Unit Frame

GA-Cell ::= SEQUENCE (SIZE (1..maxNrOfPoints)) OF
  SEQUENCE {
    cell-GAIgeographicalCoordinate GeographicalCoordinate,
    iE-Extensions ProtocolExtensionContainer { {GA-Cell-ExtIEs} } OPTIONAL,
    ...
  }

GA-Cell-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

GA-CellAdditionalShapes ::= CHOICE {
  pointWithUncertainty GA-PointWithUnCertainty,
  pointWithUncertaintyEllipse GA-PointWithUnCertaintyEllipse,
  pointWithAltitude GA-PointWithAltitude,
  pointWithAltitudeAndUncertaintyEllipsoid GA-PointWithAltitudeAndUncertaintyEllipsoid,
  ellipsoidArc GA-EllipsoidArc,
  ...
}

GA-AltitudeAndDirection ::= SEQUENCE {
  directionOfAltitude ENUMERATED {height, depth},
  altitude INTEGER (0..32767),
  ...
}

GA-EllipsoidArc ::= SEQUENCE {
  geographicalCoordinates GeographicalCoordinate,
  innerRadius INTEGER (0..65535),
  uncertaintyRadius INTEGER (0..127),
  offsetAngle INTEGER (0..179),
  includedAngle INTEGER (0..179),
  confidence INTEGER (0..127),
  iE-Extensions ProtocolExtensionContainer { { GA-EllipsoidArc-ExtIEs} } OPTIONAL,
  ...
}

```

```

GA-EllipsoidArc-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GA-PointWithAltitude ::= SEQUENCE {
    geographicalCoordinates      GeographicalCoordinate,
    altitudeAndDirection         GA-AltitudeAndDirection,
    iE-Extensions                ProtocolExtensionContainer { { GA-PointWithAltitude-ExtIEs } } OPTIONAL,
    ...
}

GA-PointWithAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GA-PointWithAltitudeAndUncertaintyEllipsoid ::= SEQUENCE {
    geographicalCoordinates      GeographicalCoordinate,
    altitudeAndDirection         GA-AltitudeAndDirection,
    uncertaintyEllipse           GA-UncertaintyEllipse,
    uncertaintyAltitude          INTEGER (0..127),
    confidence                    INTEGER (0..127),
    iE-Extensions                ProtocolExtensionContainer { { GA-PointWithAltitudeAndUncertaintyEllipsoid-ExtIEs } } OPTIONAL,
    ...
}

GA-PointWithAltitudeAndUncertaintyEllipsoid-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GA-PointWithUnCertaintyEllipse ::= SEQUENCE {
    geographicalCoordinates      GeographicalCoordinate,
    uncertaintyEllipse           GA-UncertaintyEllipse,
    confidence                    INTEGER (0..127),
    iE-Extensions                ProtocolExtensionContainer { { GA-PointWithUnCertaintyEllipse-ExtIEs } } OPTIONAL,
    ...
}

GA-PointWithUnCertaintyEllipse-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GA-UncertaintyEllipse ::= SEQUENCE {
    uncertaintySemi-major        INTEGER (0..127),
    uncertaintySemi-minor        INTEGER (0..127),
    orientationOfMajorAxis       INTEGER (0..179), -- The values 90..179 shall not be used.
    ...
}

GA-PointWithUnCertainty ::= SEQUENCE {
    geographicalCoordinates      GeographicalCoordinate,

```

```

    uncertaintyCode      INTEGER (0..127),
    iE-Extensions        ProtocolExtensionContainer { {GA-PointWithUnCertainty-ExtIEs} } OPTIONAL,
    ...
}

GA-PointWithUnCertainty-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GA-AccessPointPosition ::= SEQUENCE {
    geographicalCoordinate    GeographicalCoordinate,
    iE-Extensions            ProtocolExtensionContainer { {GA-AccessPoint-ExtIEs} } OPTIONAL,
    ...
}

GA-AccessPoint-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GeographicalCoordinate ::= SEQUENCE {
    latitudeSign            ENUMERATED { north, south },
    latitude                INTEGER (0..8388607),
    longitude              INTEGER (-8388608..8388607),
    iE-Extensions          ProtocolExtensionContainer { {GeographicalCoordinate-ExtIEs} } OPTIONAL,
    ...
}

GeographicalCoordinate-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GERAN-Cell-Capability ::= BIT STRING (SIZE (16))
-- First bit: A/Gb mode --
-- Second bit: Iu mode --
-- Note: undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver. --

GERAN-Classmark ::= OCTET STRING
-- GERAN Classmark as defined in (38) --

GERAN-SI-Type ::= CHOICE {
    sI                GERAN-SystemInfo,
    pSI               GERAN-SystemInfo,
    ...
}

GERAN-SystemInfo ::= SEQUENCE (SIZE (1..maxNrOfGERANSI)) OF
    SEQUENCE {
        gERAN-SI-block    OCTET STRING (SIZE (1..23)),
        iE-Extensions    ProtocolExtensionContainer { { GERAN-SystemInfo-ExtIEs } } OPTIONAL,
        ...
    }

```

```

}

GERAN-SystemInfo-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GenericTrafficCategory ::= BIT STRING (SIZE (8))

GPS-Almanac ::= SEQUENCE {
    wna-alm          BIT STRING (SIZE (8)),
    satellite-Almanac-Information SEQUENCE (SIZE (1..maxNoSat)) OF
        SEQUENCE {
            dATA-ID          DATA-ID,
            sAT-ID           SAT-ID,
            gps-e-alm        BIT STRING (SIZE (16)),
            gps-toa-alm      BIT STRING (SIZE (8)),
            gps-delta-I-alm  BIT STRING (SIZE (16)),
            omegadot-alm     BIT STRING (SIZE (16)),
            svhealth-alm     BIT STRING (SIZE (8)),
            gps-a-sqrt-alm   BIT STRING (SIZE (24)),
            omegazero-alm    BIT STRING (SIZE (24)),
            m-zero-alm       BIT STRING (SIZE (24)),
            gps-omega-alm    BIT STRING (SIZE (24)),
            gps-af-zero-alm  BIT STRING (SIZE (11)),
            gps-af-one-alm   BIT STRING (SIZE (11)),
            iE-Extensions    ProtocolExtensionContainer { { Satellite-Almanac-Information-ExtIEs} } OPTIONAL,
            ...
        },
    -- This GPS-Almanac-Information is for the 1st 16 satellites
    sVGlobalHealth-alm     BIT STRING (SIZE (364)) OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { GPS-Almanac-ExtIEs} } OPTIONAL,
    ...
}

Satellite-Almanac-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-Almanac-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Satellite-Almanac-Information-ExtItem CRITICALITY ignore EXTENSION Satellite-Almanac-Information-ExtItem PRESENCE optional},
    ...
}

Satellite-Almanac-Information-ExtItem ::= SEQUENCE (SIZE (1..maxNrOfSatAlmanac-maxNoSat)) OF
    SEQUENCE {
        dATA-ID          DATA-ID,
        sAT-ID           SAT-ID,
        gps-e-alm        BIT STRING (SIZE (16)),
        gps-toa-alm      BIT STRING (SIZE (8)),
    }

```

```

        gps-delta-I-alm      BIT STRING (SIZE (16)),
        omegadot-alm        BIT STRING (SIZE (16)),
        svhealth-alm        BIT STRING (SIZE (8)),
        gps-a-sqrt-alm       BIT STRING (SIZE (24)),
        omegazero-alm        BIT STRING (SIZE (24)),
        m-zero-alm          BIT STRING (SIZE (24)),
        gps-omega-alm        BIT STRING (SIZE (24)),
        gps-af-zero-alm      BIT STRING (SIZE (11)),
        gps-af-one-alm       BIT STRING (SIZE (11)),
        iE-Extensions        ProtocolExtensionContainer { { Satellite-Almanac-Information-ExtItemIEs } } OPTIONAL,
        ...
    }
-- Includes the GPS-Almanac-Information for the 17th through 32nd satellites.

Satellite-Almanac-Information-ExtItemIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPSInformation ::= SEQUENCE (SIZE (1..maxNoGPSTypes)) OF
    SEQUENCE {
        GPSInformationItem      ENUMERATED {
            GPS-NavigationModel-and-TimeRecovery,
            GPS-Ionospheric-Model,
            GPS-UTC-Model,
            GPS-Almanac,
            GPS-RealTime-Integrity,
            ...
        },
        iE-Extensions            ProtocolExtensionContainer { { GPSInformation-ExtIEs } } OPTIONAL,
        ...
    }
-- This IE shall be present if the Information Type IE indicates 'GPS Information'

GPSInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-Ionospheric-Model ::= SEQUENCE {
    alpha-zero-ionos           BIT STRING (SIZE (8)),
    alpha-one-ionos            BIT STRING (SIZE (8)),
    alpha-two-ionos            BIT STRING (SIZE (8)),
    alpha-three-ionos          BIT STRING (SIZE (8)),
    beta-zero-ionos            BIT STRING (SIZE (8)),
    beta-one-ionos              BIT STRING (SIZE (8)),
    beta-two-ionos             BIT STRING (SIZE (8)),
    beta-three-ionos           BIT STRING (SIZE (8)),
    iE-Extensions              ProtocolExtensionContainer { { GPS-Ionospheric-Model-ExtIEs } } OPTIONAL,
    ...
}

```



```

GPS-Ionospheric-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-NavigationModel-and-TimeRecovery ::= SEQUENCE (SIZE (1..maxNoSat)) OF
SEQUENCE {
    tx-tow-nav                INTEGER (0..1048575),
    sAT-ID                    SAT-ID,
    tlm-message-nav           BIT STRING (SIZE (14)),
    tlm-revd-c-nav            BIT STRING (SIZE (2)),
    ho-word-nav                BIT STRING (SIZE (22)),
    w-n-nav                    BIT STRING (SIZE (10)),
    ca-or-p-on-l2-nav         BIT STRING (SIZE (2)),
    user-range-accuracy-index-nav BIT STRING (SIZE (4)),
    sv-health-nav             BIT STRING (SIZE (6)),
    iodc-nav                   BIT STRING (SIZE (10)),
    l2-p-dataflag-nav         BIT STRING (SIZE (1)),
    sfl-reserved-nav          BIT STRING (SIZE (87)),
    t-gd-nav                   BIT STRING (SIZE (8)),
    t-oc-nav                   BIT STRING (SIZE (16)),
    a-f-2-nav                  BIT STRING (SIZE (8)),
    a-f-1-nav                  BIT STRING (SIZE (16)),
    a-f-zero-nav              BIT STRING (SIZE (22)),
    c-rs-nav                   BIT STRING (SIZE (16)),
    delta-n-nav               BIT STRING (SIZE (16)),
    m-zero-nav                 BIT STRING (SIZE (32)),
    c-uc-nav                   BIT STRING (SIZE (16)),
    gps-e-nav                  BIT STRING (SIZE (32)),
    c-us-nav                   BIT STRING (SIZE (16)),
    a-sqrt-nav                 BIT STRING (SIZE (32)),
    t-oe-nav                   BIT STRING (SIZE (16)),
    fit-interval-flag-nav     BIT STRING (SIZE (1)),
    aodo-nav                   BIT STRING (SIZE (5)),
    c-ic-nav                   BIT STRING (SIZE (16)),
    omega-zero-nav            BIT STRING (SIZE (32)),
    c-is-nav                   BIT STRING (SIZE (16)),
    i-zero-nav                 BIT STRING (SIZE (32)),
    c-rc-nav                   BIT STRING (SIZE (16)),
    gps-omega-nav             BIT STRING (SIZE (32)),
    omegadot-nav              BIT STRING (SIZE (24)),
    idot-nav                   BIT STRING (SIZE (14)),
    spare-zero-fill           BIT STRING (SIZE (20)),
    iE-Extensions             ProtocolExtensionContainer { { GPS-NavigationModel-and-TimeRecoveryItem-ExtIEs } } OPTIONAL,
    ...
}

GPS-NavigationModel-and-TimeRecoveryItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

GPS-RealTime-Integrity ::= CHOICE {
    badSatellites          BadSatellites,
    noBadSatellite        NULL
}

GPS-RX-POS ::= SEQUENCE {
    geographicalCoordinate GeographicalCoordinate,
    altitudeAndDirection  GA-AltitudeAndDirection,
    iE-Extensions         ProtocolExtensionContainer { { GPS-RX-POS-ExtIEs } } OPTIONAL,
    ...
}

GPS-RX-POS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

GPS-Status-Health ::= ENUMERATED {
    udre-1-0,
    udre-0-75,
    udre-0-5,
    udre-0-3,
    udre-0-1,
    no-data,
    invalid-data
}

GPSTOW ::= INTEGER (0..604799)

GPS-UTC-Model ::= SEQUENCE {
    a-one-utc          BIT STRING (SIZE (24)),
    a-zero-utc         BIT STRING (SIZE (32)),
    t-ot-utc           BIT STRING (SIZE (8)),
    delta-t-ls-utc    BIT STRING (SIZE (8)),
    w-n-t-utc          BIT STRING (SIZE (8)),
    w-n-lsf-utc        BIT STRING (SIZE (8)),
    dn-utc             BIT STRING (SIZE (8)),
    delta-t-lsf-utc    BIT STRING (SIZE (8)),
    iE-Extensions     ProtocolExtensionContainer { { GPS-UTC-Model-ExtIEs } } OPTIONAL,
    ...
}

GPS-UTC-Model-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Guaranteed-Rate-Information ::= SEQUENCE {
    guaranteed-UL-Rate Guaranteed-Rate OPTIONAL,
    guaranteed-DL-Rate Guaranteed-Rate OPTIONAL,
    iE-Extensions     ProtocolExtensionContainer { { Guaranteed-Rate-Information-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

Guaranteed-Rate-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Guaranteed-Rate ::= INTEGER (1..maxNrOfTFs)
-- "1": TFI 0, "2": TFI 1, "3": TFI 2, ...

-- H

HARQ-MemoryPartitioning ::= CHOICE {
    implicit      HARQ-MemoryPartitioning-Implicit,
    explicit      HARQ-MemoryPartitioning-Explicit,
    ...
}

HARQ-MemoryPartitioning-Implicit ::= SEQUENCE {
    number-of-Processes      INTEGER (1..8,...),
    iE-Extensions            ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Implicit-ExtIEs } }      OPTIONAL,
    ...
}

HARQ-MemoryPartitioning-Implicit-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQ-MemoryPartitioning-Explicit ::= SEQUENCE {
    hARQ-MemoryPartitioningList      HARQ-MemoryPartitioningList,
    iE-Extensions                    ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Explicit-ExtIEs } }      OPTIONAL,
    ...
}

HARQ-MemoryPartitioning-Explicit-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQ-MemoryPartitioningList ::= SEQUENCE (SIZE (1..maxNrOfHARQProc)) OF HARQ-MemoryPartitioningItem

HARQ-MemoryPartitioningItem ::= SEQUENCE {
    process-Memory-Size      ENUMERATED {
        hms800, hms1600, hms2400, hms3200, hms4000,
        hms4800, hms5600, hms6400, hms7200, hms8000,
        hms8800, hms9600, hms10400, hms11200, hms12000,
        hms12800, hms13600, hms14400, hms15200, hms16000,
        hms17600, hms19200, hms20800, hms22400, hms24000,
        hms25600, hms27200, hms28800, hms30400, hms32000,
        hms36000, hms40000, hms44000, hms48000, hms52000,
        hms56000, hms60000, hms64000, hms68000, hms72000,
        hms76000, hms80000, hms88000, hms96000, hms104000,
    }
}

```

```

        hms112000, hms120000, hms128000, hms136000, hms144000,
        hms152000, hms160000, hms176000, hms192000, hms208000,
        hms224000, hms240000, hms256000, hms272000, hms288000,
        hms304000,...},
    iE-Extensions          ProtocolExtensionContainer { { HARQ-MemoryPartitioningItem-ExtIEs } }      OPTIONAL,
    ...
}

HARQ-MemoryPartitioningItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQ-Preamble-Mode ::= ENUMERATED {
    mode0,
    mode1
}

HCS-Prio ::= INTEGER (0..7)
-- 0 = lowest priority, ...7 = highest priority

HSDSCH-FDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlows-Information          HSDSCH-MACdFlows-Information,
    uE-Capabilities-Info                  UE-Capabilities-Info,
    mAChs-Reordering-Buffer-Size-for-RLC-UM MACHsReorderingBufferSize-for-RLC-UM,
    cqiFeedback-CycleK                    CQI-Feedback-Cycle,
    cqiRepetitionFactor                    CQI-RepetitionFactor          OPTIONAL,
    -- This IE shall be present if the CQI Feedback Cycle k IE is set to a value greater than 0.
    ackNackRepetitionFactor                AckNack-RepetitionFactor,
    cqiPowerOffset                         CQI-Power-Offset,
    ackPowerOffset                         Ack-Power-Offset,
    nackPowerOffset                        Nack-Power-Offset,
    hsscch-PowerOffset                     HSSCCH-PowerOffset          OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs } }      OPTIONAL,
    ...
}

HSDSCH-FDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HARQ-Preamble-Mode CRITICALITY reject EXTENSION HARQ-Preamble-Mode PRESENCE optional},
    ...
}

HSDSCH-FDD-Information-Response ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-Response HSDSCH-MACdFlow-Specific-InfoList-Response      OPTIONAL,
    hSSCCH-Specific-InfoList-Response          HSSCCH-FDD-Specific-InfoList-Response      OPTIONAL,
    hSPDSCH-and-HSSCCH-ScramblingCode         DL-ScramblingCode                          OPTIONAL,
    measurement-Power-Offset                   Measurement-Power-Offset                    OPTIONAL,
    hARQ-MemoryPartitioning                    HARQ-MemoryPartitioning                    OPTIONAL,
    iE-Extensions                              ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }      OPTIONAL,
    ...
}

```

```

HSDSCH-FDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-Information-to-Modify ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-to-Modify      HSDSCH-MACdFlow-Specific-InfoList-to-Modify      OPTIONAL,
    priorityQueue-Info-to-Modify                    PriorityQueue-InfoList-to-Modify                    OPTIONAL,
    mAChs-Reordering-Buffer-Size-for-RLC-UM         MAChsReorderingBufferSize-for-RLC-UM                OPTIONAL,
    cqiFeedback-CycleK                              CQI-Feedback-Cycle                                OPTIONAL,    -- For FDD only
    cqiRepetitionFactor                             CQI-RepetitionFactor                              OPTIONAL,    -- For FDD only
    ackNackRepetitionFactor                         AckNack-RepetitionFactor                          OPTIONAL,    -- For FDD only
    cqiPowerOffset                                 CQI-Power-Offset                                 OPTIONAL,    -- For FDD only
    ackPowerOffset                                 Ack-Power-Offset                                 OPTIONAL,    -- For FDD only
    nackPowerOffset                               Nack-Power-Offset                               OPTIONAL,    -- For FDD only
    hsscch-PowerOffset                             HSSCCH-PowerOffset                              OPTIONAL,    -- For FDD only
    hSSCCH-CodeChangeGrant                         HSSCCH-Code-Change-Grant                         OPTIONAL,
    tDDAckNackPowerOffset                          TDD-AckNack-Power-Offset                         OPTIONAL,    -- For TDD only
    iE-Extensions                                  ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-ExtIEs } }    OPTIONAL,
    ...
}

HSDSCH-Information-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HARQ-Preamble-Mode CRITICALITY reject    EXTENSION    HARQ-Preamble-Mode PRESENCE optional},
    ...
}

HSDSCH-Information-to-Modify-Unsynchronised ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-to-Modify      HSDSCH-MACdFlow-Specific-InfoList-to-Modify      OPTIONAL,
    priorityQueue-InfoList-to-Modify-Unsynchronised  PriorityQueue-InfoList-to-Modify-Unsynchronised    OPTIONAL,
    cqiPowerOffset                                 CQI-Power-Offset                                OPTIONAL,    -- For FDD only
    ackPowerOffset                                 Ack-Power-Offset                                OPTIONAL,    -- For FDD only
    nackPowerOffset                               Nack-Power-Offset                               OPTIONAL,    -- For FDD only
    hsscch-PowerOffset                             HSSCCH-PowerOffset                              OPTIONAL,    -- Only for FDD
    tDDAckNackPowerOffset                          TDD-AckNack-Power-Offset                         OPTIONAL,    -- For TDD only
    iE-Extensions                                  ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs } }
    OPTIONAL,
    ...
}

HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HARQ-Preamble-Mode CRITICALITY reject    EXTENSION    HARQ-Preamble-Mode PRESENCE optional},
    ...
}

HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)

HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem

HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {

```

```

    hSDSCH-MACdFlow-ID           HSDSCH-MACdFlow-ID,
    allocationRetentionPriority    AllocationRetentionPriority,
    trafficClass                  TrafficClass,
    bindingID                    BindingID                    OPTIONAL,
    transportLayerAddress         TransportLayerAddress    OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlow-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-Response

HSDSCH-MACdFlow-Specific-InfoItem-Response ::= SEQUENCE {
    hSDSCH-MACdFlow-ID           HSDSCH-MACdFlow-ID,
    bindingID                    BindingID                    OPTIONAL,
    transportLayerAddress         TransportLayerAddress    OPTIONAL,
    hSDSCH-Initial-Capacity-Allocation HSDSCH-Initial-Capacity-Allocation OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem-to-Modify

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    hSDSCH-MACdFlow-ID           HSDSCH-MACdFlow-ID,
    allocationRetentionPriority    AllocationRetentionPriority    OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    trafficClass                  TrafficClass                    OPTIONAL,
    bindingID                    BindingID                    OPTIONAL,
    transportLayerAddress         TransportLayerAddress          OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlows-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-Info HSDSCH-MACdFlow-Specific-InfoList,
    priorityQueue-Info             PriorityQueue-InfoList,
    iE-Extensions                  ProtocolExtensionContainer { { HSDSCH-MACdFlows-Information-ExtIEs } } OPTIONAL,
    ...
}

```

```

}

HSDSCH-MACdFlows-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-MACdFlows-to-Delete ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlows-to-Delete-Item

HSDSCH-MACdFlows-to-Delete-Item ::= SEQUENCE {
    hsDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
    iE-Extensions               ProtocolExtensionContainer { { HSDSCH-MACdFlows-to-Delete-Item-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-MACdFlows-to-Delete-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-Initial-Capacity-Allocation ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF HSDSCH-Initial-Capacity-AllocationItem

HSDSCH-Initial-Capacity-AllocationItem ::= SEQUENCE {
    schedulingPriorityIndicator    SchedulingPriorityIndicator,
    maximum-MACdPDU-Size          MACdPDU-Size,
    hSDSCH-InitialWindowSize      HSDSCH-InitialWindowSize,
    iE-Extensions                 ProtocolExtensionContainer { {HSDSCH-Initial-Capacity-AllocationItem-ExtIEs} } OPTIONAL,
    ...
}

HSDSCH-Initial-Capacity-AllocationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-InitialWindowSize          ::= INTEGER (1..255)
-- Number of MAC-d PDUs.

HSDSCH-RNTI ::= INTEGER (0..65535)

HSDSCH-TDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlows-Information    HSDSCH-MACdFlows-Information,
    uE-Capabilities-Info            UE-Capabilities-Info,
    mAChs-Reordering-Buffer-Size-for-RLC-UM    MACHsReorderingBufferSize-for-RLC-UM,
    tDD-AckNack-Power-Offset        TDD-AckNack-Power-Offset,
    iE-Extensions                   ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-TDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

HSDSCH-TDD-Information-Response ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-Response    HSDSCH-MACdFlow-Specific-InfoList-Response    OPTIONAL,
    hSSCCH-TDD-Specific-InfoList-Response         HSSCCH-TDD-Specific-InfoList-Response         OPTIONAL,
-- Not Applicable to 1.28Mcps TDD
    hSSCCH-TDD-Specific-InfoList-Response-LCR     HSSCCH-TDD-Specific-InfoList-Response-LCR     OPTIONAL,
-- Not Applicable to 3.84Mcps TDD
    hSPDSCH-TDD-Specific-InfoList-Response       HSPDSCH-TDD-Specific-InfoList-Response       OPTIONAL,
    hSPDSCH-TDD-Specific-InfoList-Response-LCR   HSPDSCH-TDD-Specific-InfoList-Response-LCR   OPTIONAL,
    hARQ-MemoryPartitioning                      HARQ-MemoryPartitioning                      OPTIONAL,
    iE-Extensions                                ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } }    OPTIONAL,
    ...
}

HSDSCH-TDD-Information-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSPDSCH-TDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfDLTs)) OF HSPDSCH-TDD-Specific-InfoItem-Response

HSPDSCH-TDD-Specific-InfoItem-Response ::= SEQUENCE {
    timeslot                                     TimeSlot,
    midambleShiftAndBurstType                   MidambleShiftAndBurstType,
    iE-Extensions                               ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-ExtIEs } }    OPTIONAL,
    ...
}

HSPDSCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSPDSCH-TDD-Specific-InfoList-Response-LCR ::= SEQUENCE (SIZE (1.. maxNrOfDLTsLCR)) OF HSPDSCH-TDD-Specific-InfoItem-Response-LCR

HSPDSCH-TDD-Specific-InfoItem-Response-LCR ::= SEQUENCE {
    timeslotLCR                                 TimeSlotLCR,
    midambleShiftLCR                           MidambleShiftLCR,
    iE-Extensions                              ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs } }    OPTIONAL,
    ...
}

HSPDSCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-FDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-FDD-Specific-InfoItem-Response

HSSCCH-FDD-Specific-InfoItem-Response ::= SEQUENCE {
    code-Number                                INTEGER (0..127),
    iE-Extensions                              ProtocolExtensionContainer { { HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs } }    OPTIONAL,
    ...
}

```



```

}

HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-PowerOffset ::= INTEGER (0..255)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB

HSSCCH-TDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response

HSSCCH-TDD-Specific-InfoItem-Response ::= SEQUENCE {
    timeslot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tDD-ChannelisationCode  TDD-ChannelisationCode,
    hSSICH-Info             HSSICH-Info,
    iE-Extensions           ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs } } OPTIONAL,
    ...
}

HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-TDD-Specific-InfoList-Response-LCR ::= SEQUENCE (SIZE (0..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response-LCR

HSSCCH-TDD-Specific-InfoItem-Response-LCR ::= SEQUENCE {
    timeslotLCR                TimeSlotLCR,
    midambleShiftLCR          MidambleShiftLCR,
    first-TDD-ChannelisationCode TDD-ChannelisationCode,
    second-TDD-ChannelisationCode TDD-ChannelisationCode,
    hSSICH-InfoLCR           HSSICH-InfoLCR,
    iE-Extensions           ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs } } OPTIONAL,
    ...
}

HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-Info ::= SEQUENCE {
    hsSICH-ID                HS-SICH-ID,
    timeslot                TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,
    tDD-ChannelisationCode  TDD-ChannelisationCode,
    iE-Extensions           ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } } OPTIONAL,
    ...
}

```

```

HSSICH-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-InfoLCR ::= SEQUENCE {
    hsSICH-ID                HS-SICH-ID,
    timeslotLCR              TimeSlotLCR,
    midambleShiftLCR        MidambleShiftLCR,
    tDD-ChannelisationCode   TDD-ChannelisationCode,
    iE-Extensions            ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } } OPTIONAL,
    ...
}

HSSICH-Info-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SICH-Reception-Quality-Value ::= SEQUENCE {
    failed-HS-SICH           HS-SICH-failed,
    missed-HS-SICH          HS-SICH-missed,
    total-HS-SICH           HS-SICH-total,
    iE-Extensions            ProtocolExtensionContainer { { HS-SICH-Reception-Quality-Value-ExtIEs } } OPTIONAL,
    ...
}

HS-SICH-Reception-Quality-Value-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SICH-failed ::= INTEGER (0..20)

HS-SICH-missed ::= INTEGER (0..20)

HS-SICH-total ::= INTEGER (0..20)

HS-SICH-Reception-Quality-Measurement-Value ::= INTEGER (0..20)
-- According to mapping in [23]

HS-SICH-ID ::= INTEGER (0..31)

HSSCCH-CodeChangeIndicator ::= ENUMERATED {
    hsSCCHCodeChangeNeeded
}

HSSCCH-Code-Change-Grant ::= ENUMERATED {
    changeGranted
}

HSDSCH-FDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator          HSSCCH-CodeChangeIndicator          OPTIONAL,

```

```

    cqiFeedback-CycleK          CQI-Feedback-Cycle          OPTIONAL,
    cqiRepetitionFactor         CQI-RepetitionFactor        OPTIONAL,
    ackNackRepetitionFactor     AckNack-RepetitionFactor    OPTIONAL,
    cqiPowerOffset              CQI-Power-Offset           OPTIONAL,
    ackPowerOffset              Ack-Power-Offset            OPTIONAL,
    nackPowerOffset             Nack-Power-Offset          OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { HSDSCH-FDD-Update-Information-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-FDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-TDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator   HSSCCH-CodeChangeIndicator    OPTIONAL,
    tDDAckNackPowerOffset       TDD-AckNack-Power-Offset      OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { HSDSCH-TDD-Update-Information-ExtIEs } } OPTIONAL,
    ...
}

HSDSCH-TDD-Update-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- I

IB-SchedulingInformation ::= SEQUENCE {
    iB-SG-Rep                   IB-SG-REP,
    iB-segmentInformationList    IB-SegmentInformationList,
    iE-Extensions                ProtocolExtensionContainer { { IB-SchedulingInformation-ExtIEs } } OPTIONAL,
    ...
}

IB-SchedulingInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

IB-SegmentInformationList ::= SEQUENCE (SIZE(1..maxIBSEG)) OF IB-SegmentInformationItem

IB-SegmentInformationItem ::= SEQUENCE {
    iB-SG-POS                   IB-SG-POS,
    iE-Extensions                ProtocolExtensionContainer { { IB-SegmentInformationItem-ExtIEs } } OPTIONAL,
    ...
}

IB-SegmentInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

IB-SG-POS ::= INTEGER (0..4094)
-- Only even positions allowed

IB-SG-REP ::= ENUMERATED {rep4, rep8, rep16, rep32, rep64, rep128, rep256, rep512, rep1024, rep2048, rep4096}

IMEI ::= OCTET STRING (SIZE(8))

IMEISV ::= OCTET STRING (SIZE(8))

IMSI ::= OCTET STRING (SIZE(3..8))

InformationAvailable ::= SEQUENCE {
    requestedDataValue RequestedDataValue,
    iE-Extensions ProtocolExtensionContainer { { InformationAvailable-ExtIEs } } OPTIONAL,
    ...
}

InformationAvailable-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

InformationExchangeID ::= INTEGER (0..1048575)

InformationNotAvailable ::= NULL

InformationReportCharacteristics ::= CHOICE {
    onDemand NULL,
    periodic PeriodicInformation,
    onModification OnModificationInformation,
    ...
}

InformationReportPeriodicity ::= CHOICE {
    min INTEGER (1..60,...),
    -- Unit min, Step lmin
    hour INTEGER (1..24,...),
    -- Unit hour, Step lhour
    ...
}

InformationThreshold ::= CHOICE {
    dGPSThreshold DGPSThreshold,
    ...
}

InformationType ::= SEQUENCE {
    informationTypeItem ENUMERATED {
        gA-AccessPointPositionwithAltitude,
        gA-AccessPointPosition,
    }
}

```

```

    iPDLPParameters,
    gPSInformation,
    dGPSCorrections,
    gPS-RX-POS,
    sFNSFN-GA-AccessPointPosition,
    ...,
    cell-Capacity-Class,
    nACC-Related-Data
  },
  gPSInformation          GPSInformation          OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { InformationType-ExtIEs } }      OPTIONAL,
  ...
}

-- The GPS Information IE shall be present if the Information Exchange Type IE indicates 'GPS Information'
-- For information exchange on the Iur-g interface, only the Cell Capacity Class is used.

InformationType-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

InnerLoopDLPCStatus ::= ENUMERATED {active, inactive}

IPDLParameters ::= CHOICE {
  iPDL-FDD-Parameters      IPDL-FDD-Parameters,
  iPDL-TDD-Parameters      IPDL-TDD-Parameters,    --3.84Mcps TDD only
  ...,
  extension-IPDLParameters Extension-IPDLParameters
}

Extension-IPDLParameters ::= ProtocolIE-Single-Container {{ Extension-IPDLParametersIE }}

Extension-IPDLParametersIE RNSAP-PROTOCOL-IES ::= {
  { ID id-IPDL-TDD-ParametersLCR CRITICALITY reject TYPE IPDL-TDD-ParametersLCR PRESENCE mandatory },
  ...
}

IPDL-FDD-Parameters ::= SEQUENCE {
  iPSpacingFDD      IPSpacingFDD,
  iPLength           IPLength,
  iPOffset           IPOffset,
  seed              Seed,
  burstModeParameters BurstModeParameters OPTIONAL,
  iE-Extensions     ProtocolExtensionContainer { { IPDL-FDD-Parameters-ExtIEs } }      OPTIONAL,
  ...
}

IPDL-FDD-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

IPDL-TDD-Parameters ::= SEQUENCE {
    iPSpacingTDD          IPSpacingTDD,
    iPStart               IPStart,
    iPSlot                IPSlot,
    iP-P-CCPCH           IP-P-CCPCH,
    burstModeParameters  BurstModeParameters OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { IPDL-TDD-Parameters-ExtIEs } } OPTIONAL,
    ...
}

```

-- The *BurstModeParameters* IE shall be included if the Idle Periods are arranged in Burst Mode.

```

IPDL-TDD-Parameters-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

IPDL-TDD-ParametersLCR ::= SEQUENCE {
    iPSpacingTDD          IPSpacingTDD,
    iPStart               IPStart,
    iPSub                 IPSub,
    burstModeParameters  BurstModeParameters OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { IPDL-TDD-ParametersLCR-ExtIEs } } OPTIONAL,
    ...
}

```

-- The *BurstModeParameters* IE shall be included if the Idle Periods are arranged in Burst Mode.

```

IPDL-TDD-ParametersLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

IPLength ::= ENUMERATED {
    ip15,
    ip110,
    ...
}

```

```

IPMulticastAddress ::= BIT STRING (SIZE (128))

```

```

IPOffset ::= INTEGER (0..9)

```

```

IP-P-CCPCH ::= ENUMERATED {
    switchOff-1-Frame,
    switchOff-2-Frames
}

```

```

IPSlot ::= INTEGER (0..14)

```

```

IPSpacingFDD ::= ENUMERATED {

```

```
    ipsF5,
    ipsF7,
    ipsF10,
    ipsF15,
    ipsF20,
    ipsF30,
    ipsF40,
    ipsF50,
    ...
}

IPSpacingTDD ::= ENUMERATED {
    ipsT30,
    ipsT40,
    ipsT50,
    ipsT70,
    ipsT100,
    ...
}

IPStart ::= INTEGER (0..4095)

IPSub ::= ENUMERATED {
    first,
    second,
    both
}

-- J
-- K
-- L

LAC                ::= OCTET STRING (SIZE (2)) --(EXCEPT ('0000'H|'FFFE'H))

LengthOfTFCI2 ::= INTEGER(1..10)

LimitedPowerIncrease ::= ENUMERATED {
    used,
    not-used
}

L3-Information                ::= BIT STRING

Load-Value-IncrDecrThres ::= INTEGER(0..100)

Load-Value ::= INTEGER(0..100)

LoadValue ::= SEQUENCE {
    uplinkLoadValue    INTEGER(0..100),
    downlinkLoadValue  INTEGER(0..100)
}
```

```

}
-- M
MaxNrOfUL-DPCHs ::= INTEGER (1..6)
MAC-c-sh-SDU-Length ::= INTEGER (1..5000)
MAC-c-sh-SDU-LengthList ::= SEQUENCE(SIZE(1..maxNrOfMACcshSDU-Length)) OF MAC-c-sh-SDU-Length
MACdPDU-Size ::= INTEGER (1..5000,...)
MACdPDU-Size-IndexList ::= SEQUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem
MACdPDU-Size-IndexItem ::= SEQUENCE {
    sID SID,
    mACdPDU-Size MACdPDU-Size,
    iE-Extensions ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-ExtIEs } } OPTIONAL,
    ...
}
MACdPDU-Size-IndexItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
MACdPDU-Size-IndexList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify
MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
    sID SID,
    mACdPDU-Size MACdPDU-Size,
    iE-Extensions ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs } } OPTIONAL,
    ...
}
MACdPDU-Size-IndexItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
MACes-Guaranteed-Bitrate ::= INTEGER (0..16777215,...)
MACHsGuaranteedBitRate ::= INTEGER (0..16777215,...)
MACHsReorderingBufferSize-for-RLC-UM ::= INTEGER (0..300,...)
-- Unit kBytes
MAC-hsWindowSize ::= ENUMERATED {v4, v6, v8, v12, v16, v24, v32,...}
MaximumAllowedULTxPower ::= INTEGER (-50..33)
MaxNrDLPhysicalchannels ::= INTEGER (1..224)

```



```
-- 1.28Mcps TDD 97 - 224 are unused

MaxNrDLPhysicalchannelsTS ::= INTEGER (1..16)
MaxNr-Retransmissions-EDCH ::= INTEGER (0..15)

MaxNrTimeslots ::= INTEGER (1..14)
-- 1.28Mcps values 7-14 are unused

MaxNrUL-EDPDCHs ::= ENUMERATED {v1, v2, v4,...}

MaxNrULPhysicalchannels ::= INTEGER (1..2)

MaxTFCIvalue ::= INTEGER (1..1023)

MBMS-Bearer-Service-List ::= SEQUENCE (SIZE (1..maxNrOfMBMSServices)) OF TMGI

MeasurementFilterCoefficient ::= ENUMERATED{k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
-- Measurement Filter Coefficient to be used for measurement

MeasurementID ::= INTEGER (0..1048575)

Measurement-Power-Offset ::= INTEGER(-12 .. 26)
-- Actual value = IE value * 0.5

MinimumSpreadingFactor ::= INTEGER (1..16)

MinULChannelisationCodeLength-EDCH-FDD ::= ENUMERATED {v2, v4, v8, v16, v32, v64,...}

Multi-code-info ::= INTEGER (1..16)

MultipleURAsIndicator ::= ENUMERATED {
    multiple-URAs-exist,
    single-URA-exists
}

MaxAdjustmentStep ::= INTEGER(1..10)
-- Unit Slot

MeasurementChangeTime ::= INTEGER (1..6000,...)
-- The MeasurementChangeTime gives the MeasurementChangeTime
-- in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10 ms

MeasurementHysteresisTime ::= INTEGER (1..6000,...)
-- The MeasurementHysteresisTime gives the
-- MeasurementHysteresisTime in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
```

-- Unit is ms, Step is 10ms

```

MeasurementIncreaseDecreaseThreshold ::= CHOICE {
    sir                               SIR-Value-IncrDecrThres,
    sir-error                         SIR-Error-Value-IncrDecrThres,
    transmitted-code-power            Transmitted-Code-Power-Value-IncrDecrThres,
    rscp                              RSCP-Value-IncrDecrThres,
    round-trip-time                  Round-Trip-Time-IncrDecrThres,
    ...,
    extension-MeasurementIncreaseDecreaseThreshold Extension-MeasurementIncreaseDecreaseThreshold
}

Extension-MeasurementIncreaseDecreaseThreshold ::= ProtocolIE-Single-Container {{ Extension-MeasurementIncreaseDecreaseThresholdIE }}

Extension-MeasurementIncreaseDecreaseThresholdIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Load-Value-IncrDecrThres    CRITICALITY reject TYPE Load-Value-IncrDecrThres    PRESENCE mandatory }|
    { ID id-Transmitted-Carrier-Power-Value-IncrDecrThres    CRITICALITY reject TYPE Transmitted-Carrier-Power-Value-IncrDecrThres    PRESENCE mandatory }|
}|
{ ID id-Received-Total-Wideband-Power-Value-IncrDecrThres    CRITICALITY reject TYPE Received-Total-Wideband-Power-Value-IncrDecrThres    PRESENCE mandatory }|
{ ID id-UL-Timeslot-ISCP-Value-IncrDecrThres    CRITICALITY reject TYPE UL-Timeslot-ISCP-Value-IncrDecrThres    PRESENCE mandatory }|
{ ID id-RT-Load-Value-IncrDecrThres    CRITICALITY reject TYPE RT-Load-Value-IncrDecrThres    PRESENCE mandatory }|
{ ID id-NRT-Load-Information-Value-IncrDecrThres    CRITICALITY reject TYPE NRT-Load-Information-Value-IncrDecrThres    PRESENCE mandatory }|
{ ID id-UpPTSInterferenceValue    CRITICALITY reject TYPE UpPTSInterferenceValue    PRESENCE mandatory }
}

MeasurementRecoveryBehavior ::= NULL

MeasurementRecoveryReportingIndicator ::= NULL

MeasurementRecoverySupportIndicator ::= NULL

MeasurementThreshold ::= CHOICE {
    sir                               SIR-Value,
    sir-error                         SIR-Error-Value,
    transmitted-code-power            Transmitted-Code-Power-Value,
    rscp                              RSCP-Value,
    rx-timing-deviation              Rx-Timing-Deviation-Value,
    round-trip-time                  Round-Trip-Time-Value,
    ...,
    extension-MeasurementThreshold Extension-MeasurementThreshold
}

Extension-MeasurementThreshold ::= ProtocolIE-Single-Container {{ Extension-MeasurementThresholdIE }}

Extension-MeasurementThresholdIE RNSAP-PROTOCOL-IES ::= {
    { ID id-TUTRANGPSMeasurementThresholdInformation    CRITICALITY reject TYPE TUTRANGPSMeasurementThresholdInformation    PRESENCE mandatory }|
    { ID id-SFNFSNMeasurementThresholdInformation    CRITICALITY reject TYPE SFNFSNMeasurementThresholdInformation    PRESENCE mandatory }|
    { ID id-Load-Value    CRITICALITY reject TYPE Load-Value    PRESENCE mandatory }|
    { ID id-Transmitted-Carrier-Power-Value    CRITICALITY reject TYPE Transmitted-Carrier-Power-Value    PRESENCE mandatory }|
}

```

```

{ ID id-Received-Total-Wideband-Power-Value      CRITICALITY reject TYPE Received-Total-Wideband-Power-Value      PRESENCE mandatory } |
{ ID id-UL-Timeslot-ISCP-Value                   CRITICALITY reject TYPE UL-Timeslot-ISCP-Value                   PRESENCE mandatory } |
{ ID id-RT-Load-Value                             CRITICALITY reject TYPE RT-Load-Value                             PRESENCE mandatory } |
{ ID id-NRT-Load-Information-Value               CRITICALITY reject TYPE NRT-Load-Information-Value               PRESENCE mandatory } |
{ ID id-Rx-Timing-Deviation-Value-LCR           CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR           PRESENCE mandatory } |
{ ID id-HS-SICH-Reception-Quality-Measurement-Value CRITICALITY reject TYPE HS-SICH-Reception-Quality-Measurement-Value PRESENCE mandatory } |
{ ID id-UpPTSInterferenceValue                   CRITICALITY reject TYPE UpPTSInterferenceValue                   PRESENCE mandatory } |
}

```

```
MidambleConfigurationBurstType1And3 ::= ENUMERATED {v4, v8, v16}
```

```
MidambleConfigurationBurstType2 ::= ENUMERATED {v3, v6}
```

```
MidambleConfigurationLCR ::= ENUMERATED {v2, v4, v6, v8, v10, v12, v14, v16, ...}
```

```

MidambleShiftAndBurstType ::= CHOICE {
  type1 SEQUENCE {
    midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
    midambleAllocationMode CHOICE {
      defaultMidamble NULL,
      commonMidamble NULL,
      ueSpecificMidamble MidambleShiftLong,
      ...
    },
    ...
  },
  type2 SEQUENCE {
    midambleConfigurationBurstType2 MidambleConfigurationBurstType2,
    midambleAllocationMode CHOICE {
      defaultMidamble NULL,
      commonMidamble NULL,
      ueSpecificMidamble MidambleShiftShort,
      ...
    },
    ...
  },
  type3 SEQUENCE {
    midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
    midambleAllocationMode CHOICE {
      defaultMidamble NULL,
      ueSpecificMidamble MidambleShiftLong,
      ...
    },
    ...
  },
  ...
}

```

```
MidambleShiftLong ::= INTEGER (0..15)
```

```
MidambleShiftShort ::= INTEGER (0..5)

MidambleShiftLCR ::= SEQUENCE {
    midambleAllocationMode MidambleAllocationMode,
    midambleShift           MidambleShiftLong OPTIONAL,
    -- The IE shall be present if the Midamble Allocation Mode IE is set to "UE specific midamble".
    midambleConfigurationLCR MidambleConfigurationLCR,
    iE-Extensions           ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} } OPTIONAL,
    ...
}

MidambleAllocationMode ::= ENUMERATED {
    defaultMidamble,
    commonMidamble,
    uESpecificMidamble,
    ...
}

MidambleShiftLCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MinUL-ChannelisationCodeLength ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256
}

ModifyPriorityQueue ::= CHOICE {
    addPriorityQueue      PriorityQueue-InfoItem-to-Add,
    modifyPriorityQueue   PriorityQueue-InfoItem-to-Modify,
    deletePriorityQueue  PriorityQueue-Id,
    ...
}

Modulation ::= ENUMERATED {
    qPSK,
    eightPSK,
    ...
}

MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
}
```

```

MACHs-ResetIndicator ::= ENUMERATED{
    mACHs-NotReset
}

-- N

NACC-Related-Data ::= SEQUENCE {
    gERAN-SI-Type          GERAN-SI-Type,
    iE-Extensions          ProtocolExtensionContainer { {NACC-Related-Data-ExtIEs} } OPTIONAL,
    ...
}

NACC-Related-Data-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Nack-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [21] subclause 4.2.1

NCC ::= BIT STRING (SIZE (3))

Neighbouring-UMTS-CellInformation ::= SEQUENCE (SIZE (1..maxNrOfNeighbouringRNCs)) OF ProtocolIE-Single-Container {{ Neighbouring-UMTS-CellInformationItemIE }}

Neighbouring-UMTS-CellInformationItemIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Neighbouring-UMTS-CellInformationItem CRITICALITY ignore TYPE Neighbouring-UMTS-CellInformationItem PRESENCE mandatory }
}

Neighbouring-UMTS-CellInformationItem ::= SEQUENCE {
    rNC-ID                RNC-ID,
    cN-PS-DomainIdentifier CN-PS-DomainIdentifier OPTIONAL,
    cN-CS-DomainIdentifier CN-CS-DomainIdentifier OPTIONAL,
    neighbouring-FDD-CellInformation Neighbouring-FDD-CellInformation OPTIONAL,
    neighbouring-TDD-CellInformation Neighbouring-TDD-CellInformation OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {Neighbouring-UMTS-CellInformationItem-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-UMTS-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-neighbouring-LCR-TDD-CellInformation CRITICALITY ignore EXTENSION Neighbouring-LCR-TDD-CellInformation PRESENCE optional },
    ...
}

Neighbouring-FDD-CellInformation ::= SEQUENCE ( SIZE (1..maxNrOfFDDNeighboursPerRNC,...)) OF Neighbouring-FDD-CellInformationItem

Neighbouring-FDD-CellInformationItem ::= SEQUENCE {
    c-ID                C-ID,
    uARFCNforNu          UARFCN,

```

```

    uARFCNforNd          UARFCN,
    frameOffset         FrameOffset          OPTIONAL,
    primaryScramblingCode PrimaryScramblingCode,
    primaryCPICH-Power  PrimaryCPICH-Power   OPTIONAL,
    cellIndividualOffset CellIndividualOffset OPTIONAL,
    txDiversityIndicator TxDiversityIndicator,
    sTTD-SupportIndicator STTD-SupportIndicator OPTIONAL,
    closedLoopModel-SupportIndicator ClosedLoopModel-SupportIndicator OPTIONAL,
    closedLoopMode2-SupportIndicator ClosedLoopMode2-SupportIndicator OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { { Neighbouring-FDD-CellInformationItem-ExtIEs } } OPTIONAL,
    ...
}

Neighbouring-FDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-RestrictionStateIndicator          CRITICALITY ignore          EXTENSION RestrictionStateIndicator  PRESENCE optional }|
  { ID id-DPC-Mode-Change-SupportIndicator   CRITICALITY ignore          EXTENSION DPC-Mode-Change-SupportIndicator  PRESENCE optional }|
  { ID id-CoverageIndicator                  CRITICALITY ignore          EXTENSION CoverageIndicator             PRESENCE optional }|
  { ID id-AntennaColocationIndicator         CRITICALITY ignore          EXTENSION AntennaColocationIndicator     PRESENCE optional }|
  { ID id-HCS-Prio                          CRITICALITY ignore          EXTENSION HCS-Prio                      PRESENCE optional }|
  { ID id-CellCapabilityContainer-FDD        CRITICALITY ignore          EXTENSION CellCapabilityContainer-FDD    PRESENCE optional }|
  { ID id-SNA-Information                    CRITICALITY ignore          EXTENSION SNA-Information                PRESENCE optional },
  ...
}

NeighbouringFDDCellMeasurementInformation ::= SEQUENCE {
  uC-ID          UC-ID,
  uARFCN         UARFCN,
  primaryScramblingCode PrimaryScramblingCode,
  iE-Extensions  ProtocolExtensionContainer { { NeighbouringFDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL,
  ...
}

NeighbouringFDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

Neighbouring-GSM-CellInformation ::= ProtocolIE-Single-Container {{ Neighbouring-GSM-CellInformationIE }}

Neighbouring-GSM-CellInformationIE RNSAP-PROTOCOL-IES ::= {
  { ID id-Neighbouring-GSM-CellInformation CRITICALITY ignore TYPE Neighbouring-GSM-CellInformationIEs PRESENCE mandatory }
}

Neighbouring-GSM-CellInformationIEs ::= SEQUENCE ( SIZE (1..maxNrOfGSMNeighboursPerRNC,...)) OF Neighbouring-GSM-CellInformationItem

Neighbouring-GSM-CellInformationItem ::= SEQUENCE {
  CGI          CGI,
  cellIndividualOffset CellIndividualOffset OPTIONAL,
  bSIC         BSIC,
  band-Indicator Band-Indicator,
  bCCH-ARFCN  BCCH-ARFCN,
}

```

```

    iE-Extensions          ProtocolExtensionContainer { { Neighbouring-GSM-CellInformationItem-ExtIEs} } OPTIONAL,
    ...
}

Neighbouring-GSM-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-CoverageIndicator          CRITICALITY ignore          EXTENSION CoverageIndicator          PRESENCE optional } |
  { ID id-AntennaColocationIndicator CRITICALITY ignore          EXTENSION AntennaColocationIndicator PRESENCE optional } |
  { ID id-HCS-Prio                   CRITICALITY ignore          EXTENSION HCS-Prio                   PRESENCE optional } |
  { ID id-SNA-Information            CRITICALITY ignore          EXTENSION SNA-Information            PRESENCE optional } |
  { ID id-GERAN-Cell-Capability      CRITICALITY ignore          EXTENSION GERAN-Cell-Capability      PRESENCE optional } |
  { ID id-GERAN-Classmark            CRITICALITY ignore          EXTENSION GERAN-Classmark            PRESENCE optional } |
  { ID id-ExtendedGSMCellIndividualOffset CRITICALITY ignore          EXTENSION ExtendedGSMCellIndividualOffset PRESENCE optional },
  ...
}

Neighbouring-TDD-CellInformation ::= SEQUENCE ( SIZE (1..maxNrOfTDDNeighboursPerRNC,...)) OF Neighbouring-TDD-CellInformationItem

Neighbouring-TDD-CellInformationItem ::= SEQUENCE {
  c-ID                      C-ID,
  uARFCNforNt              UARFCN,
  frameOffset              FrameOffset          OPTIONAL,
  cellParameterID         CellParameterID,
  syncCase                 SyncCase,
  timeSlot                 TimeSlot            OPTIONAL
  -- This IE shall be present if Sync Case = Case1 -- ,
  sCH-TimeSlot             SCH-TimeSlot        OPTIONAL
  -- This IE shall be present if Sync Case = Case2 -- ,
  sCTD-Indicator           SCTD-Indicator,
  cellIndividualOffset     CellIndividualOffset OPTIONAL,
  dPCHConstantValue       DPCHConstantValue   OPTIONAL,
  pCCPCH-Power            PCCPCH-Power        OPTIONAL,
  iE-Extensions           ProtocolExtensionContainer { { Neighbouring-TDD-CellInformationItem-ExtIEs} } OPTIONAL,
  ...
}

Neighbouring-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-RestrictionStateIndicator CRITICALITY ignore          EXTENSION RestrictionStateIndicator PRESENCE optional } |
  { ID id-CoverageIndicator          CRITICALITY ignore          EXTENSION CoverageIndicator          PRESENCE optional } |
  { ID id-AntennaColocationIndicator CRITICALITY ignore          EXTENSION AntennaColocationIndicator PRESENCE optional } |
  { ID id-HCS-Prio                   CRITICALITY ignore          EXTENSION HCS-Prio                   PRESENCE optional } |
  { ID id-CellCapabilityContainer-TDD CRITICALITY ignore          EXTENSION CellCapabilityContainer-TDD PRESENCE optional } |
  { ID id-SNA-Information            CRITICALITY ignore          EXTENSION SNA-Information            PRESENCE optional },
  ...
}

NeighbouringTDDCellMeasurementInformation ::= SEQUENCE {
  uC-ID                    UC-ID,
  uARFCN                   UARFCN,
  cellParameterID         CellParameterID,
  timeSlot                 TimeSlot            OPTIONAL,

```

```

midambleShiftAndBurstType      MidambleShiftAndBurstType  OPTIONAL,
iE-Extensions                    ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationItem-ExtIEs } } OPTIONAL,
...
}

NeighbouringTDDCellMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

NeighbouringTDDCellMeasurementInformationLCR ::= SEQUENCE {
uC-ID                            UC-ID,
uARFCN                          UARFCN,
cellParameterID                 CellParameterID,
timeSlotLCR                     TimeSlotLCR                OPTIONAL,
midambleShiftLCR                MidambleShiftLCR         OPTIONAL,
iE-Extensions                    ProtocolExtensionContainer { { NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs } } OPTIONAL,
...
}

NeighbouringTDDCellMeasurementInformationLCRItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

Neighbouring-LCR-TDD-CellInformation ::= SEQUENCE (SIZE (1.. maxNrOfLCR-TDD-NeighboursPerRNC,...)) OF Neighbouring-LCR-TDD-CellInformationItem

Neighbouring-LCR-TDD-CellInformationItem ::= SEQUENCE {
c-ID                            C-ID,
uARFCNforNt                     UARFCN,
frameOffset                     FrameOffset                OPTIONAL,
cellParameterID                 CellParameterID,
sCTD-Indicator                  SCTD-Indicator,
cellIndividualOffset            CellIndividualOffset     OPTIONAL,
dPCHConstantValue              DPCHConstantValue       OPTIONAL,
pCCPCH-Power                    PCCPCH-Power            OPTIONAL,
restrictionStateIndicator       RestrictionStateIndicator OPTIONAL,
iE-Extensions                    ProtocolExtensionContainer { { Neighbouring-LCR-TDD-CellInformationItem-ExtIEs } } OPTIONAL,
...
}

Neighbouring-LCR-TDD-CellInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-CoverageIndicator        CRITICALITY ignore     EXTENSION  CoverageIndicator        PRESENCE optional }|
{ ID id-AntennaColocationIndicator CRITICALITY ignore     EXTENSION  AntennaColocationIndicator PRESENCE optional }|
{ ID id-HCS-Prio                 CRITICALITY ignore     EXTENSION  HCS-Prio                 PRESENCE optional }|
{ ID id-CellCapabilityContainer-TDD-LCR CRITICALITY ignore     EXTENSION  CellCapabilityContainer-TDD-LCR PRESENCE optional }|
{ ID id-SNA-Information          CRITICALITY ignore     EXTENSION  SNA-Information          PRESENCE optional },
...
}

NrOfDLchannelisationcodes ::= INTEGER (1..8)

```



```
NrOfTransportBlocks ::= INTEGER (0..512)

NRT-Load-Information-Value-IncrDecrThres ::= INTEGER(0..3)

NRT-Load-Information-Value ::= INTEGER(0..3)

NRTLInformationValue ::= SEQUENCE {
    uplinkNRTLInformationValue    INTEGER(0..3),
    downlinkNRTLInformationValue  INTEGER(0..3)
}

-- O

OnModification ::= SEQUENCE {
    measurementThreshold    MeasurementThreshold,
    iE-Extensions           ProtocolExtensionContainer { {OnModification-ExtIEs} } OPTIONAL,
    ...
}

OnModification-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

OnModificationInformation ::= SEQUENCE {
    informationThreshold    InformationThreshold    OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { {OnModificationInformation-ExtIEs} } OPTIONAL,
    ...
}

OnModificationInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- P

PagingCause ::= ENUMERATED {
    terminating-conversational-call,
    terminating-streaming-call,
    terminating-interactive-call,
    terminating-background-call,
    terminating-low-priority-signalling,
    ...,
    terminating-high-priority-signalling,
    terminating-cause-unknown
}

-- See in [16]

PagingRecordType ::= ENUMERATED {
```

```

    imsi-gsm-map,
    tmsi-gsm-map,
    p-tmsi-gsm-map,
    imsi-ds-41,
    tmsi-ds-41,
    ...
}
-- See in [16]

PartialReportingIndicator ::= ENUMERATED {
    partial-reporting-allowed
}

PayloadCRC-PresenceIndicator ::= ENUMERATED {
    crc-included,
    crc-not-included
}

PCCPCH-Power ::= INTEGER (-150..400,...)
-- PCCPCH-power = power * 10
-- If power <= -15 PCCPCH shall be set to -150
-- If power >= 40 PCCPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step 0.1dBm

PCH-InformationList ::= SEQUENCE (SIZE(0..1)) OF PCH-InformationItem

PCH-InformationItem ::= SEQUENCE {
    transportFormatSet      TransportFormatSet,
    iE-Extensions           ProtocolExtensionContainer { { PCH-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

PCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PC-Preamble ::= INTEGER(0..7,...)

PDSCHCodeMapping ::= SEQUENCE {
    dL-ScramblingCode      DL-ScramblingCode,
    signallingMethod        PDSCHCodeMapping-SignallingMethod,
    iE-Extensions           ProtocolExtensionContainer { { PDSCHCodeMapping-ExtIEs } } OPTIONAL,
    ...
}

PDSCHCodeMapping-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHCodeMapping-SignallingMethod ::= CHOICE {

```

```

pDSCHCodeMapping-SignallingMethod-CodeRange      PDSCHCodeMapping-SignallingMethod-CodeRange,
pDSCHCodeMapping-SignallingMethod-TFCIRange      PDSCHCodeMapping-SignallingMethod-TFCIRange,
pDSCHCodeMapping-SignallingMethod-Explicit      PDSCHCodeMapping-SignallingMethod-Explicit,
...
pDSCHCodeMapping-SignallingMethod-Replace      PDSCHCodeMapping-SignallingMethod-Replace
}

PDSCHCodeMapping-SignallingMethod-CodeRange ::= SEQUENCE (SIZE (1..maxNoCodeGroups)) OF
SEQUENCE {
    spreadingFactor      SpreadingFactor,
    multi-code-info      Multi-code-info,
    start-CodeNumber     CodeNumber,
    stop-CodeNumber      CodeNumber,
    iE-Extensions        ProtocolExtensionContainer { { PDSCHCodeMapping-SignallingMethod-CodeRange-ExtIEs } } OPTIONAL,
    ...
}

PDSCHCodeMapping-SignallingMethod-CodeRange-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHCodeMapping-SignallingMethod-TFCIRange ::= SEQUENCE (SIZE (1..maxNoTFCIGroups)) OF
SEQUENCE {
    maxTFCIvalue         MaxTFCIvalue,
    spreadingFactor      SpreadingFactor,
    multi-code-info      Multi-code-info,
    codeNumber           CodeNumber,
    iE-Extensions        ProtocolExtensionContainer { { PDSCHCodeMapping-SignallingMethod-TFCIRange-ExtIEs } } OPTIONAL,
    ...
}

PDSCHCodeMapping-SignallingMethod-TFCIRange-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHCodeMapping-SignallingMethod-Explicit ::= SEQUENCE (SIZE (1..maxTFCI2Combs)) OF
SEQUENCE {
    spreadingFactor      SpreadingFactor,
    multi-code-info      Multi-code-info,
    codeNumber           CodeNumber,
    iE-Extensions        ProtocolExtensionContainer { { PDSCHCodeMapping-SignallingMethod-Explicit-ExtIEs } } OPTIONAL,
    ...
}

PDSCHCodeMapping-SignallingMethod-Explicit-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PDSCHCodeMapping-SignallingMethod-Replace ::= SEQUENCE (SIZE (1..maxTFCI2Combs)) OF
SEQUENCE {

```

```

    tfci-Field2                TFCS-MaxTFCI-field2-Value,
    spreadingFactor            SpreadingFactor,
    multi-CodeInfo             Multi-code-info,
    codeNumber                 CodeNumber,
    iE-Extensions              ProtocolExtensionContainer { { PDSCHCodeMapping-SignallingMethod-Replace-ExtIEs } } OPTIONAL,
    ...
}

PDSCHCodeMapping-SignallingMethod-Replace-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Periodic ::= SEQUENCE {
    reportPeriodicity          ReportPeriodicity,
    iE-Extensions              ProtocolExtensionContainer { {Periodic-ExtIEs} } OPTIONAL,
    ...
}

Periodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

PeriodicInformation ::= SEQUENCE {
    informationReportPeriodicity InformationReportPeriodicity,
    iE-Extensions              ProtocolExtensionContainer { {PeriodicInformation-ExtIEs} } OPTIONAL,
    ...
}

PeriodicInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Permanent-NAS-UE-Identity ::= CHOICE {
    imsi                       IMSI,
    ...
}

Phase-Reference-Update-Indicator ::= ENUMERATED {
    phase-reference-needs-to-be-changed
}

PLMN-Identity ::= OCTET STRING (SIZE(3))

PowerAdjustmentType ::= ENUMERATED {
    none,
    common,
    individual
}

PowerOffset ::= INTEGER (0..24)

```

```
PRC ::= INTEGER (-2047..2047)
--pseudo range correction; scaling factor 0.32 meters

PRCDeviation ::= ENUMERATED {
    prcd1,
    prcd2,
    prcd5,
    prcd10,
    ...
}

Pre-emptionCapability ::= ENUMERATED {
    shall-not-trigger-pre-emption,
    may-trigger-pre-emption
}

Pre-emptionVulnerability ::= ENUMERATED {
    not-pre-emptable,
    pre-emptable
}

PredictedSFNSFNDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

PredictedTUTRANGPSDeviationLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

PrimaryCPICH-Power ::= INTEGER (-100..500)
-- step 0.1 (Range -10.0..50.0) Unit is dBm

PrimaryCPICH-EcNo ::= INTEGER (-30..30)

Primary-CPICH-Usage-For-Channel-Estimation ::= ENUMERATED {
    primary-CPICH-may-be-used,
    primary-CPICH-shall-not-be-used
}

PrimaryCCPCH-RSCP ::= INTEGER (0..91)
-- Mapping of Non Negative values according to mapping in [24]

PrimaryCCPCH-RSCP-Delta ::= INTEGER (-5..-1,...)
-- Mapping of Negative values according to mapping in [24]

PrimaryScramblingCode ::= INTEGER (0..511)

PriorityLevel ::= INTEGER (0..15)
-- 0 = spare, 1 = highest priority, ...14 = lowest priority and 15 = no priority

PriorityQueue-Id ::= INTEGER (0..maxNrOfPrioQueues-1)
```

PriorityQueue-InfoList ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem

```
PriorityQueue-InfoItem ::= SEQUENCE {
  priorityQueue-Id          PriorityQueue-Id,
  associatedHSDSCH-MACdFlow  HSDSCH-MACdFlow-ID,
  schedulingPriorityIndicator SchedulingPriorityIndicator,
  t1                        T1,
  discardTimer              DiscardTimer          OPTIONAL,
  mAC-hsWindowSize          MAC-hsWindowSize,
  mAChsGuaranteedBitRate    MACHsGuaranteedBitRate  OPTIONAL,
  mACdPDU-Size-Index        MACdPDU-Size-IndexList,
  rLC-Mode                  RLC-Mode,
  iE-Extensions             ProtocolExtensionContainer { { PriorityQueue-InfoItem-ExtIEs } }  OPTIONAL,
  ...
}
```

```
PriorityQueue-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

PriorityQueue-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPrioQueues)) OF ModifyPriorityQueue

```
PriorityQueue-InfoItem-to-Add ::= SEQUENCE {
  priorityQueue-Id          PriorityQueue-Id,
  associatedHSDSCH-MACdFlow  HSDSCH-MACdFlow-ID,
  schedulingPriorityIndicator SchedulingPriorityIndicator,
  t1                        T1,
  discardTimer              DiscardTimer          OPTIONAL,
  mAC-hsWindowSize          MAC-hsWindowSize,
  mAChsGuaranteedBitRate    MACHsGuaranteedBitRate  OPTIONAL,
  mACdPDU-Size-Index        MACdPDU-Size-IndexList,
  rLC-Mode                  RLC-Mode,
  iE-Extensions             ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Add-ExtIEs } }  OPTIONAL,
  ...
}
```

```
PriorityQueue-InfoItem-to-Add-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
PriorityQueue-InfoItem-to-Modify ::= SEQUENCE {
  priorityQueue-Id          PriorityQueue-Id,
  schedulingPriorityIndicator SchedulingPriorityIndicator  OPTIONAL,
  t1                        T1                            OPTIONAL,
  discardTimer              DiscardTimer                  OPTIONAL,
  mAC-hsWindowSize          MAC-hsWindowSize              OPTIONAL,
  mAChsGuaranteedBitRate    MACHsGuaranteedBitRate        OPTIONAL,
  mACdPDU-Size-Index-to-Modify MACdPDU-Size-IndexList-to-Modify  OPTIONAL,
  iE-Extensions             ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Modify-ExtIEs } }  OPTIONAL,
}
```

```

}
...
}
PriorityQueue-InfoItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
PriorityQueue-InfoList-to-Modify-Unsynchronised ::= SEQUENCE (SIZE (0..maxNrOfPrioQueues)) OF PriorityQueue-InfoItem-to-Modify-Unsynchronised
PriorityQueue-InfoItem-to-Modify-Unsynchronised ::= SEQUENCE {
  priorityQueueId          PriorityQueue-Id,
  schedulingPriorityIndicator SchedulingPriorityIndicator OPTIONAL,
  discardTimer             DiscardTimer OPTIONAL,
  mChsGuaranteedBitRate   MACHsGuaranteedBitRate OPTIONAL,
  iE-Extensions           ProtocolExtensionContainer { { PriorityQueue-InfoItem-to-Modify-Unsynchronised-ExtIEs } } OPTIONAL,
  ...
}
PriorityQueue-InfoItem-to-Modify-Unsynchronised-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
PropagationDelay          ::= INTEGER (0..255)
PunctureLimit             ::= INTEGER (0..15)
-- 0: 40%; 1: 44%; ... 14: 96%; 15: 100
-- Q
QE-Selector ::= ENUMERATED {
  selected,
  non-selected
}
Qth-Parameter ::= INTEGER (-20..0)
-- Unit dB, Step 1dB
-- R
RAC                      ::= OCTET STRING (SIZE(1))
RANAP-RelocationInformation ::= BIT STRING
Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s
RateMatchingAttribute     ::= INTEGER (1..maxRateMatching)
RB-Identity               ::= INTEGER (0..31)

```

```

RB-Info ::= SEQUENCE (SIZE(1..maxNoOfRB)) OF RB-Identity

Received-Total-Wideband-Power-Value ::= Received-total-wide-band-power

Received-Total-Wideband-Power-Value-IncrDecrThres ::= INTEGER(0..620)
-- Unit dB Step 0.1dB
-- e.g. value 100 means 10dB

RefTFCNumber ::= INTEGER (0..15)

RepetitionLength          ::= INTEGER (1..63)

RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64
}

RepetitionNumber0 ::= INTEGER (0..255)

RepetitionNumber1 ::= INTEGER (1..256)

ReportCharacteristics ::= CHOICE {
    onDemand          NULL,
    periodic          Periodic,
    eventA            EventA,
    eventB            EventB,
    eventC            EventC,
    eventD            EventD,
    eventE            EventE,
    eventF            EventF,
    ...,
    extension-ReportCharacteristics  Extension-ReportCharacteristics
}

Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}

Extension-ReportCharacteristicsIE RNSAP-PROTOCOL-IES ::= {
    { ID id-OnModification CRITICALITY reject TYPE OnModification PRESENCE mandatory }
}

ReportPeriodicity ::= CHOICE {
    ten-msec          INTEGER (1..6000,...),
    -- The Report Periodicity gives the reporting periodicity in number of 10 ms periods.
    -- E.g. value 6000 means 60000ms (i.e. 1min)
    -- Unit ms, Step 10ms

```



```

    min                INTEGER (1..60,...),
-- Unit min, Step lmin
    ...
}

RequestedDataValue ::= SEQUENCE {
    gA-AccessPointPositionwithAltitude    GA-AccessPointPositionwithOptionalAltitude    OPTIONAL,
    iPDLParameters                        IPDLParameters                        OPTIONAL,
    dGPSCorrections                       DGPSCorrections                       OPTIONAL,
    gPS-NavigationModel-and-TimeRecovery   GPS-NavigationModel-and-TimeRecovery   OPTIONAL,
    gPS-Ionospheric-Model                 GPS-Ionospheric-Model                 OPTIONAL,
    gPS-UTC-Model                         GPS-UTC-Model                         OPTIONAL,
    gPS-Almanac                           GPS-Almanac                           OPTIONAL,
    gPS-RealTime-Integrity                 GPS-RealTime-Integrity                 OPTIONAL,
    gPS-RX-POS                            GPS-RX-POS                            OPTIONAL,
    sFNSFN-GA-AccessPointPosition         GA-AccessPointPositionwithOptionalAltitude    OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { RequestedDataValue-ExtIEs} }    OPTIONAL,
    ...
}

RequestedDataValue-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Cell-Capacity-Class-Value    CRITICALITY ignore    EXTENSION Cell-Capacity-Class-Value    PRESENCE mandatory }|
    { ID id-NACC-Related-Data            CRITICALITY ignore    EXTENSION NACC-Related-Data            PRESENCE optional },
    ...
}

RequestedDataValueInformation ::= CHOICE {
    informationAvailable                InformationAvailable,
    informationNotAvailable              InformationNotAvailable
}

RestrictionStateIndicator ::= ENUMERATED {
    cellNotResevedForOperatorUse,
    cellResevedForOperatorUse,
    ...
}

RL-ID ::= INTEGER (0..31)

RL-Set-ID ::= INTEGER (0..31)

RL-Specific-DCH-Info ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF RL-Specific-DCH-Info-Item

RL-Specific-DCH-Info-Item ::= SEQUENCE {
    dCH-id                DCH-ID,
    bindingID              BindingID OPTIONAL,
    -- Shall be ignored if bearer establishment with ALCAP.
    transportLayerAddress  TransportLayerAddress    OPTIONAL,
    -- Shall be ignored if bearer establishment with ALCAP.
    iE-Extensions          ProtocolExtensionContainer { { RL-Specific-DCH-Info-Item-ExtIEs} }    OPTIONAL,
}

```

```

}
...
}
RL-Specific-DCH-Info-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
RL-Specific-EDCH-Information ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF RL-Specific-EDCH-InfoItem
RL-Specific-EDCH-InfoItem ::= SEQUENCE {
eDCH-MACdFlow-ID EDCH-MACdFlow-ID,
bindingID BindingID OPTIONAL,
-- Shall be ignored if bearer establishment with ALCAP.
transportLayerAddress TransportLayerAddress OPTIONAL,
-- Shall be ignored if bearer establishment with ALCAP.
iE-Extensions ProtocolExtensionContainer { { RL-Specific-EDCH-Info-Item-ExtIEs } } OPTIONAL,
...
}
RL-Specific-EDCH-Info-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}
RLC-Mode ::= ENUMERATED {
rLC-AM,
rLC-UM,
...
}
RNC-ID ::= INTEGER (0..4095)
Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)
Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [23]
RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [24]
RSCP-Value-IncrDecrThres ::= INTEGER (0..126)
Received-total-wide-band-power ::= INTEGER (0..621)
-- According to mapping in [23]
RT-Load-Value-IncrDecrThres ::= INTEGER(0..100)
RT-Load-Value ::= INTEGER(0..100)
RTLoadValue ::= SEQUENCE {
uplinkRTLoadValue INTEGER(0..100),

```

```

        downlinkRTLoadValue      INTEGER(0..100)
    }

RxTimingDeviationForTA          ::= INTEGER (0..127)
-- As specified in [5], ch. 6.2.7.6
-- For 1.28Mcps TDD this IE must be set to 0.

Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
--According to mapping in [24][3.84Mcps TDD only]

Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..511)
--According to mapping in [24][1.28Mcps TDD only]

-- S

SAC                             ::= OCTET STRING (SIZE (2))

SAI ::= SEQUENCE {
    pLMN-Identity      PLMN-Identity,
    lAC                LAC,
    sAC                SAC,
    iE-Extensions      ProtocolExtensionContainer { {SAI-ExtIEs} } OPTIONAL
}

SAI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SAT-ID ::= INTEGER (0..63)

SCH-TimeSlot                ::= INTEGER (0..6)

ScaledAdjustmentRatio      ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100

Secondary-CCPCH-Info ::= SEQUENCE {
    fDD-S-CCPCH-Offset      FDD-S-CCPCH-Offset,
    dl-ScramblingCode        DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                  TFCS,
    secondaryCCPCH-SlotFormat SecondaryCCPCH-SlotFormat,
    tFCI-Presence            TFCI-Presence OPTIONAL,
    -- This IE shall be present only if the Secondary CCPCH Slot Format IE is equal to any of the values from 8 to 17
    multiplexingPosition     MultiplexingPosition,
    sTTD-Indicator          STTD-Indicator,
    fACH-PCH-InformationList FACH-PCH-InformationList,
    iB-schedulingInformation IB-SchedulingInformation,
    iE-Extensions            ProtocolExtensionContainer { { Secondary-CCPCH-Info-ExtIEs} } OPTIONAL,
    ...
}

```

```

Secondary-CCPCH-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-Info-TDD ::= SEQUENCE {
    dl-TFCS                TFCS,
    tFCI-Coding            TFCI-Coding,
    secondary-CCPCH-TDD-InformationList Secondary-CCPCH-TDD-InformationList,
    fACH-InformationList   FACH-InformationList,
    pCH-InformationList    PCH-InformationList,
    iE-Extensions         ProtocolExtensionContainer { { Secondary-CCPCH-Info-TDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CPICH-Information ::= SEQUENCE {
    dl-ScramblingCode      DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    iE-Extensions         ProtocolExtensionContainer { { Secondary-CPICH-Information-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CPICH-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CPICH-Information-Change ::= CHOICE {
    new-secondary-CPICH      Secondary-CPICH-Information,
    secondary-CPICH-shall-not-be-used NULL,
    ...
}

Secondary-LCR-CCPCH-Info-TDD ::= SEQUENCE {
    dl-TFCS                TFCS,
    tFCI-Coding            TFCI-Coding,
    secondary-LCR-CCPCH-TDD-InformationList Secondary-LCR-CCPCH-TDD-InformationList,
    fACH-InformationList   FACH-InformationList,
    pCH-InformationList    PCH-InformationList,
    iE-Extensions         ProtocolExtensionContainer { { Secondary-LCR-CCPCH-Info-TDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-LCR-CCPCH-Info-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

Secondary-CCPCH-TDD-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-CCPCH-TDD-InformationItem

```

Secondary-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    midambleShiftAndBurstType  MidambleShiftAndBurstType,
    tFCI-Presence            TFCI-Presence,
    secondary-CCPCH-TDD-Code-Information  Secondary-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset  TDD-PhysicalChannelOffset,
    repetitionLength          RepetitionLength,
    repetitionPeriod          RepetitionPeriod,
    iE-Extensions             ProtocolExtensionContainer { { Secondary-CCPCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

```

```

Secondary-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

Secondary-LCR-CCPCH-TDD-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-LCR-CCPCH-TDD-InformationItem

```

Secondary-LCR-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlotLCR              TimeSlotLCR,
    midambleShiftLCR         MidambleShiftLCR,
    tFCI-Presence            TFCI-Presence,
    secondary-LCR-CCPCH-TDD-Code-Information  Secondary-LCR-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset  TDD-PhysicalChannelOffset,
    repetitionLength          RepetitionLength,
    repetitionPeriod          RepetitionPeriod,
    iE-Extensions             ProtocolExtensionContainer { { Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

```

```

Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

Secondary-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs)) OF Secondary-CCPCH-TDD-Code-InformationItem

```

Secondary-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCode    TDD-ChannelisationCode,
    iE-Extensions             ProtocolExtensionContainer { {Secondary-CCPCH-TDD-Code-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

```

```

Secondary-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

Secondary-LCR-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs)) OF Secondary-LCR-CCPCH-TDD-Code-InformationItem

```

Secondary-LCR-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCodeLCR          TDD-ChannelisationCodeLCR,
    s-CCPCH-TimeSlotFormat-LCR        TDD-DL-DPCH-TimeSlotFormat-LCR,
    iE-Extensions                      ProtocolExtensionContainer { {Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeslot-related,
    ...
}

Seed ::= INTEGER (0..63)

Service-ID ::= OCTET STRING (SIZE (3))

SFN ::= INTEGER (0..4095)

SFNSFN-FDD ::= INTEGER(0..614399)

SFNSFN-TDD ::= INTEGER(0..40961)

GA-AccessPointPositionwithOptionalAltitude ::= SEQUENCE {
    geographicalCoordinate             GeographicalCoordinate,
    altitudeAndDirection               GA-AltitudeAndDirection OPTIONAL,
    iE-Extensions                      ProtocolExtensionContainer { { GA-AccessPointPositionwithOptionalAltitude-ExtIEs} } OPTIONAL,
    ...
}

GA-AccessPointPositionwithOptionalAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

SFNSFNDriftRate ::= INTEGER (-100..100)
-- Unit chip/s, Step 1/256 chip/s, Range -100/256..+100/256 chip/s

SFNSFNDriftRateQuality ::= INTEGER (0..100)
-- Unit chip/s, Step 1/256 chip/s, Range 0..100/256 chip/s

SFNSFNMeasurementThresholdInformation ::= SEQUENCE {
    sFNSFNChangeLimit                 SFNSFNChangeLimit                OPTIONAL,
    predictedSFNSFNDeviationLimit      PredictedSFNSFNDeviationLimit    OPTIONAL,

```

```

    iE-Extensions          ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs} }    OPTIONAL,
  ...
}

SFNSFNMeasurementThresholdInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

SFNSFNMeasurementValueInformation ::= SEQUENCE {
  successfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation    SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
  SEQUENCE {
    uC-ID          UC-ID,
    sFNSFNValue    SFNSFNValue,
    sFNSFNQuality  SFNSFNQuality          OPTIONAL,
    sFNSFNDriftRate SFNSFNDriftRate,
    sFNSFNDriftRateQuality SFNSFNDriftRateQuality    OPTIONAL,
    sFNSFNTimeStampInformation SFNSFNTimeStampInformation,
    iE-Extensions  ProtocolExtensionContainer { {
  SuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs} }    OPTIONAL,
  ...
  },
  unsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation    SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
  SEQUENCE {
    uC-ID          UC-ID,
    iE-Extensions  ProtocolExtensionContainer { { UnsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-
ExtIEs} }    OPTIONAL,
  ...
  },
  iE-Extensions  ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs} }    OPTIONAL,
  ...
}

SFNSFNMeasurementValueInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

SuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

UnsuccessfulNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

SFNSFNQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

```

```

SFNSFNTimeStampInformation ::= CHOICE {
    sFNSFNTimeStamp-FDD      SFN,
    sFNSFNTimeStamp-TDD      SFNSFNTimeStamp-TDD,
    ...
}

SFNSFNTimeStamp-TDD ::= SEQUENCE {
    sFN                      SFN,
    timeSlot                 TimeSlot,
    iE-Extensions            ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs}} OPTIONAL,
    ...
}

SFNSFNTimeStamp-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNValue ::= CHOICE {
    sFNSFN-FDD              SFNSFN-FDD,
    sFNSFN-TDD              SFNSFN-TDD,
    ...
}

SID ::= INTEGER (0..maxNrOfPDUIndexes-1)

SIR-Error-Value           ::= INTEGER (0..125)

SIR-Error-Value-IncrDecrThres           ::= INTEGER (0..124)

SIR-Value                 ::= INTEGER (0..63)
-- According to mapping in [11]/[14]

SIR-Value-IncrDecrThres ::= INTEGER (0..62)

SecondaryCCPCH-SlotFormat           ::= INTEGER (0..17,...)
-- refer to [8]

S-FieldLength              ::= ENUMERATED {
    v1,
    v2,
    ...
}

SNA-Information ::= SEQUENCE {
    pLMN-Identity    PLMN-Identity,
    listOfSNAs      ListOfSNAs                                OPTIONAL,

```



```

    iE-Extensions      ProtocolExtensionContainer { { SNA-Information-ExtIEs } } OPTIONAL,
    ...
}

SNA-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

ListOfSNAs ::= SEQUENCE (SIZE (1.. maxNrOfSNAs)) OF SNACode

SNACode ::= INTEGER (0..65535)

SpecialBurstScheduling ::= INTEGER (1..256)

SplitType ::= ENUMERATED {
    hard,
    logical
}

SpreadingFactor      ::= INTEGER (4| 8| 16| 32| 64| 128| 256)

S-RNTI               ::= INTEGER (0..1048575)
-- From 0 to 2^20-1

S-RNTI-Group        ::= SEQUENCE {
    sRNTI             S-RNTI,
    sRNTI-BitMaskIndex ENUMERATED {
        b1,
        b2,
        b3,
        b4,
        b5,
        b6,
        b7,
        b8,
        b9,
        b10,
        b11,
        b12,
        b13,
        b14,
        b15,
        b16,
        b17,
        b18,
        b19,...
    }
}

SRB-Delay ::= INTEGER(0..7,...)

```

```
SSDT-CellID ::= ENUMERATED {
    a,
    b,
    c,
    d,
    e,
    f,
    g,
    h
}

SSDT-CellID-Length ::= ENUMERATED {
    short,
    medium,
    long
}

SSDT-Indication ::= ENUMERATED {
    sSDT-active-in-the-UE,
    sSDT-not-active-in-the-UE
}

SSDT-SupportIndicator ::= ENUMERATED {
    sSDT-supported,
    sSDT-not-supported
}

STTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

STTD-SupportIndicator ::= ENUMERATED {
    sTTD-Supported,
    sTTD-not-Supported
}

Support-8PSK ::= ENUMERATED {
    v8PSK-Supported
}

SyncCase ::= INTEGER (1..2,...)

SynchronisationConfiguration ::= SEQUENCE {
    n-INSYNC-IND          INTEGER (1..256),
    n-OUTSYNC-IND        INTEGER (1..256),
    t-RLFAILURE          INTEGER (0..255),
    -- Unit seconds, Range 0s .. 25.5s, Step 0.1s
    iE-Extensions        ProtocolExtensionContainer { { SynchronisationConfiguration-ExtIEs} } OPTIONAL,

```

```
    ...
}

SynchronisationConfiguration-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SYNC-UL-ProcParameters ::= SEQUENCE {
    maxSYNC-UL-transmissions      ENUMERATED {v1, v2, v4, v8, ...},
    powerRampStep                 INTEGER (0..3, ...),
    ...
}

-- T

T1 ::= ENUMERATED {v10,v20,v30,v40,v50,v60,v70,v80,v90,v100,v120,v140,v160,v200,v300,v400,...}

TDD-AckNack-Power-Offset ::= INTEGER (-7..8,...)
-- Unit dB, Range -7dB .. +8dB, Step 1dB

TDD-ChannelisationCode      ::= ENUMERATED {
    chCode1div1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
    chCode8div1,
    chCode8div2,
    chCode8div3,
    chCode8div4,
    chCode8div5,
    chCode8div6,
    chCode8div7,
    chCode8div8,
    chCode16div1,
    chCode16div2,
    chCode16div3,
    chCode16div4,
    chCode16div5,
    chCode16div6,
    chCode16div7,
    chCode16div8,
    chCode16div9,
    chCode16div10,
    chCode16div11,
    chCode16div12,
    chCode16div13,
    chCode16div14,
```

```

    chCode16div15,
    chCode16div16,
    ...
}

TDD-ChannelisationCodeLCR ::= SEQUENCE {
    tDD-ChannelisationCode      TDD-ChannelisationCode,
    modulation                   Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD
    ...
}

TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF TDD-DCHs-to-ModifyItem

TDD-DCHs-to-ModifyItem ::= SEQUENCE {
    ul-FP-Mode                   UL-FP-Mode     OPTIONAL,
    toAWS                        ToAWS         OPTIONAL,
    toAWE                        ToAWE         OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    dCH-SpecificInformationList  TDD-DCHs-to-ModifySpecificInformationList,
    iE-Extensions               ProtocolExtensionContainer { {TDD-DCHs-to-ModifyItem-ExtIEs} } OPTIONAL,
    ...
}

TDD-DCHs-to-ModifyItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-TnIQos                CRITICALITY ignore     EXTENSION TnIQos PRESENCE optional },
    ...
}

TDD-DCHs-to-ModifySpecificInformationList ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF TDD-DCHs-to-ModifySpecificItem

TDD-DCHs-to-ModifySpecificItem ::= SEQUENCE {
    dCH-ID                       DCH-ID,
    ul-CCTrCH-ID                 CCTrCH-ID     OPTIONAL,
    dl-CCTrCH-ID                 CCTrCH-ID     OPTIONAL,
    ul-TransportformatSet        TransportFormatSet OPTIONAL,
    dl-TransportformatSet        TransportFormatSet OPTIONAL,
    allocationRetentionPriority   AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority         FrameHandlingPriority OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { {TDD-DCHs-to-ModifySpecificItem-ExtIEs} } OPTIONAL,
    ...
}

TDD-DCHs-to-ModifySpecificItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Guaranteed-Rate-Information CRITICALITY ignore EXTENSION Guaranteed-Rate-Information PRESENCE optional }|
    { ID id-TrafficClass                CRITICALITY ignore EXTENSION TrafficClass PRESENCE optional},
    ...
}

TDD-DL-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem

```

```

TDD-DL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tDD-ChannelisationCode TDD-ChannelisationCode,
    iE-Extensions          ProtocolExtensionContainer { {TDD-DL-Code-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

TDD-DL-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHsLCR)) OF TDD-DL-Code-LCR-InformationItem

TDD-DL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    tdd-DL-DPCH-TimeSlotFormat-LCR TDD-DL-DPCH-TimeSlotFormat-LCR,
    iE-Extensions          ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

TDD-DL-Code-LCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
    qPSK                QPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK            EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    ...
}

QPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)

EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)

TDD-DPCHOffset ::= CHOICE {
    initialOffset      INTEGER (0..255),
    noinitialOffset    INTEGER (0..63)
}

TDD-PhysicalChannelOffset ::= INTEGER (0..63)

TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
    ...
}

TDD-TPC-UplinkStepSize-LCR ::= ENUMERATED {

```

```

    step-size1,
    step-size2,
    step-size3,
    ...
}

TDD-UL-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationItem

TDD-UL-Code-InformationItem ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tDD-ChannelisationCode TDD-ChannelisationCode,
    iE-Extensions          ProtocolExtensionContainer { {TDD-UL-Code-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

TDD-UL-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHsLCR)) OF TDD-UL-Code-LCR-InformationItem

TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID                DPCH-ID,
    tdd-ChannelisationCodeLCR TDD-ChannelisationCodeLCR,
    tdd-UL-DPCH-TimeSlotFormat-LCR TDD-UL-DPCH-TimeSlotFormat-LCR,
    iE-Extensions          ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

TDD-UL-Code-LCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-UL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
    qPSK                QPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK            EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
    ...
}

QPSK-UL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..69,...)

EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)

TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    ...
}

```

```

TFCI-PC-SupportIndicator ::= ENUMERATED {
    tFCI-PC-mode1-supported,
    tFCI-PC-mode2-supported
}

TFCI-Presence ::= ENUMERATED {
    present,
    not-present
}

TFCI-SignallingMode ::= ENUMERATED {
    normal,
    split
}

TGD                ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence

TGPRC              ::= INTEGER (0..511)
-- 0 = infinity

TGPSID             ::= INTEGER (1.. maxTGPS)

TGSN               ::= INTEGER (0..14)

TimeSlot           ::= INTEGER (0..14)

TimeSlotLCR ::= INTEGER (0..6)

TimingAdvanceApplied ::= ENUMERATED {
    yes,
    no
}

TMGI ::= SEQUENCE {
    plmn-id      PLMN-Identity,
    service-id  Service-ID,
    iE-Extensions
                ProtocolExtensionContainer { { TMGI-ExtIEs } } OPTIONAL,
    ...
}

TMGI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TnlQos ::= CHOICE {
    dsField          DsField,
    genericTrafficCategory
                    GenericTrafficCategory,
    ...
}

```

```

}

ToAWE ::= INTEGER (0..2559)

ToAWS ::= INTEGER (0..1279)

TraceDepth ::= ENUMERATED {
    minimum,
    medium,
    maximum,
    ...
}

TraceRecordingSessionReference ::= INTEGER (0..65535)

TraceReference ::= OCTET STRING (SIZE (2..3))

TrafficClass ::= ENUMERATED {
    conversational,
    streaming,
    interactive,
    background,
    ...
}

Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
SEQUENCE {
    tGPSID          TGPSID,
    tGSN            TGSN,
    tGL1            GapLength,
    tGL2            GapLength OPTIONAL,
    tGD             TGD,
    tGPL1           GapDuration,
    tGPL2           GapDuration OPTIONAL,
    uL-DL-mode      UL-DL-mode,
    downlink-Compressed-Mode-Method Downlink-Compressed-Mode-Method OPTIONAL,
    -- This IE shall be present if the value of the UL/DL mode IE is "DL only" or "UL/DL"
    uplink-Compressed-Mode-Method Uplink-Compressed-Mode-Method OPTIONAL,
    -- This IE shall be present if the value of the UL/DL mode IE is "UL only" or "UL/DL"
    dL-FrameType    DL-FrameType,
    delta-SIR1       DeltaSIR,
    delta-SIR-after1 DeltaSIR,
    delta-SIR2       DeltaSIR OPTIONAL,
    delta-SIR-after2 DeltaSIR OPTIONAL,
    iE-Extensions    ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
    ...
}

Transmission-Gap-Pattern-Sequence-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...

```



```
}

Transmission-Gap-Pattern-Sequence-ScramblingCode-Information ::= ENUMERATED{
    code-change,
    nocode-change
}

Transmission-Gap-Pattern-Sequence-Status-List ::= SEQUENCE (SIZE (0..maxTGPS)) OF
    SEQUENCE {
        tGPSID          TGPSID,
        tGPRC           TGPRC,
        tGCFN           CFN,
        iE-Extensions  ProtocolExtensionContainer { { Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs } } OPTIONAL,
        ...
    }

Transmission-Gap-Pattern-Sequence-Status-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransmissionMode ::=ENUMERATED {
    p-t-p,
    p-t-m,
    not-provided,
    ...
}

TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    ...
}

TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    dynamic,
    ...
}

TransmitDiversityIndicator ::= ENUMERATED {
    active,
    inactive
}

Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
```

```

-- according to mapping in [23] and [24]

Transmitted-Carrier-Power-Value-IncrDecrThres ::= INTEGER(0..100)
-- according to mapping in [23] and [24]

TUTRANGPS ::= SEQUENCE {
    ms-part    INTEGER (0..16383),
    ls-part    INTEGER (0..4294967295)
}

TUTRANGPSChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s

TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s

TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
    ...
}

TUTRANGPSMeasurementThresholdInformation ::= SEQUENCE {
    tTUTRANGPSChangeLimit          TUTRANGPSChangeLimit          OPTIONAL,
    predictedTUTRANGPSDeviationLimit PredictedTUTRANGPSDeviationLimit OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { TUTRANGPSMeasurementThresholdInformation-ExtIEs} } OPTIONAL,
    ...
}

TUTRANGPSMeasurementThresholdInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
    tTUTRANGPS                    TUTRANGPS,
    tTUTRANGPSQuality              TUTRANGPSQuality          OPTIONAL,
    tTUTRANGPSDriftRate            TUTRANGPSDriftRate,
    tTUTRANGPSDriftRateQuality     TUTRANGPSDriftRateQuality OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { { TUTRANGPSMeasurementValueInformationItem-ExtIEs} } OPTIONAL,
    ...
}

TUTRANGPSMeasurementValueInformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

}

TUTRANGPSQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

TransportBearerID      ::= INTEGER (0..4095)

TransportBearerRequestIndicator ::= ENUMERATED {
    bearer-requested,
    bearer-not-requested,
    ...
}

TransportBlockSize      ::= INTEGER (0..5000)
-- Unit is bits

TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors SEQUENCE {
        betaC          BetaCD,
        betaD          BetaCD,
        refTFCNumber   RefTFCNumber OPTIONAL,
        iE-Extensions  ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs } } OPTIONAL,
        ...
    },
    refTFCNumber       RefTFCNumber,
    ...
}

SignalledGainFactors-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS ::= SEQUENCE {
    tFCSvalues CHOICE {
        no-Split-in-TFCI TFCS-TFCSList,
        split-in-TFCI SEQUENCE {
            transportFormatCombination-DCH TFCS-DCHList,
            signallingMethod CHOICE {
                tFCI-Range TFCS-MappingOnDSCHList,
                explicit TFCS-DSCHList,
                ...
            },
            iE-Extensions ProtocolExtensionContainer { { Split-in-TFCI-ExtIEs } } OPTIONAL,
            ...
        },
        ...
    },
    iE-Extensions ProtocolExtensionContainer { { TFCS-ExtIEs } } OPTIONAL,
    ...
}

```

```

Split-in-TFCI-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCS)) OF
    SEQUENCE {
        cTFC                TFCS-CTFC,
        tFC-Beta            TransportFormatCombination-Beta    OPTIONAL,
        -- The IE shall be present if the TFCS concerns a UL DPCH [FDD - or PRACH channel in FDD]
        iE-Extensions      ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs } }    OPTIONAL,
        ...
    }

TFCS-TFCSList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-CTFC ::= CHOICE {
    ctfc2bit                INTEGER (0..3),
    ctfc4bit                INTEGER (0..15),
    ctfc6bit                INTEGER (0..63),
    ctfc8bit                INTEGER (0..255),
    ctfc12bit               INTEGER (0..4095),
    ctfc16bit               INTEGER (0..65535),
    ctfcmaxbit              INTEGER (0..maxCTFC)
}

TFCS-DCHList ::= SEQUENCE (SIZE (1..maxTFCI1Combs)) OF
    SEQUENCE {
        cTFC                TFCS-CTFC,
        iE-Extensions      ProtocolExtensionContainer { { TFCS-DCHList-ExtIEs } }    OPTIONAL,
        ...
    }

TFCS-DCHList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-MappingOnDSCHList ::= SEQUENCE (SIZE (1..maxNoTFCIGroups)) OF
    SEQUENCE {
        maxTFCI-field2-Value    TFCS-MaxTFCI-field2-Value,
        cTFC-DSCH              TFCS-CTFC,
        iE-Extensions          ProtocolExtensionContainer { { TFCS-MappingOnDSCHList-ExtIEs } }    OPTIONAL,
        ...
    }

```

```

TFCS-MappingOnDSCHList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCS-MaxTFCI-field2-Value ::= INTEGER (1..maxTFCI2Combs-1)

TFCS-DSCHList ::= SEQUENCE (SIZE (1..maxTFCI2Combs)) OF
    SEQUENCE {
        cTFC-DSCH          TFCS-CTFC,
        iE-Extensions      ProtocolExtensionContainer { { TFCS-DSCHList-ExtIEs } } OPTIONAL,
        ...
    }

TFCS-DSCHList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet ::= SEQUENCE {
    dynamicParts          TransportFormatSet-DynamicPartList,
    semi-staticPart      TransportFormatSet-Semi-staticPart,
    iE-Extensions        ProtocolExtensionContainer { {TransportFormatSet-ExtIEs} } OPTIONAL,
    ...
}

TransportFormatSet-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
    SEQUENCE {
        nrOfTransportBlocks      NrOfTransportBlocks,
        transportBlockSize       TransportBlockSize OPTIONAL
        -- This IE shall be present if nrOfTransportBlocks is greater than 0 --,
        mode                     TransportFormatSet-ModeDP,
        iE-Extensions            ProtocolExtensionContainer { {TransportFormatSet-DynamicPartList-ExtIEs} } OPTIONAL,
        ...
    }

TransportFormatSet-DynamicPartList-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ModeDP ::= CHOICE {
    tdd          TDD-TransportFormatSet-ModeDP,
    notApplicable NULL,
    ...
}

TDD-TransportFormatSet-ModeDP ::= SEQUENCE {

```

```

    transmissionTimeIntervalInformation      TransmissionTimeIntervalInformation      OPTIONAL,
    -- This IE shall be present if the "Transmission Time Interval" of the "Semi-static Transport Format Information" is "dynamic". Otherwise it is
absent.
    iE-Extensions                          ProtocolExtensionContainer { {TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
    ...
}

TDD-TransportFormatSet-ModeDP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-Count)) OF
SEQUENCE {
    transmissionTimeInterval      TransmissionTimeIntervalDynamic,
    iE-Extensions                ProtocolExtensionContainer { {TransmissionTimeIntervalInformation-ExtIEs} } OPTIONAL,
    ...
}

TransmissionTimeIntervalInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in [11]/[14]

Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)

TransportFormatManagement ::= ENUMERATED {
    cell-based,
    ue-based,
    ...
}

TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTime              TransmissionTimeIntervalSemiStatic,
    channelCoding                 ChannelCodingType,
    codingRate                    CodingRate OPTIONAL
    -- This IE shall be present if channelCoding is 'convolutional' or 'turbo' --,
    rateMatchingAttribute         RateMatchingAttribute,
    cRC-Size                      CRC-Size,
    mode                          TransportFormatSet-ModeSSP,
    iE-Extensions                ProtocolExtensionContainer { {TransportFormatSet-Semi-staticPart-ExtIEs} } OPTIONAL,
    ...
}

TransportFormatSet-Semi-staticPart-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ModeSSP ::= CHOICE {

```

```
    tdd                SecondInterleavingMode,
    notApplicable      NULL,
    ...
}

TransportLayerAddress ::= BIT STRING (SIZE(1..160, ...))

TrCH-SrcStatisticsDescr ::= ENUMERATED {
    speech,
    rRC,
    unknown,
    ...
}

TSTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

TSTD-Support-Indicator ::= ENUMERATED {
    tSTD-supported,
    tSTD-not-supported
}

TxDiversityIndicator ::= ENUMERATED {
    true,
    false
}

TypeOfError ::= ENUMERATED {
    not-understood,
    missing,
    ...
}

-- U

UARFCN ::= INTEGER (0..16383,...)
-- Corresponds to: 0.0Hz..3276.6Mhz. See [7], [43]

UDRE ::= ENUMERATED {
    lessThan1,
    between1-and-4,
    between4-and-8,
    over8,
    ...
}

UE-Capabilities-Info ::= SEQUENCE {
    hSDSCH-Physical-Layer-Category INTEGER (1..64,...),
```

```

    iE-Extensions          ProtocolExtensionContainer { { UE-Capabilities-Info-ExtIEs } } OPTIONAL,
    ...
}

UE-Capabilities-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEIdentity                ::= CHOICE {
    imsi                    IMSI,
    imei                    IMEI,
    imeisv                  IMEISV,
    ...
}

UEMeasurementHysteresisTime ::= INTEGER (0..15)
-- Unit dB
-- Range 0..7.5 dB
-- Step 0.5 dB

UEMeasurementParameterModAllow ::= ENUMERATED {
    parameterModificationAllowed,
    ...
}

UEMeasurementReportCharacteristics ::= CHOICE {
    periodic                UEMeasurementReportCharacteristicsPeriodic,
    event1h                 UEMeasurementReportCharacteristicsEvent1h,
    event1i                 UEMeasurementReportCharacteristicsEvent1i,
    event6a                 UEMeasurementReportCharacteristicsEvent6a,
    event6b                 UEMeasurementReportCharacteristicsEvent6b,
    event6c                 UEMeasurementReportCharacteristicsEvent6c,
    event6d                 UEMeasurementReportCharacteristicsEvent6d,
    ...,
    extension-ReportCharacteristics UEMeasurementReportCharacteristics-Extension
}

UEMeasurementReportCharacteristicsEvent1h ::= SEQUENCE {
    uEMeasurementTreshold    UEMeasurementThreshold,
    uEMeasurementTimeToTrigger UEMeasurementTimeToTrigger,
    uEMeasurementHysteresisTime UEMeasurementHysteresisTime,
    iE-Extensions          ProtocolExtensionContainer { { UEMeasurementReportCharacteristicsEvent1h-ExtIEs } } OPTIONAL,
    ...
}

UEMeasurementReportCharacteristicsEvent1h-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEMeasurementReportCharacteristicsEvent1i ::= SEQUENCE {

```



```

    uMeasurementTreshold      UMeasurementThreshold,
    uMeasurementTimeToTrigger UMeasurementTimeToTrigger,
    uMeasurementHysteresisTime UMeasurementHysteresisTime,
    iE-Extensions            ProtocolExtensionContainer { { UMeasurementReportCharacteristicsEvent1i-ExtIEs } } OPTIONAL,
    ...
}

UEMeasurementReportCharacteristicsEvent1i-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEMeasurementReportCharacteristicsEvent6a ::= SEQUENCE {
    uMeasurementTreshold      UMeasurementThreshold,
    uMeasurementTimeToTrigger UMeasurementTimeToTrigger,
    iE-Extensions            ProtocolExtensionContainer { { UMeasurementReportCharacteristicsEvent6a-ExtIEs } } OPTIONAL,
    ...
}

UEMeasurementReportCharacteristicsEvent6a-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEMeasurementReportCharacteristicsEvent6b ::= SEQUENCE {
    uMeasurementTreshold      UMeasurementThreshold,
    uMeasurementTimeToTrigger UMeasurementTimeToTrigger,
    iE-Extensions            ProtocolExtensionContainer { { UMeasurementReportCharacteristicsEvent6b-ExtIEs } } OPTIONAL,
    ...
}

UEMeasurementReportCharacteristicsEvent6b-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEMeasurementReportCharacteristicsEvent6c ::= SEQUENCE {
    uMeasurementTimeToTrigger UMeasurementTimeToTrigger,
    iE-Extensions            ProtocolExtensionContainer { { UMeasurementReportCharacteristicsEvent6c-ExtIEs } } OPTIONAL,
    ...
}

UEMeasurementReportCharacteristicsEvent6c-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEMeasurementReportCharacteristicsEvent6d ::= SEQUENCE {
    uMeasurementTimeToTrigger UMeasurementTimeToTrigger,
    iE-Extensions            ProtocolExtensionContainer { { UMeasurementReportCharacteristicsEvent6d-ExtIEs } } OPTIONAL,
    ...
}

UEMeasurementReportCharacteristicsEvent6d-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {

```

```

}
...
}
UEMeasurementReportCharacteristicsPeriodic ::= SEQUENCE {
    amountOfReporting      UEMeasurementReportCharacteristicsPeriodicAmountOfReporting,
    reportingInterval      UEMeasurementReportCharacteristicsPeriodicReportingInterval,
    iE-Extensions          ProtocolExtensionContainer { {UEMeasurementReportCharacteristicsPeriodic-ExtIEs} } OPTIONAL,
    ...
}

UEMeasurementReportCharacteristicsPeriodicAmountOfReporting ::= ENUMERATED {
    r1,
    r2,
    r4,
    r8,
    r16,
    r32,
    r64,
    rInfinity
}

UEMeasurementReportCharacteristicsPeriodicReportingInterval ::= ENUMERATED {
    r250,
    r500,
    r1000,
    r2000,
    r3000,
    r4000,
    r6000,
    r8000,
    r12000,
    r16000,
    r20000,
    r24000,
    r28000,
    r32000,
    r64000
}

UEMeasurementReportCharacteristicsPeriodic-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEMeasurementReportCharacteristics-Extension ::= ProtocolIE-Single-Container {{ UEMeasurementReportCharacteristics-ExtensionIE }}

UEMeasurementReportCharacteristics-ExtensionIE RNSAP-PROTOCOL-IES ::= {
    ...
}

UEMeasurementThreshold ::= CHOICE {

```

```

    timeslotISCP                UEMeasurementThresholdDLTimeslotISCP,
    uETransmitPower             UEMeasurementThresholdUETransmitPower,
    ...,
    extension-UEMeasurementThreshold  UEMeasurementThreshold-Extension
}

UEMeasurementThresholdDLTimeslotISCP ::= INTEGER(-115..-25)

UEMeasurementThresholdUETransmitPower ::= INTEGER(-50..33)

UEMeasurementThreshold-Extension ::= ProtocolIE-Single-Container {{ UEMeasurementThreshold-ExtensionIE }}

UEMeasurementThreshold-ExtensionIE RNSAP-PROTOCOL-IES ::= {
    ...
}

UEMeasurementTimeslotInfoHCR ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementTimeslotInfoHCR-IEs

UEMeasurementTimeslotInfoHCR-IEs ::= SEQUENCE {
    timeSlot                TimeSlot,
    burstType               UEMeasurementTimeslotInfoHCRBurstType,
    iE-Extensions           ProtocolExtensionContainer { { UEMeasurementTimeslotInfoHCR-IEs-ExtIEs} } OPTIONAL,
    ...
}

UEMeasurementTimeslotInfoHCRBurstType ::= ENUMERATED {
    type1,
    type2,
    type3,
    ...
}

UEMeasurementTimeslotInfoHCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEMeasurementTimeslotInfoLCR ::= SEQUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementTimeslotInfoLCR-IEs

UEMeasurementTimeslotInfoLCR-IEs ::= SEQUENCE {
    timeSlot                TimeSlotLCR,
    iE-Extensions           ProtocolExtensionContainer { { UEMeasurementTimeslotInfoLCR-IEs-ExtIEs} } OPTIONAL,
    ...
}

UEMeasurementTimeslotInfoLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEMeasurementTimeToTrigger ::= ENUMERATED {

```

```

r0,
r10,
r20,
r40,
r60,
r80,
r100,
r120,
r160,
r200,
r240,
r320,
r640,
r1280,
r2560,
r5000
}

UEMeasurementType ::= ENUMERATED {
    primary-CCPCH-RSCP,
    dL-Timeslot-ISCP,
    uE-Transmitted-power,
    ...
}

UEMeasurementValue ::= CHOICE {
    uE-Transmitted-Power          UE-MeasurementValue-UE-Transmitted-Power,
    primary-CCPCH-RSCP           UE-MeasurementValue-Primary-CCPCH-RSCP,
    dL-Timeslot-ISCP             UE-MeasurementValue-DL-Timeslot-ISCP,
    ...,
    extension-UEMeasurementValue UEMeasurementValue-Extension
}

UE-MeasurementValue-UE-Transmitted-Power ::= SEQUENCE {
    uEMeasurementTransmittedPowerListHCR    UEMeasurementValueTransmittedPowerListHCR    OPTIONAL,
-- Mandatory for 3.84Mcps TDD, Not applicable for 1.28Mcps TDD
    uEMeasurementTransmittedPowerListLCR    UEMeasurementValueTransmittedPowerListLCR    OPTIONAL,
-- Mandatory for 1.28Mcps TDD, Not applicable for 3.84Mcps TDD
    iE-Extensions                           ProtocolExtensionContainer { { UE-MeasurementValue-UE-Transmitted-Power-ExtIEs } }    OPTIONAL,
    ...
}

UE-MeasurementValue-UE-Transmitted-Power-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEMeasurementValueTransmittedPowerListHCR ::= SEQUENCE (SIZE (1..maxNrOfTS)) OF UEMeasurementValueTransmittedPowerListHCR-IEs

UEMeasurementValueTransmittedPowerListHCR-IEs ::= SEQUENCE {
    timeSlot          TimeSlot,

```

```

    uETransmitPower          INTEGER(0..104),
    -- mapping according to [24], values 0..20 not used
    iE-Extensions           ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerListHCR-IEs-ExtIEs} }    OPTIONAL,
    ...
}

UEMeasurementValueTransmittedPowerListHCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
UEMeasurementValueTransmittedPowerListLCR ::= SEQUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementValueTransmittedPowerListLCR-IEs

UEMeasurementValueTransmittedPowerListLCR-IEs ::= SEQUENCE {
    timeSlotLCR              TimeSlotLCR,
    uETransmitPower          INTEGER(0..104),
    -- mapping according to [24], values 0..20 not used
    iE-Extensions           ProtocolExtensionContainer { { UEMeasurementValueTransmittedPowerListLCR-IEs-ExtIEs} }    OPTIONAL,
    ...
}
UEMeasurementValueTransmittedPowerListLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UE-MeasurementValue-Primary-CCPCH-RSCP ::= SEQUENCE {
    primaryCCPCH-RSCP        PrimaryCCPCH-RSCP          OPTIONAL,
    primaryCCPCH-RSCP-Delta PrimaryCCPCH-RSCP-Delta      OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { UE-MeasurementValue-Primary-CCPCH-RSCP-ExtIEs} }    OPTIONAL,
    ...
}

UE-MeasurementValue-Primary-CCPCH-RSCP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UE-MeasurementValue-DL-Timeslot-ISCP ::= SEQUENCE {
    uEMeasurementTimeslotISCPListHCR UEMeasurementValueTimeslotISCPListHCR  OPTIONAL,
    -- Mandatory for 3.84Mcps TDD, Not applicable for 1.28Mcps TDD
    uEMeasurementTimeslotISCPListLCR UEMeasurementValueTimeslotISCPListLCR  OPTIONAL,
    -- Mandatory for 1.28Mcps TDD, Not applicable for 3.84Mcps TDD
    iE-Extensions           ProtocolExtensionContainer { { UE-MeasurementValue-DL-Timeslot-ISCP-ExtIEs} }    OPTIONAL,
    ...
}

UE-MeasurementValue-DL-Timeslot-ISCP-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UEMeasurementValueTimeslotISCPListHCR ::= SEQUENCE (SIZE (1..maxNrOfTs)) OF UEMeasurementValueTimeslotISCPListHCR-IEs

```

```

UEMeasurementValueTimeslotISCPListHCR-IEs ::= SEQUENCE {
    timeSlot                TimeSlot,
    dL-TimeslotISCP         DL-TimeslotISCP,
    iE-Extensions           ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPListHCR-IEs-ExtIEs} } OPTIONAL,
    ...
}
UEMeasurementValueTimeslotISCPListHCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
UEMeasurementValueTimeslotISCPListLCR ::= SEQUENCE (SIZE (1..maxNrOfTsLCR)) OF UEMeasurementValueTimeslotISCPListLCR-IEs
UEMeasurementValueTimeslotISCPListLCR-IEs ::= SEQUENCE {
    timeSlotLCR            TimeSlotLCR,
    dL-TimeslotISCP       DL-TimeslotISCP,
    iE-Extensions         ProtocolExtensionContainer { { UEMeasurementValueTimeslotISCPListLCR-IEs-ExtIEs} } OPTIONAL,
    ...
}
UEMeasurementValueTimeslotISCPListLCR-IEs-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
UEMeasurementValue-Extension ::= ProtocolIE-Single-Container {{ UEMeasurementValue-ExtensionIE }}
UEMeasurementValue-ExtensionIE RNSAP-PROTOCOL-IES ::= {
    ...
}
UEMeasurementValueInformation ::= CHOICE {
    measurementAvailable      UEMeasurementValueInformationAvailable,
    measurementnotAvailable   UEMeasurementValueInformationnotAvailable
}
UEMeasurementValueInformationAvailable ::= SEQUENCE {
    uEmeasurementValue       UEMeasurementValue,
    ie-Extensions            ProtocolExtensionContainer { { UEMeasurementValueInformationAvailableItem-ExtIEs} } OPTIONAL,
    ...
}
UEMeasurementValueInformationAvailableItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
UEMeasurementValueInformationnotAvailable ::= NULL
UE-State ::= CHOICE {
    cell-fach-pch                Cell-Fach-Pch-State,
    ura-pch                      Ura-Pch-State,

```

```

}
...
}

Cell-Fach-Pch-State ::= SEQUENCE {
    d-RNTI                D-RNTI,
    iE-Extensions         ProtocolExtensionContainer { { Cell-Fach-Pch-State-ExtIEs } } OPTIONAL,
    ...
}

Cell-Fach-Pch-State-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Ura-Pch-State ::= SEQUENCE {
    ssrc-id              RNC-ID,
    ura-id               URA-ID,
    iE-Extensions         ProtocolExtensionContainer { { Ura-Pch-State-ExtIEs } } OPTIONAL,
    ...
}

Ura-Pch-State-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation ::= ENUMERATED {
    dedicated-pilots-for-channel-estimation-supported
}

UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH ::= ENUMERATED {
    dedicated-pilots-for-channel-estimation-supported
}

UL-DL-mode ::= ENUMERATED {
    ul-only,
    dl-only,
    both-ul-and-dl
}

UL-DPDCHIndicatorEDCH ::= ENUMERATED {
    uL-DPDCH-present,
    uL-DPDCH-not-present }

UL-Timeslot-Information ::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem

UL-Timeslot-InformationItem ::= SEQUENCE {
    timeSlot              TimeSlot,
    midambleShiftAndBurstType MidambleShiftAndBurstType,

```

```

    tFCI-Presence          TFCI-Presence,
    uL-Code-Information    TDD-UL-Code-Information,
    iE-Extensions          ProtocolExtensionContainer { {UL-Timeslot-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

UL-Timeslot-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeslotLCR-Information ::= SEQUENCE (SIZE (1..maxNrOfULTsLCR)) OF UL-TimeslotLCR-InformationItem

UL-TimeslotLCR-InformationItem ::= SEQUENCE {
    timeSlotLCR              TimeSlotLCR,
    midambleShiftLCR        MidambleShiftLCR,
    tFCI-Presence            TFCI-Presence,
    uL-Code-LCR-InformationList TDD-UL-Code-LCR-Information,
    iE-Extensions            ProtocolExtensionContainer { { UL-TimeslotLCR-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

UL-TimeslotLCR-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeSlot-ISCP-Info ::= SEQUENCE (SIZE (1..maxNrOfULTs)) OF UL-TimeSlot-ISCP-InfoItem

UL-TimeSlot-ISCP-InfoItem ::= SEQUENCE {
    timeSlot                TimeSlot,
    uL-TimeslotISCP          UL-TimeslotISCP,
    iE-Extensions            ProtocolExtensionContainer { { UL-TimeSlot-ISCP-InfoItem-ExtIEs} } OPTIONAL,
    ...
}

UL-TimeSlot-ISCP-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-TimeSlot-ISCP-LCR-Info ::= SEQUENCE (SIZE (1..maxNrOfULTsLCR)) OF UL-TimeSlot-ISCP-LCR-InfoItem

UL-TimeSlot-ISCP-LCR-InfoItem ::= SEQUENCE {
    timeSlotLCR              TimeSlotLCR,
    iSCP                      UL-TimeSlot-ISCP-Value,
    iE-Extensions            ProtocolExtensionContainer { { UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs} } OPTIONAL,
    ...
}

UL-TimeSlot-ISCP-LCR-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```



```

UL-Timeslot-ISCP-Value ::= UL-TimeslotISCP

UL-Timeslot-ISCP-Value-IncrDecrThres ::= INTEGER(0..126)
-- Unit dB. Step 0.5dB
-- e.g. Value 100 means 50dB

UL-TimingAdvanceCtrl-LCR ::= SEQUENCE {
    sync-UL-codes-bitmap          BIT STRING (SIZE(8)),
    fPACH-info                    FPACH-Information,
    prxUpPCHdes                  INTEGER (-120 .. -58, ...),
    syncUL-procParameter         SYNC-UL-ProcParameters,
    mMax                          INTEGER (1..32),
    ...
}

Uplink-Compressed-Mode-Method ::= ENUMERATED {
    sFdiv2,
    higher-layer-scheduling,
    ...
}

UL-SIR ::= INTEGER (-82..173)
-- The UL-SIR gives the UL-SIR in number of 0.1 dB steps.
-- E.g. Value 173 means 17.3 dB
-- Unit dB. Step 0.1 dB.

UC-ID ::= SEQUENCE {
    rNC-ID          RNC-ID,
    c-ID            C-ID,
    iE-Extensions  ProtocolExtensionContainer { {UC-ID-ExtIEs} } OPTIONAL,
    ...
}

UC-ID-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-DPCCH-SlotFormat ::= INTEGER (0..5,...)

UL-FP-Mode ::= ENUMERATED {
    normal,
    silent,
    ...
}

UL-PhysCH-SF-Variation ::= ENUMERATED {
    sf-variation-supported,
    sf-variation-not-supported
}

```

```

UL-ScramblingCode ::= SEQUENCE {
    ul-ScramblingCodeNumber    UL-ScramblingCodeNumber,
    ul-ScramblingCodeLength    UL-ScramblingCodeLength,
    iE-Extensions              ProtocolExtensionContainer { {UL-ScramblingCode-ExtIEs} } OPTIONAL
}

UL-ScramblingCode-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-ScramblingCodeLength ::= ENUMERATED {
    short,
    long
}

UL-ScramblingCodeNumber ::= INTEGER (0..16777215)

UL-Synchronisation-Parameters-LCR ::= SEQUENCE {
    ul-Synchronisation-StepSize    UL-Synchronisation-StepSize,
    ul-Synchronisation-Frequency    UL-Synchronisation-Frequency,
    iE-Extensions                  ProtocolExtensionContainer { { UL-Synchronisation-Parameters-LCR-ExtIEs } }
    ...
}

UL-Synchronisation-Parameters-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Synchronisation-StepSize ::= INTEGER (1..8)

UL-Synchronisation-Frequency ::= INTEGER (1..8)

UL-TimeslotISCP ::= INTEGER (0..127)
-- According to mapping in [14]

UpPTSInterferenceValue ::= INTEGER (0..127,...)

Unidirectional-DCH-Indicator ::= ENUMERATED {
    downlink-DCH-only,
    uplink-DCH-only
}

URA-ID ::= INTEGER (0..65535)

URA-Information ::= SEQUENCE {
    uRA-ID                URA-ID,
    multipleURAsIndicator MultipleURAsIndicator,
    rNCsWithCellsInTheAccessedURA-List RNCsWithCellsInTheAccessedURA-List OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { {URA-Information-ExtIEs} } OPTIONAL,
}

```

```

}
...
}
URA-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
RNCsWithCellsInTheAccessedURA-List ::= SEQUENCE (SIZE (1..maxRNCinURA-1)) OF RNCsWithCellsInTheAccessedURA-Item
RNCsWithCellsInTheAccessedURA-Item ::= SEQUENCE {
  rNC-ID RNC-ID,
  iE-Extensions ProtocolExtensionContainer { {RNCsWithCellsInTheAccessedURA-Item-ExtIEs} } OPTIONAL,
  ...
}
RNCsWithCellsInTheAccessedURA-Item-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}
USCH-ID ::= INTEGER (0..255)
USCH-Information ::= SEQUENCE (SIZE (1..maxNoOfUSCHs)) OF USCH-InformationItem
USCH-InformationItem ::= SEQUENCE {
  uSCH-ID USCH-ID,
  ul-CCTrCH-ID CCTrCH-ID,
  trChSourceStatisticsDescriptor TrCH-SrcStatisticsDescr,
  transportFormatSet TransportFormatSet,
  allocationRetentionPriority AllocationRetentionPriority,
  schedulingPriorityIndicator SchedulingPriorityIndicator,
  rb-Info RB-Info,
  iE-Extensions ProtocolExtensionContainer { {USCH-InformationItem-ExtIEs} } OPTIONAL,
  ...
}
USCH-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-TrafficClass CRITICALITY ignore EXTENSION TrafficClass PRESENCE mandatory }|
  { ID id-BindingID CRITICALITY ignore EXTENSION BindingID PRESENCE optional }|
  { ID id-TransportLayerAddress CRITICALITY ignore EXTENSION TransportLayerAddress PRESENCE optional },
  -- Shall be ignored if bearer establishment with ALCAP.
  ...
}
-- V
-- W
-- X
-- Y
-- Z

```

END

## 9.3.5 Common Definitions

```

-- *****
--
-- Common definitions
--
-- *****

RNSAP-CommonDataTypes {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-CommonDataTypes (3) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- *****
--
-- Extension constants
--
-- *****

maxPrivateIEs                INTEGER ::= 65535
maxProtocolExtensions         INTEGER ::= 65535
maxProtocolIEs               INTEGER ::= 65535

-- *****
--
-- Common Data Types
--
-- *****

Criticality      ::= ENUMERATED { reject, ignore, notify }

Presence         ::= ENUMERATED { optional, conditional, mandatory }

PrivateIE-ID     ::= CHOICE {
    local          INTEGER (0.. maxPrivateIEs),
    global         OBJECT IDENTIFIER
}

ProcedureCode    ::= INTEGER (0..255)

ProcedureID ::= SEQUENCE {
    procedureCode    ProcedureCode,
    ddMode           ENUMERATED { tdd, fdd, common, ... }
}

```

```

ProtocolIE-ID      ::= INTEGER (0..maxProtocolIEs)

TransactionID      ::= CHOICE {
    shortTransActionId  INTEGER (0..127),
    longTransActionId   INTEGER (0..32767)
}

TriggeringMessage ::= ENUMERATED { initiating-message, successful-outcome, unsuccessful-outcome, outcome }

END

```

### 9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

RNSAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-Constants (4) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    ProcedureCode,
    ProtocolIE-ID
FROM RNSAP-CommonDataTypes;

-- *****
--
-- Elementary Procedures
--
-- *****

id-commonTransportChannelResourcesInitialisation      ProcedureCode ::= 0
id-commonTransportChannelResourcesRelease             ProcedureCode ::= 1
id-compressedModeCommand                             ProcedureCode ::= 2
id-downlinkPowerControl                              ProcedureCode ::= 3
id-downlinkPowerTimeslotControl                      ProcedureCode ::= 4
id-downlinkSignallingTransfer                        ProcedureCode ::= 5
id-errorIndication                                   ProcedureCode ::= 6
id-dedicatedMeasurementFailure                       ProcedureCode ::= 7
id-dedicatedMeasurementInitiation                   ProcedureCode ::= 8
id-dedicatedMeasurementReporting                     ProcedureCode ::= 9

```

```

id-dedicatedMeasurementTermination      ProcedureCode ::= 10
id-paging                                ProcedureCode ::= 11
id-physicalChannelReconfiguration        ProcedureCode ::= 12
id-privateMessage                        ProcedureCode ::= 13
id-radioLinkAddition                     ProcedureCode ::= 14
id-radioLinkCongestion                   ProcedureCode ::= 34
id-radioLinkDeletion                     ProcedureCode ::= 15
id-radioLinkFailure                      ProcedureCode ::= 16
id-radioLinkPreemption                   ProcedureCode ::= 17
id-radioLinkRestoration                  ProcedureCode ::= 18
id-radioLinkSetup                        ProcedureCode ::= 19
id-relocationCommit                      ProcedureCode ::= 20
id-synchronisedRadioLinkReconfigurationCancellation ProcedureCode ::= 21
id-synchronisedRadioLinkReconfigurationCommit ProcedureCode ::= 22
id-synchronisedRadioLinkReconfigurationPreparation ProcedureCode ::= 23
id-unSynchronisedRadioLinkReconfiguration ProcedureCode ::= 24
id-uplinkSignallingTransfer              ProcedureCode ::= 25
id-commonMeasurementFailure              ProcedureCode ::= 26
id-commonMeasurementInitiation           ProcedureCode ::= 27
id-commonMeasurementReporting             ProcedureCode ::= 28
id-commonMeasurementTermination          ProcedureCode ::= 29
id-informationExchangeFailure            ProcedureCode ::= 30
id-informationExchangeInitiation         ProcedureCode ::= 31
id-informationReporting                  ProcedureCode ::= 32
id-informationExchangeTermination        ProcedureCode ::= 33
id-reset                                  ProcedureCode ::= 35
id-radioLinkActivation                   ProcedureCode ::= 36
id-gERANuplinkSignallingTransfer         ProcedureCode ::= 37
id-radioLinkParameterUpdate              ProcedureCode ::= 38
id-uEMeasurementFailure                  ProcedureCode ::= 39
id-uEMeasurementInitiation               ProcedureCode ::= 40
id-uEMeasurementReporting                 ProcedureCode ::= 41
id-uEMeasurementTermination              ProcedureCode ::= 42
id-iurDeactivateTrace                    ProcedureCode ::= 43
id-iurInvokeTrace                        ProcedureCode ::= 44
id-mBMSAttach                            ProcedureCode ::= 45
id-mBMSDetach                            ProcedureCode ::= 46
id-mBMSChannelTypeReconfiguration        ProcedureCode ::= 47
-- *****
--
-- Lists
--
-- *****

```

```

maxCodeNumComp-1      INTEGER ::= 255
maxRateMatching       INTEGER ::= 256
maxNoCodeGroups       INTEGER ::= 256
maxNoOfDSCHs          INTEGER ::= 10
maxNoOfDSCHsLCR       INTEGER ::= 10
maxNoOfFRB            INTEGER ::= 32

```

maxNoOfUSCHs	INTEGER ::= 10
maxNoOfUSCHsLCR	INTEGER ::= 10
maxNoTFCIGroups	INTEGER ::= 256
maxNrOfTFCS	INTEGER ::= 1024
maxNrOfTFs	INTEGER ::= 32
maxNrOfCCTrCHs	INTEGER ::= 16
maxNrOfCCTrCHsLCR	INTEGER ::= 16
maxNrOfDCHs	INTEGER ::= 128
maxNrOfDL-Codes	INTEGER ::= 8
maxNrOfDPCHs	INTEGER ::= 240
maxNrOfDPCHsLCR	INTEGER ::= 240
maxNrOfErrors	INTEGER ::= 256
maxNrOfMACcshSDU-Length	INTEGER ::= 16
maxNrOfMBMSServices	INTEGER ::= 128
maxNrOfActiveMBMSServices	INTEGER ::= 256
maxNrOfPoints	INTEGER ::= 15
maxNrOfRLs	INTEGER ::= 16
maxNrOfRLSets	INTEGER ::= maxNrOfRLs
maxNrOfRLSets-1	INTEGER ::= 15 -- maxNrOfRLSets - 1
maxNrOfRLs-1	INTEGER ::= 15 -- maxNrOfRLs - 1
maxNrOfRLs-2	INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfUEs	INTEGER ::= 16
maxNrOfULTs	INTEGER ::= 15
maxNrOfULTsLCR	INTEGER ::= 6
maxNrOfDLTs	INTEGER ::= 15
maxNrOfDLTsLCR	INTEGER ::= 6
maxRNCinURA-1	INTEGER ::= 15
maxTTI-Count	INTEGER ::= 4
maxCTFC	INTEGER ::= 16777215
maxNrOfNeighbouringRNCs	INTEGER ::= 10
maxNrOfFDDNeighboursPerRNC	INTEGER ::= 256
maxNrOfGSMNeighboursPerRNC	INTEGER ::= 256
maxNrOfTDDNeighboursPerRNC	INTEGER ::= 256
maxNrOfFACHs	INTEGER ::= 8
maxNrOfLCRTDDNeighboursPerRNC	INTEGER ::= 256
maxFACHCountPlus1	INTEGER ::= 10
maxIBSEG	INTEGER ::= 16
maxNrOfSCCPCHs	INTEGER ::= 8
maxTFCI1Combs	INTEGER ::= 512
maxTFCI2Combs	INTEGER ::= 1024
maxTFCI2Combs-1	INTEGER ::= 1023
maxTGPS	INTEGER ::= 6
maxNrOfTS	INTEGER ::= 15
maxNrOfLevels	INTEGER ::= 256
maxNoOfDSCHs-1	INTEGER ::= 9
maxNrOfTsLCR	INTEGER ::= 6
maxNoSat	INTEGER ::= 16
maxNoGPSTypes	INTEGER ::= 8
maxNrOfMeasNCell	INTEGER ::= 96
maxNrOfMeasNCell-1	INTEGER ::= 95 -- maxNrOfMeasNCell - 1

```

maxResetContext                INTEGER ::= 250
maxResetContextGroup           INTEGER ::= 32
maxNrOfHARQProc                 INTEGER ::= 8
maxNrOfHSSCCHCodes             INTEGER ::= 4
maxNrOfHSSICHS                 INTEGER ::= 4
maxNrOfMACdFlows               INTEGER ::= 8
maxNrOfMACdFlows-1             INTEGER ::= 7 -- maxNrOfMACdFlows - 1
maxNrOfPDUIndexes              INTEGER ::= 8
maxNrOfPDUIndexes-1            INTEGER ::= 7 -- maxNrOfPDUIndexes - 1
maxNrOfPrioQueues              INTEGER ::= 8
maxNrOfPrioQueues-1            INTEGER ::= 7 -- maxNrOfPrioQueues - 1
maxNrOfSNAs                    INTEGER ::= 65536
maxNrOfSatAlmanac-maxNoSat     INTEGER ::= 16
maxNrOfGERANSI                 INTEGER ::= 8
maxNrOfInterfaces              INTEGER ::= 16
maxNrOfDDIs                    INTEGER ::= 63
maxNrOfSigSeqERGHICH-1        INTEGER ::= 39

```

```

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

```

```

id-AllowedQueuingTime          ProtocolIE-ID ::= 4
id-Allowed-Rate-Information     ProtocolIE-ID ::= 42
id-AntennaColocationIndicator  ProtocolIE-ID ::= 309
id-BindingID                   ProtocolIE-ID ::= 5
id-C-ID                         ProtocolIE-ID ::= 6
id-C-RNTI                       ProtocolIE-ID ::= 7
id-Cell-Capacity-Class-Value   ProtocolIE-ID ::= 303
id-CFN                          ProtocolIE-ID ::= 8
id-CN-CS-DomainIdentifier       ProtocolIE-ID ::= 9
id-CN-PS-DomainIdentifier       ProtocolIE-ID ::= 10
id-Cause                        ProtocolIE-ID ::= 11
id-CoverageIndicator            ProtocolIE-ID ::= 310
id-CriticalityDiagnostics       ProtocolIE-ID ::= 20
id-ContextInfoItem-Reset       ProtocolIE-ID ::= 211
id-ContextGroupInfoItem-Reset  ProtocolIE-ID ::= 515
id-D-RNTI                       ProtocolIE-ID ::= 21
id-D-RNTI-ReleaseIndication     ProtocolIE-ID ::= 22
id-DCHs-to-Add-FDD             ProtocolIE-ID ::= 26
id-DCHs-to-Add-TDD             ProtocolIE-ID ::= 27
id-DCH-DeleteList-RL-ReconfPrepFDD ProtocolIE-ID ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD ProtocolIE-ID ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD ProtocolIE-ID ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD ProtocolIE-ID ::= 33
id-DCH-FDD-Information          ProtocolIE-ID ::= 34
id-DCH-TDD-Information          ProtocolIE-ID ::= 35

```



id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 39
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 40
id-DCH-InformationResponse	ProtocolIE-ID ::= 43
id-DCH-Rate-InformationItem-RL-CongestInd	ProtocolIE-ID ::= 38
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 45
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	ProtocolIE-ID ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 50
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 51
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 53
id-FDD-DL-CodeInformation	ProtocolIE-ID ::= 54
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 59
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD	ProtocolIE-ID ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 64
id-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 278
id-DLReferencePower	ProtocolIE-ID ::= 67
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst	ProtocolIE-ID ::= 69
id-DPC-Mode	ProtocolIE-ID ::= 12
id-DRXCycleLengthCoefficient	ProtocolIE-ID ::= 70
id-DedicatedMeasurementObjectType-DM-Fail-Ind	ProtocolIE-ID ::= 470
id-DedicatedMeasurementObjectType-DM-Fail	ProtocolIE-ID ::= 471
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 73
id-DedicatedMeasurementType	ProtocolIE-ID ::= 74
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD	ProtocolIE-ID ::= 82
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD	ProtocolIE-ID ::= 83
id-Guaranteed-Rate-Information	ProtocolIE-ID ::= 41
id-IMSI	ProtocolIE-ID ::= 84
id-HCS-Prio	ProtocolIE-ID ::= 311
id-L3-Information	ProtocolIE-ID ::= 85
id-AdjustmentPeriod	ProtocolIE-ID ::= 90
id-MaxAdjustmentStep	ProtocolIE-ID ::= 91
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 92
id-MessageStructure	ProtocolIE-ID ::= 57
id-MeasurementID	ProtocolIE-ID ::= 93
id-Neighbouring-GSM-CellInformation	ProtocolIE-ID ::= 13
id-Neighbouring-UMTS-CellInformationItem	ProtocolIE-ID ::= 95
id-NRT-Load-Information-Value	ProtocolIE-ID ::= 305
id-NRT-Load-Information-Value-IncrDecrThres	ProtocolIE-ID ::= 306
id-PagingArea-PagingRqst	ProtocolIE-ID ::= 102
id-FACH-FlowControlInformation	ProtocolIE-ID ::= 103

id-PartialReportingIndicator	ProtocolIE-ID ::= 472
id-Permanent-NAS-UE-Identity	ProtocolIE-ID ::= 17
id-PowerAdjustmentType	ProtocolIE-ID ::= 107
id-RANAP-RelocationInformation	ProtocolIE-ID ::= 109
id-RL-Information-PhyChReconfRqstFDD	ProtocolIE-ID ::= 110
id-RL-Information-PhyChReconfRqstTDD	ProtocolIE-ID ::= 111
id-RL-Information-RL-AdditionRqstFDD	ProtocolIE-ID ::= 112
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 113
id-RL-Information-RL-DeletionRqst	ProtocolIE-ID ::= 114
id-RL-Information-RL-FailureInd	ProtocolIE-ID ::= 115
id-RL-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 116
id-RL-Information-RL-RestoreInd	ProtocolIE-ID ::= 117
id-RL-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 118
id-RL-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 119
id-RL-InformationItem-RL-CongestInd	ProtocolIE-ID ::= 55
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 120
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 121
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 122
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 2
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 123
id-RL-InformationList-RL-CongestInd	ProtocolIE-ID ::= 56
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 124
id-RL-InformationList-RL-DeletionRqst	ProtocolIE-ID ::= 125
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 1
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 126
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 127
id-RL-InformationResponse-RL-ReconfReadyTDD	ProtocolIE-ID ::= 128
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD	ProtocolIE-ID ::= 131
id-RL-InformationResponseItem-RL-ReconfRspFDD	ProtocolIE-ID ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD	ProtocolIE-ID ::= 135
id-RL-InformationResponseList-RL-ReconfRspFDD	ProtocolIE-ID ::= 136
id-RL-InformationResponse-RL-ReconfRspTDD	ProtocolIE-ID ::= 28
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 137
id-RL-ReconfigurationFailure-RL-ReconfFail	ProtocolIE-ID ::= 141
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 143
id-RL-Set-InformationItem-DM-Rqst	ProtocolIE-ID ::= 144
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 145
id-RL-Set-Information-RL-FailureInd	ProtocolIE-ID ::= 146
id-RL-Set-Information-RL-RestoreInd	ProtocolIE-ID ::= 147
id-RL-Set-Successful-InformationItem-DM-Fail	ProtocolIE-ID ::= 473
id-RL-Set-Unsuccessful-InformationItem-DM-Fail	ProtocolIE-ID ::= 474
id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind	ProtocolIE-ID ::= 475
id-RL-Successful-InformationItem-DM-Fail	ProtocolIE-ID ::= 476
id-RL-Unsuccessful-InformationItem-DM-Fail	ProtocolIE-ID ::= 477
id-RL-Unsuccessful-InformationItem-DM-Fail-Ind	ProtocolIE-ID ::= 478
id-ReportCharacteristics	ProtocolIE-ID ::= 152

id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 153
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 154
id-RT-Load-Value	ProtocolIE-ID ::= 307
id-RT-Load-Value-IncrDecrThres	ProtocolIE-ID ::= 308
id-S-RNTI	ProtocolIE-ID ::= 155
id-ResetIndicator	ProtocolIE-ID ::= 244
id-RNC-ID	ProtocolIE-ID ::= 245
id-SAI	ProtocolIE-ID ::= 156
id-SRNC-ID	ProtocolIE-ID ::= 157
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD	ProtocolIE-ID ::= 159
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD	ProtocolIE-ID ::= 160
id-TransportBearerID	ProtocolIE-ID ::= 163
id-TransportBearerRequestIndicator	ProtocolIE-ID ::= 164
id-TransportLayerAddress	ProtocolIE-ID ::= 165
id-TypeOfError	ProtocolIE-ID ::= 140
id-UC-ID	ProtocolIE-ID ::= 166
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD	ProtocolIE-ID ::= 167
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 169
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 171
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD	ProtocolIE-ID ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD	ProtocolIE-ID ::= 180
id-UL-DPCH-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 182
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 183
id-UL-SIRTarget	ProtocolIE-ID ::= 184
id-URA-Information	ProtocolIE-ID ::= 185
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD	ProtocolIE-ID ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD	ProtocolIE-ID ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD	ProtocolIE-ID ::= 190
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 193
id-AdjustmentRatio	ProtocolIE-ID ::= 194
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 197
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 198
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 199
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 200
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 201
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 205
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 206
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 207
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 208
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 209
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 210
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 212

id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 213
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 214
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 215
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 216
id-DSCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 217
id-DSCH-Delete-RL-ReconfPrepFDD	ProtocolIE-ID ::= 218
id-DSCH-FDD-Information	ProtocolIE-ID ::= 219
id-DSCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 220
id-DSCH-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 221
id-DSCH-TDD-Information	ProtocolIE-ID ::= 222
id-DSCH-FDD-InformationResponse	ProtocolIE-ID ::= 223
id-DSCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 226
id-DSCH-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 227
id-DSCH-Modify-RL-ReconfPrepFDD	ProtocolIE-ID ::= 228
id-DSCH-Specific-FDD-Additional-List	ProtocolIE-ID ::= 324
id-DSCHsToBeAddedOrModified-FDD	ProtocolIE-ID ::= 229
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 230
id-EnhancedDSCHPC	ProtocolIE-ID ::= 29
id-EnhancedDSCHPCIndicator	ProtocolIE-ID ::= 225
id-GA-Cell	ProtocolIE-ID ::= 232
id-GA-CellAdditionalShapes	ProtocolIE-ID ::= 3
id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 246
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 255
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD	ProtocolIE-ID ::= 256
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD	ProtocolIE-ID ::= 257
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 258
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 259
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 260
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 261
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 262
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 263
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 264
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 265
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD	ProtocolIE-ID ::= 266
id-USCHs-to-Add	ProtocolIE-ID ::= 267
id-USCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 268
id-USCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 269
id-USCH-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 270
id-USCH-Information	ProtocolIE-ID ::= 271
id-USCH-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 272
id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 273
id-DL-Physical-Channel-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 274
id-UL-Physical-Channel-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 275
id-ClosedLoopModel1-SupportIndicator	ProtocolIE-ID ::= 276
id-ClosedLoopMode2-SupportIndicator	ProtocolIE-ID ::= 277
id-STTD-SupportIndicator	ProtocolIE-ID ::= 279
id-CFNReportingIndicator	ProtocolIE-ID ::= 14
id-CNOriginatedPage-PagingRqst	ProtocolIE-ID ::= 23
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 24
id-PropagationDelay	ProtocolIE-ID ::= 25

id-RxTimingDeviationForTA	ProtocolIE-ID ::= 36
id-timeSlot-ISCP	ProtocolIE-ID ::= 37
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 15
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 16
id-CommonMeasurementAccuracy	ProtocolIE-ID ::= 280
id-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 281
id-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 282
id-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 283
id-CommonMeasurementType	ProtocolIE-ID ::= 284
id-CongestionCause	ProtocolIE-ID ::= 18
id-SFN	ProtocolIE-ID ::= 285
id-SFNReportingIndicator	ProtocolIE-ID ::= 286
id-InformationExchangeID	ProtocolIE-ID ::= 287
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 288
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 289
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 290
id-InformationReportCharacteristics	ProtocolIE-ID ::= 291
id-InformationType	ProtocolIE-ID ::= 292
id-neighbouring-LCR-TDD-CellInformation	ProtocolIE-ID ::= 58
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 65
id-RL-LCR-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 66
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 75
id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 76
id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 78
id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 79
id-USCH-LCR-InformationListIEs-RL-SetupRspTDD	ProtocolIE-ID ::= 80
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 81
id-RL-LCR-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 86
id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 87
id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 88
id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 89
id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD	ProtocolIE-ID ::= 94
id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD	ProtocolIE-ID ::= 96
id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD	ProtocolIE-ID ::= 97
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 98
id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 100
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 101
id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 104
id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD	ProtocolIE-ID ::= 105
id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD	ProtocolIE-ID ::= 106
id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD	ProtocolIE-ID ::= 138
id-TSTD-Support-Indicator-RL-SetupRqstTDD	ProtocolIE-ID ::= 139
id-RestrictionStateIndicator	ProtocolIE-ID ::= 142
id-Load-Value	ProtocolIE-ID ::= 233
id-Load-Value-IncrDecrThres	ProtocolIE-ID ::= 234
id-OnModification	ProtocolIE-ID ::= 235
id-Received-Total-Wideband-Power-Value	ProtocolIE-ID ::= 236
id-Received-Total-Wideband-Power-Value-IncrDecrThres	ProtocolIE-ID ::= 237
id-SFNMeasurementThresholdInformation	ProtocolIE-ID ::= 238

id-Transmitted-Carrier-Power-Value	ProtocolIE-ID ::= 239
id-Transmitted-Carrier-Power-Value-IncrDecrThres	ProtocolIE-ID ::= 240
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 241
id-UL-Timeslot-ISCP-Value	ProtocolIE-ID ::= 242
id-UL-Timeslot-ISCP-Value-IncrDecrThres	ProtocolIE-ID ::= 243
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 293
id-DPC-Mode-Change-SupportIndicator	ProtocolIE-ID ::= 19
id-SplitType	ProtocolIE-ID ::= 247
id-LengthOfTFCI2	ProtocolIE-ID ::= 295
id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD	ProtocolIE-ID ::= 202
id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD	ProtocolIE-ID ::= 203
id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 204
id-DSCH-RNTI	ProtocolIE-ID ::= 249
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 296
id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 297
id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 298
id-DL-ReferencePowerInformation	ProtocolIE-ID ::= 299
id-Enhanced-PrimaryCPICH-EcNo	ProtocolIE-ID ::= 224
id-IPDL-TDD-ParametersLCR	ProtocolIE-ID ::= 252
id-CellCapabilityContainer-FDD	ProtocolIE-ID ::= 300
id-CellCapabilityContainer-TDD	ProtocolIE-ID ::= 301
id-CellCapabilityContainer-TDD-LCR	ProtocolIE-ID ::= 302
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= 317
id-RL-ReconfigurationRequestFDD-RL-InformationList	ProtocolIE-ID ::= 318
id-RL-ReconfigurationRequestFDD-RL-Information-IEs	ProtocolIE-ID ::= 319
id-RL-ReconfigurationRequestTDD-RL-Information	ProtocolIE-ID ::= 321
id-CommonTransportChannelResourcesInitialisationNotRequired	ProtocolIE-ID ::= 250
id-DelayedActivation	ProtocolIE-ID ::= 312
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 313
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 314
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 315
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 316
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 251
id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 150
id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 151
id-PrimCCPCH-RSCP-DL-PC-RqstTDD	ProtocolIE-ID ::= 451
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 452
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 453
id-HSDSCH-FDD-Update-Information	ProtocolIE-ID ::= 466
id-HSDSCH-Information-to-Modify	ProtocolIE-ID ::= 456
id-HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 516
id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 517
id-HSDSCH-RNTI	ProtocolIE-ID ::= 457
id-HSDSCH-TDD-Information	ProtocolIE-ID ::= 458
id-HSDSCH-TDD-Information-Response	ProtocolIE-ID ::= 459
id-HSDSCH-TDD-Update-Information	ProtocolIE-ID ::= 467
id-HSPDSCH-RL-ID	ProtocolIE-ID ::= 463
id-HSDSCH-MACdFlows-to-Add	ProtocolIE-ID ::= 531
id-HSDSCH-MACdFlows-to-Delete	ProtocolIE-ID ::= 532
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 148

id-TrafficClass	ProtocolIE-ID ::= 158
id-TFCI-PC-SupportIndicator	ProtocolIE-ID ::= 248
id-Qth-Parameter	ProtocolIE-ID ::= 253
id-PDSCH-RL-ID	ProtocolIE-ID ::= 323
id-TimeSlot-RL-SetupRspTDD	ProtocolIE-ID ::= 325
id-GERAN-Cell-Capability	ProtocolIE-ID ::= 468
id-GERAN-Classmark	ProtocolIE-ID ::= 469
id-DSCH-InitialWindowSize	ProtocolIE-ID ::= 480
id-UL-Synchronisation-Parameters-LCR	ProtocolIE-ID ::= 464
id-SNA-Information	ProtocolIE-ID ::= 479
id-MACHs-ResetIndicator	ProtocolIE-ID ::= 465
id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD	ProtocolIE-ID ::= 481
id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD	ProtocolIE-ID ::= 482
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD	ProtocolIE-ID ::= 483
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 484
id-UL-CCTrCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 485
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 486
id-DL-CCTrCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 487
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 488
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 489
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD	ProtocolIE-ID ::= 490
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 491
id-UL-TimingAdvanceCtrl-LCR	ProtocolIE-ID ::= 492
id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD	ProtocolIE-ID ::= 493
id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD	ProtocolIE-ID ::= 494
id-HS-SICH-Reception-Quality	ProtocolIE-ID ::= 495
id-HS-SICH-Reception-Quality-Measurement-Value	ProtocolIE-ID ::= 496
id-HSSICH-Info-DM-Rprt	ProtocolIE-ID ::= 497
id-HSSICH-Info-DM-Rqst	ProtocolIE-ID ::= 498
id-HSSICH-Info-DM	ProtocolIE-ID ::= 499
id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD	ProtocolIE-ID ::= 500
id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD	ProtocolIE-ID ::= 501
id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD	ProtocolIE-ID ::= 502
id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD	ProtocolIE-ID ::= 503
id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD	ProtocolIE-ID ::= 504
id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD	ProtocolIE-ID ::= 505
id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD	ProtocolIE-ID ::= 506
id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD	ProtocolIE-ID ::= 507
id-DL-CCTrCH-InformationList-RL-ReconfRspTDD	ProtocolIE-ID ::= 508
id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD	ProtocolIE-ID ::= 509
id-Maximum-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 510
id-Minimum-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 511
id-TDD-Support-8PSK	ProtocolIE-ID ::= 512
id-TDD-maxNrDLPhysicalchannels	ProtocolIE-ID ::= 513
id-ExtendedGSMCellIndividualOffset	ProtocolIE-ID ::= 514
id-RL-ParameterUpdateIndicationFDD-RL-InformationList	ProtocolIE-ID ::= 518
id-Primary-CPICH-Usage-For-Channel-Estimation	ProtocolIE-ID ::= 519
id-Secondary-CPICH-Information	ProtocolIE-ID ::= 520
id-Secondary-CPICH-Information-Change	ProtocolIE-ID ::= 521
id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation	ProtocolIE-ID ::= 522

id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH	ProtocolIE-ID ::= 523
id-RL-ParameterUpdateIndicationFDD-RL-Information-Item	ProtocolIE-ID ::= 524
id-Phase-Reference-Update-Indicator	ProtocolIE-ID ::= 525
id-Unidirectional-DCH-Indicator	ProtocolIE-ID ::= 526
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 527
id-Multiple-RL-InformationResponse-RL-ReconfReadyTDD	ProtocolIE-ID ::= 528
id-RL-ReconfigurationResponseTDD-RL-Information	ProtocolIE-ID ::= 529
id-Satellite-Almanac-Information-ExtItem	ProtocolIE-ID ::= 530
id-HSDSCH-Information-to-Modify-Unsynchronised	ProtocolIE-ID ::= 533
id-TnlQos	ProtocolIE-ID ::= 534
id-RTLoadValue	ProtocolIE-ID ::= 535
id-NRTLLoadInformationValue	ProtocolIE-ID ::= 536
id-CellPortionID	ProtocolIE-ID ::= 537
id-UpPTSInterferenceValue	ProtocolIE-ID ::= 538
id-PrimaryCCPCH-RSCP-Delta	ProtocolIE-ID ::= 539
id-UEMeasurementType	ProtocolIE-ID ::= 540
id-UEMeasurementTimeslotInfoHCR	ProtocolIE-ID ::= 541
id-UEMeasurementTimeslotInfoLCR	ProtocolIE-ID ::= 542
id-UEMeasurementReportCharacteristics	ProtocolIE-ID ::= 543
id-UEMeasurementParameterModAllow	ProtocolIE-ID ::= 544
id-UEMeasurementValueInformation	ProtocolIE-ID ::= 545
id-InterfacesToTraceItem	ProtocolIE-ID ::= 546
id-ListOfInterfacesToTrace	ProtocolIE-ID ::= 547
id-TraceDepth	ProtocolIE-ID ::= 548
id-TraceRecordingSessionReference	ProtocolIE-ID ::= 549
id-TraceReference	ProtocolIE-ID ::= 550
id-UEIdentity	ProtocolIE-ID ::= 551
id-NACC-Related-Data	ProtocolIE-ID ::= 552
id-GSM-Cell-InfEx-Rqst	ProtocolIE-ID ::= 553
id-MeasurementRecoveryBehavior	ProtocolIE-ID ::= 554
id-MeasurementRecoveryReportingIndicator	ProtocolIE-ID ::= 555
id-MeasurementRecoverySupportIndicator	ProtocolIE-ID ::= 556
id-MBMS-Bearer-Service-List	ProtocolIE-ID ::= 560
id-MBMS-Bearer-Service-List-InfEx-Rsp	ProtocolIE-ID ::= 561
id-Active-MBMS-Bearer-Service-UplinkSigTrFDD	ProtocolIE-ID ::= 562
id-Active-MBMS-Bearer-Service-UplinkSigTrTDD	ProtocolIE-ID ::= 563
id-Old-URA-ID	ProtocolIE-ID ::= 564
id-TMGI	ProtocolIE-ID ::= 565
id-TransmissionMode	ProtocolIE-ID ::= 566
id-AffectedUEInformationForMBMS	ProtocolIE-ID ::= 567
id-UE-State	ProtocolIE-ID ::= 568
id-URA-ID	ProtocolIE-ID ::= 569
id-DRNC-ID	ProtocolIE-ID ::= 570
id-HARQ-Preamble-Mode	ProtocolIE-ID ::= 571
<a href="#">id-UL-DPDCHIndicatorEDCH</a>	<a href="#">ProtocolIE-ID ::= 573</a>
<a href="#">id-EDPCH-Information</a>	<a href="#">ProtocolIE-ID ::= 574</a>
<a href="#">id-RL-Specific-EDCH-Information</a>	<a href="#">ProtocolIE-ID ::= 575</a>
<a href="#">id-EDCH-RL-Indication</a>	<a href="#">ProtocolIE-ID ::= 576</a>
<a href="#">id-EDCH-FDD-Information</a>	<a href="#">ProtocolIE-ID ::= 577</a>
<a href="#">id-EDCH-RLSet-Id</a>	<a href="#">ProtocolIE-ID ::= 578</a>



<a href="#">id-Serving-EDCHRL-Id</a>	ProtocolIE-ID ::= 579
<a href="#">id-EDCH-FDD-DL-ControlChannelInformation</a>	ProtocolIE-ID ::= 580
<a href="#">id-EDCH-FDD-InformationResponse</a>	ProtocolIE-ID ::= 581
<a href="#">id-EDCH-MACdFlows-To-Add</a>	ProtocolIE-ID ::= 582
<a href="#">id-EDCH-FDD-Information-To-Modify</a>	ProtocolIE-ID ::= 583
<a href="#">id-EDCH-MACdFlows-To-Delete</a>	ProtocolIE-ID ::= 584
<a href="#">id-EDPCH-Information-RLReconfRequest-FDD</a>	ProtocolIE-ID ::= 585
<a href="#">id-EDCH-MacFlowSpecificInformationList-RL-PreemptRequiredInd</a>	ProtocolIE-ID ::= 586
<a href="#">id-EDCH-MacFlowSpecificInformationItem-RL-PreemptRequiredInd</a>	ProtocolIE-ID ::= 587
<a href="#">id-EDCH-MacFlowSpecificInformationList-RL-CongestInd</a>	ProtocolIE-ID ::= 588
<a href="#">id-EDCH-MacFlowSpecificInformationItem-RL-CongestInd</a>	ProtocolIE-ID ::= 589

END

## 9.3.7 Container Definitions

```
-- *****
--
-- Container definitions
--
-- *****

RNSAP-Containers {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) rnsap (1) version1 (1) rnsap-Containers (5) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

IMPORTS
    maxPrivateIEs,
    maxProtocolExtensions,
    maxProtocolIEs,
    Criticality,
    Presence,
    PrivateIE-ID,
    ProtocolIE-ID
FROM RNSAP-CommonDataTypes;

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

```

-- Class Definition for Protocol IEs
--
-- *****

RNSAP-PROTOCOL-IES ::= CLASS {
    &id          ProtocolIE-ID          UNIQUE,
    &criticality Criticality,
    &Value,
    &presence    Presence
}
WITH SYNTAX {
    ID          &id
    CRITICALITY &criticality
    TYPE        &Value
    PRESENCE    &presence
}

-- *****
--
-- Class Definition for Protocol IEs
--
-- *****

RNSAP-PROTOCOL-IES-PAIR ::= CLASS {
    &id          ProtocolIE-ID          UNIQUE,
    &firstCriticality Criticality,
    &FirstValue,
    &secondCriticality Criticality,
    &SecondValue,
    &presence    Presence
}
WITH SYNTAX {
    ID          &id
    FIRST CRITICALITY &firstCriticality
    FIRST TYPE      &FirstValue
    SECOND CRITICALITY &secondCriticality
    SECOND TYPE     &SecondValue
    PRESENCE        &presence
}

-- *****
--
-- Class Definition for Protocol Extensions
--
-- *****

RNSAP-PROTOCOL-EXTENSION ::= CLASS {
    &id          ProtocolIE-ID          UNIQUE,
    &criticality Criticality,
    &Extension,

```

```

    &presence      Presence
}
WITH SYNTAX {
    ID              &id
    CRITICALITY    &criticality
    EXTENSION      &Extension
    PRESENCE       &presence
}

-- *****
--
-- Class Definition for Private IEs
--
-- *****

RNSAP-PRIVATE-IES ::= CLASS {
    &id              PrivateIE-ID,
    &criticality    Criticality,
    &Value,
    &presence      Presence
}
WITH SYNTAX {
    ID              &id
    CRITICALITY    &criticality
    TYPE           &Value
    PRESENCE       &presence
}

-- *****
--
-- Container for Protocol IEs
--
-- *****

ProtocolIE-Container {RNSAP-PROTOCOL-IES : IEsSetParam} ::=
    SEQUENCE (SIZE (0..maxProtocolIEs)) OF
    ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Single-Container {RNSAP-PROTOCOL-IES : IEsSetParam} ::=
    ProtocolIE-Field {{IEsSetParam}}

ProtocolIE-Field {RNSAP-PROTOCOL-IES : IEsSetParam} ::= SEQUENCE {
    id              RNSAP-PROTOCOL-IES.&id              ({IEsSetParam}),
    criticality     RNSAP-PROTOCOL-IES.&criticality      ({IEsSetParam}@id}),
    value          RNSAP-PROTOCOL-IES.&Value            ({IEsSetParam}@id)
}

-- *****
--
-- Container for Protocol IE Pairs

```

```

--
-- *****
ProtocolIE-ContainerPair {RNSAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
  SEQUENCE (SIZE (0..maxProtocolIEs)) OF
    ProtocolIE-FieldPair {{IEsSetParam}}

ProtocolIE-FieldPair {RNSAP-PROTOCOL-IES-PAIR : IEsSetParam} ::= SEQUENCE {
  id                RNSAP-PROTOCOL-IES-PAIR.&id                ({IEsSetParam}),
  firstCriticality  RNSAP-PROTOCOL-IES-PAIR.&firstCriticality  ({IEsSetParam}{@id}),
  firstValue        RNSAP-PROTOCOL-IES-PAIR.&FirstValue        ({IEsSetParam}{@id}),
  secondCriticality RNSAP-PROTOCOL-IES-PAIR.&secondCriticality  ({IEsSetParam}{@id}),
  secondValue       RNSAP-PROTOCOL-IES-PAIR.&SecondValue       ({IEsSetParam}{@id})
}

-- *****
--
-- Container Lists for Protocol IE Containers
--
-- *****

ProtocolIE-ContainerList {INTEGER : lowerBound, INTEGER : upperBound, RNSAP-PROTOCOL-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (lowerBound..upperBound)) OF
    ProtocolIE-Container {{IEsSetParam}}

ProtocolIE-ContainerPairList {INTEGER : lowerBound, INTEGER : upperBound, RNSAP-PROTOCOL-IES-PAIR : IEsSetParam} ::=
  SEQUENCE (SIZE (lowerBound..upperBound)) OF
    ProtocolIE-ContainerPair {{IEsSetParam}}

-- *****
--
-- Container for Protocol Extensions
--
-- *****

ProtocolExtensionContainer {RNSAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::=
  SEQUENCE (SIZE (1..maxProtocolExtensions)) OF
    ProtocolExtensionField {{ExtensionSetParam}}

ProtocolExtensionField {RNSAP-PROTOCOL-EXTENSION : ExtensionSetParam} ::= SEQUENCE {
  id                RNSAP-PROTOCOL-EXTENSION.&id                ({ExtensionSetParam}),
  criticality       RNSAP-PROTOCOL-EXTENSION.&criticality       ({ExtensionSetParam}{@id}),
  extensionValue    RNSAP-PROTOCOL-EXTENSION.&Extension         ({ExtensionSetParam}{@id})
}

-- *****
--
-- Container for Private IEs
--
-- *****

```

```
PrivateIE-Container {RNSAP-PRIVATE-IES : IEsSetParam} ::=
  SEQUENCE (SIZE (1..maxPrivateIEs)) OF
    PrivateIE-Field {{IEsSetParam}}

PrivateIE-Field {RNSAP-PRIVATE-IES : IEsSetParam} ::= SEQUENCE {
  id          RNSAP-PRIVATE-IES.&id          ({IEsSetParam}),
  criticality RNSAP-PRIVATE-IES.&criticality ({IEsSetParam}@id),
  value       RNSAP-PRIVATE-IES.&Value      ({IEsSetParam}@id)
}

END
```

```
/* Unaffected parts omitted */
```



3GPP TSG-RAN3 Meeting #46  
 Scottsdale, Arizona, USA, 14th – 18th February 2005

Tdoc # R3-050359

CR-Form-v7.1	<b>CHANGE REQUEST</b>
⌘ <b>25.433 CR 1081</b> ⌘ rev <b>2</b> ⌘ Current version: <b>6.4.0</b> ⌘	

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

**Proposed change affects:** UICC apps  ME  Radio Access Network  Core Network

<b>Title:</b>	⌘ E-DCH NBAP ASN.1		
<b>Source:</b>	⌘ RAN3		
<b>Work item code:</b>	⌘ EDCH-lurlub	<b>Date:</b>	⌘ 14/02/2005
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-6
	Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

<b>Reason for change:</b>	⌘ The ASN.1 needs to be updated due to all the modifications made to the specification to introduce the new Enhanced DCH feature. The tabular format and the procedure text need to be updated accordingly.
<b>Summary of change:</b>	⌘ Introduction of the Enhanced DCH functionality in the ASN.1 of the NBAP specification. The tabular format and the procedure text are updated accordingly.
<b>Consequences if not approved:</b>	⌘

<b>Clauses affected:</b>	⌘ 8.2.17.2, 8.3.2.2, 8.3.5.2, 9.1.36.1, 9.1.37.1, 9.1.38.1, 9.1.39.1, 9.1.40.1, 9.1.41.1, 9.1.42.1, 9.1.43, 9.1.47.1, 9.1.48, 9.2.1.29ab, 9.2.2.13Dc, 9.2.2.13Df, 9.2.2.x1 (new), 9.2.2.x2 (new), 9.3.3, 9.3.4, 9.3.6								
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td></td> <td>X</td> </tr> <tr> <td></td> <td>X</td> </tr> </table> Other core specifications ⌘ 25.423 Rel-6 Test specifications O&M Specifications	Y	N	X			X		X
Y	N								
X									
	X								
	X								
<b>Other comments:</b>	⌘								

**How to create CRs using this form:**

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

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



## 8.2.17 Radio Link Setup

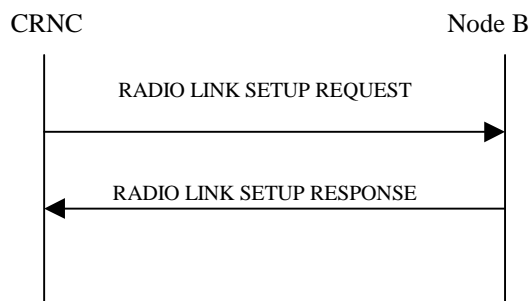
### 8.2.17.1 General

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

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

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

### 8.2.17.2 Successful Operation



**Figure 24: Radio Link Setup procedure, Successful Operation**

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

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

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

#### Transport Channels Handling:

##### DCH(s):

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

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

If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.

[TDD - If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]

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

QE, ref. [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]

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

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

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

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

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

If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.

[FDD - The *Diversity Control Field* IE indicates for each RL (except the first RL in the message) whether the Node B shall combine the concerned RL or not.

- If the *Diversity Control Field* IE is set to "May", the Node B shall decide for either of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL.
- If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

The *Diversity Control Field* IE is applied to Dedicated Transport Channels (DCH) only, in case of E-DCH it shall always be assumed to be set to "Must". When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with.]

[FDD - In the RADIO LINK SETUP RESPONSE message, the Node B shall indicate for each RL with the Diversity Indication in the *RL Information Response* IE whether the RL is combined or not.]

- [FDD - In case of not combining with a RL previously listed in the RADIO LINK SETUP RESPONSE message or for the first RL in the RADIO LINK SETUP RESPONSE message, the Node B shall include in the *DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]
- [FDD - Otherwise in case of combining, the *RL ID* IE indicates (one of) the RL(s) previously listed in this RADIO LINK SETUP RESPONSE message with which the concerned RL is combined.]

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

In the case of a set of co-ordinated DCHs, the *Binding ID* IE and the *Transport Layer Address* IE shall be specified for only one of the DCHs in the set of co-ordinated DCHs.

#### **DSCH(s):**

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. The Node B shall manage the time of arrival of these frames according to the values of ToAWS and ToAWE specified in the IEs. The *TFCI2 Bearer Information Response* IE containing the *Binding ID* IE and the *Transport Layer Address* IE for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message. If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *TFCI2 Bearer Information* IE the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a TFCI2 transport bearer.]

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

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

#### [TDD - USCH(s)]:

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

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

[TDD - If the RADIO LINK SETUP REQUEST message includes the *TNL QoS* IE in the *USCH Information* IE and if ALCAP is not used, the Node B may use the *TNL QoS* IE to determine the transport bearer characteristics to apply in the uplink for the related USCH.]

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

#### HS-DSCH:

If the *HS-DSCH Information* IE is present in the RADIO LINK SETUP REQUEST message, then:

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message.
- The Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every HS-DSCH MAC-d flow being established.
- If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *HS-DSCH Information* IE for an HS-DSCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow.
- If the RADIO LINK SETUP REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK SETUP REQUEST message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK SETUP RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- [FDD – If the RADIO LINK SETUP REQUEST message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD – If the RADIO LINK SETUP REQUEST message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD – The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [TDD – The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD - *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK SETUP RESPONSE message.]
- [FDD – If the RADIO LINK SETUP REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10].]

**[FDD - E-DCH]:**

[FDD – If the *E-DCH FDD Information* IE is present in the RADIO LINK SETUP REQUEST message:]

- [FDD – The Node B shall setup the requested E-DCH resources on the Radio Links indicated by the *E-DCH RL Indication* IE in the *RL Information* IE.]
- [FDD – The Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer for every E-DCH MAC-d flow being established.]
- [FDD – If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *E-DCH Information* IE for an E-DCH MAC-d flow, then the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned E-DCH MAC-d flow.]
- [FDD – If the RADIO LINK SETUP REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *Data Descriptor Indicator* IE in the *E-DCH Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions for the related reordering queue.]
- [FDD – If the RADIO LINK SETUP REQUEST message includes the *Maximum Number Of Retransmissions For E-DCH* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to report if the maximum number of retransmissions has elapsed.]
- [FDD – If the *TNL QoS* IE is included for an E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.]
- [FDD – The Node B shall include the *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE, the *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-RGCH Signature Sequence Number* and *E-HICH Signature Sequence* IEs in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK SETUP RESPONSE message for every RL indicated by the *E-DCH RL Indication* IE in the *RL Information* IE.]
- [FDD – If the RADIO LINK SETUP REQUEST message includes the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this Node B, then the Node B shall allocate an E-RNTI identifier for the corresponding RL and include this E-RNTI identifier and the channelisation code of

the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK SETUP RESPONSE message.]

### Physical Channels Handling:

#### [FDD - Compressed Mode]:

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

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

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

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

#### [FDD - DL Code Information]:

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

#### [TDD - PDSCH RL ID]:

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

#### [FDD – Phase Reference Handling]:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Primary CPICH Usage For Channel Estimation* IE and has the value "Primary CPICH shall not be used", the Node B shall assume that the UE is not using the Primary CPICH for channel estimation. If the RADIO LINK SETUP REQUEST message does not include the *Primary CPICH Usage For Channel Estimation* IE or includes the *Primary CPICH Usage For Channel Estimation* IE and has the value "Primary CPICH may be used", the Node B shall assume that the UE may use the Primary CPICH for channel estimation.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Secondary CPICH Information* IE, the Node B shall assume that the UE may use the Secondary CPICH indicated by the *Common Physical Channel ID* IE for channel estimation.]

#### General:

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

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

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

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

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

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

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

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

[1.28Mcps TDD - If the *UL CCTrCH Information* IE includes the *TDD TPC UL Step Size* IE, the Node B shall configure the uplink TPC step size according to the parameters given in the message.]

#### **[FDD - E-DPCH Handling]:**

[FDD – If the *UL DPDCH Indicator For E-DCH Operation* IE is set to "UL DPDCH not present", the *Min UL Channelisation Code Length* IE, the *Puncture Limit* IE and the *TFCS* IE within the *UL DPCH Information* IE shall be ignored.]

#### **Radio Link Handling:**

##### **[FDD - Transmit Diversity]:**

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

##### **DL Power Control:**

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

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

[3.84 Mcps TDD - The Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power

is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall start any DL transmission on each DCH type CCH until the UL synchronisation on the Uu interface is achieved for the CCH. 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.[21], subclause 4.2.3.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

[3.84 Mcps TDD - The Node B shall determine the maximum DL power for each DCH type CCH by the following rule: If the *CCH Maximum DL Transmission Power* IE is included for that CCH, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE.]

[3.84 Mcps TDD - The Node B shall determine the minimum DL power for each DCH type CCH by the following rule: If the *CCH Minimum DL Transmission Power* IE is included for that CCH, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE.]

[3.84 Mcps TDD - The initial power, maximum power, and minimum power for DSCH type CCH shall be determined as follows:

- If the DSCH type CCH is paired with an uplink CCH(s) for inner loop power control, the minimum, maximum and initial power for each PDSCH is determined in the same way as described above for DCH type CCHs.
- If the DSCH type CCH is not paired with an uplink CCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCHs. The minimum and initial powers, however, are subject to control by the CRNC via the frame protocol].

[1.28 Mcps TDD - The Node B shall determine the initial DL power for each timeslot within the DCH type CCH by the following rule: If the *Initial DL Transmission Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the Initial DL Power and ignore the *DL Time Slot ISCP info LCR* IE, otherwise the initial DL Power is the *Initial DL Transmission Power* IE included in the *RL Information* IE and if *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall start any DL transmission on each timeslot within each DCH type CCH using the initial DL power, as determined above, on each DL DPCH and on each timeslot of the CCH until the UL synchronisation on the Uu interface is achieved for the CCH. 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.[21], subclause 5.1.2.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

[1.28 Mcps TDD - The Node B shall determine the maximum DL power for each timeslot within the DCH type CCH by the following rule: If the *Maximum DL Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE.]

[1.28 Mcps TDD - The Node B shall determine the minimum DL power for each timeslot within the DCH type CCH by the following rule: If the *Minimum DL Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE.]

[1.28 Mcps TDD - The Node B shall determine the initial power for each timeslot within the DSCH type CCH by the following rule: If both the *CCH Initial DL Transmission Power* IE, included in the *DL CCH Information* IE, and the *DL Time Slot ISCP Info LCR* IE, included in the *RL Information* IE, are included then the Node B shall use that power for the PDSCH and ignore the *Initial DL Transmission Power* IE included in the *RL Information* IE, otherwise the initial DL Power is the *Initial DL Transmission Power* IE included in the *RL Information* IE and if *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall start any DL transmission on each timeslot within each DSCH

type CCTrCH using the initial DL power, as determined above, on each DL PDSCH and on each timeslot of the CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

[1.28 Mcps TDD - The Node B shall determine the maximum DL power for each timeslot within the DSCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE.]

[1.28 Mcps TDD - The Node B shall determine the minimum DL power for each timeslot within the DSCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE.]

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

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *DL Power Balancing Information* IE and the *Power Adjustment Type* IE is set to "Common" or "Individual", the Node B shall activate the power balancing, if activation of power balancing by the RADIO LINK SETUP REQUEST message is supported, according to subclause 8.3.7, using the *DL Power Balancing Information* IE. If the Node B starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing, i.e.  $P_{init}$  shall be set to the power level indicated by the *Initial DL Transmission Power* IE.]

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

#### **[1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:**

[1.28Mcps TDD - If the RADIO LINK SETUP REQUEST message contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]

#### **General:**

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

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Qth Parameter* IE in addition to the *SSDT Cell Identity* IE, the Node B shall use the *Qth Parameter* IE, if Qth signalling is supported, when SSDT is activated.]

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

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



[10] subclause 5.2.2. If the RADIO LINK SETUP REQUEST message includes both *SSDT Cell Identity* IE and *SSDT Cell Identity For EDSCHPC* IE, then the Node B shall ignore the value in *SSDT Cell Identity For EDSCHPC* IE. If the enhanced DSCH power control is activated and the TFCI power control in DSCH hard split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

The Node B shall start reception on the new RL(s) after the RLs are successfully established.

**[FDD - Radio Link Set Handling]:**

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

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

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

[FDD - The UL out-of-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the maximum value of the parameters *N\_OUTSYNC\_IND* and *T\_RLFAILURE* that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters *N\_INSYNC\_IND*, that are configured in the cells supporting the radio links of the RL Set.]

**Response Message:**

If the RLs are successfully established, the Node B shall and respond with a RADIO LINK SETUP RESPONSE message.

After sending the RADIO LINK SETUP RESPONSE message the Node B shall continuously attempt to obtain UL synchronisation on the Uu interface.

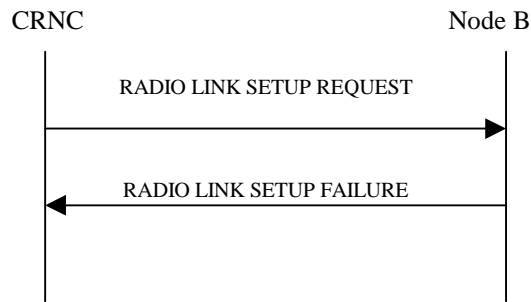
For each RL for which the *Delayed Activation* IE is not included in the RADIO LINK SETUP REQUEST message, the Node B shall:

- [FDD - start transmission on the DL DPDCH(s) of the new RL as specified in [16].]
- [TDD - start transmission on the new RL immediately as specified in [16].]

For each RL for which the *Delayed Activation* IE is included in the RADIO LINK SETUP REQUEST message, the Node B shall:

- if the *Delayed Activation* IE indicates "Separate Indication":
  - not start any DL transmission for the concerned RL on the Uu interface;
- if the *Delayed Activation* IE indicates "CFN":
  - [FDD - start transmission on the DL DPDCH(s) of the new RL as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
  - [TDD - start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in [16].]

### 8.2.17.3 Unsuccessful Operation



**Figure 25: Radio Link Setup procedure, Unsuccessful Operation**

If the establishment of at least one radio link is unsuccessful, the Node B shall respond with a RADIO LINK SETUP FAILURE message. The message contains the failure cause in the *Cause* IE.

[FDD - If some radio links were established successfully, the Node B shall indicate this in the RADIO LINK SETUP FAILURE message in the same way as in the RADIO LINK SETUP RESPONSE message. In this case, the Node B shall include the *Communication Control Port Id* IE in the RADIO LINK SETUP FAILURE message.]

[FDD - If the RL identified by the *HS-PDSCH RL ID* IE is a radio link in the Node B and this RL is successfully established, then the Node B shall include the *HS-DSCH FDD Information Response* IE in the RADIO LINK SETUP FAILURE message.]

Typical cause values are as follows:

**Radio Network Layer Cause:**

- Combining not supported
- Combining Resources not available
- Requested Tx Diversity Mode not supported
- Number of DL codes not supported
- Number of UL codes not supported
- UL SF not supported
- DL SF not supported
- Dedicated Transport Channel Type not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- DPC mode change not supported
- Delayed Activation not supported
- HARQ Preamble Mode not supported

**Transport Layer Cause:**

- Transport Resources Unavailable

**Miscellaneous Cause:**

- O&M Intervention

- Control processing overload
- HW failure

#### 8.2.17.4 Abnormal Conditions

[FDD - If the RADIO LINK SETUP REQUEST message contains the *Active Pattern Sequence Information* IE, but the *Transmission Gap Pattern Sequence Information* IE is not present, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Radio Link Setup procedure as failed and shall respond with a RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCH Information* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and the *Binding ID* IE in the *RL Specific DCH Information* IE included in the *RL Information* IE for a specific RL and the *Diversity Control Field* IE is set to "Must", the Node B shall regard the Radio Link Setup procedure as failed and respond with the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Length Of TFCI2* IE but the *TFCI Signalling Option* IE is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message does not include the *Length Of TFCI2* IE but the *Split Type* IE is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

[FDD - If the RADIO LINK SETUP REQUEST message includes the *Split Type* IE set to the value "Hard" and the *Length Of TFCI2* IE set to the value "1", "2", "5", "8", "9" or "10", then the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.]

If the RADIO LINK SETUP REQUEST message includes an *HS-PDSCH RL-ID* IE not referring to one of the radio links to be established, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

If the RADIO LINK SETUP REQUEST message contains the *HS-DSCH Information* IE and if the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the RADIO LINK SETUP FAILURE message.

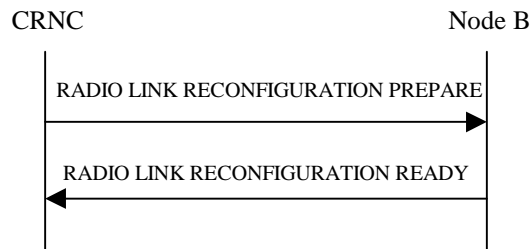
## 8.3.2 Synchronised Radio Link Reconfiguration Preparation

### 8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one Node B Communication Context.

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

### 8.3.2.2 Successful Operation



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

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

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

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

#### **DCH Modification:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs To Modify* IE 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 *TNL QoS* IE for a DCH or a set of co-ordinated DCHs to be modified and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply in the uplink for the related DCH or set of co-ordinated DCHs.
- 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 the *Allocation/Retention Priority* IE for a DCH, the Node B shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs, 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, 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.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.
- [TDD – If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply for the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.
- 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 Startpoint 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 Endpoint 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* IE, the Node B shall not include the referenced DCHs in the new configuration.

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

#### **Physical Channel Modification:**

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

- [FDD - If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL 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, 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 DPCH Slot Format* IE, the Node B shall set the new Downlink DPCH 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 set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]

- [FDD - If the *DL DPCH Information IE* includes the *Limited Power Increase IE* 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. Any Transmission Gap Pattern Sequences already existing in the previous Compressed Mode Configuration are replaced by the new sequences once the new Compressed Mode Configuration has been activated. 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.]

#### [FDD - E-DPCH Handling]:

~~[FDD – If the *UL DPDCH Indicator For E-DCH Operation IE* is set to "UL DPDCH not present" the *Min UL Channelisation Code Length IE*, the *Puncture Limit IE* and the *TFCS IE* within the *UL DPCH Information IE* shall be ignored.]~~

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

- [FDD - If the *E-DPCH Information IE* includes the *Min UL Channelisation Code Length For EDCH FDD IE*, the Node B shall apply the new Min UL Channelisation Code Length in the new configuration. The Node B shall apply the contents of the *Max Number Of E-DPDCHs IE* (if it is included) in the new configuration.]
- [FDD - If the *E-DPCH Information IE* includes the *Puncture Limit IE*, the Node B shall apply the value in the uplink of the new configuration]
- [FDD - If the *E-DPCH Information IE* includes the *E-TFCS IE*, the Node B shall use the *E-TFCS IE* for the E-DCH 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 *E-DPCH Information IE* includes the *E-TTI IE*, the Node B shall use the value when the new configuration is being used.]

#### [TDD – UL/DL CCTrCH Modification]

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

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

- [1.28Mcps TDD - If the *UL CCH to Modify* IE includes the *TDD TPC UL Step Size* IE, the Node B shall apply this value to the uplink TPC step size in the new configuration.]
- [TDD - If the *DL CCH to Modify* IE includes the *TDD TPC DL Step Size* IE, the Node B shall apply this value to the downlink TPC step size in the new configuration.]

#### [TDD – UL/DL CCH Addition]

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

[TDD – If the *UL/DL CCH To Add* IE includes any [3.84Mcps TDD - *UL/DL DPCH Information* IE] [1.28Mcps TDD - *UL/DL DPCH Information LCR* 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 *TDD TPC DL Step Size* IE within a *DL CCH To Add* IE, the Node B shall set the downlink TPC step size of that CCH to that value, otherwise the Node B shall set the TPC step size of that CCH to the same value as the lowest numbered DL CCH in the current configuration.]

[1.28Mcps TDD - If the *UL CCH To Add* IE includes the *TDD TPC UL Step Size* IE, the Node B shall apply the uplink TPC step size in the new configuration.]

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

#### [TDD – UL/DL CCH Deletion]

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

#### DL Power Control:

- [FDD - If the *RL Information* IE includes the *DL Reference Power* IEs and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported, at the CFN in the RADIO LINK RECONFIGURATION COMMIT message, according to subclause 8.3.7, using the *DL Reference Power* IE. If the CFN modulo the value of the *Adjustment Period* IE is not equal to 0, the power balancing continues with the old reference power until the end of the current adjustment period, and the updated reference power shall be used from the next adjustment period.]

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION READY message.]

#### DSCH Addition/Modification/Deletion:

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

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

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



[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Request Indicator* IE in the *TFCI2 Bearer Information* IE with the value "New Bearer Requested", the Node B shall establish a new transport bearer replacing the existing transport bearer on which the DSCH TFCI Signaling control frames shall be received. The *Binding ID* IE and *Transport Layer Address* IE of a new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message.]

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

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

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

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

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

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

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

[FDD - If the enhanced DSCH power control is activated and the TFCI power control in DSCH hard split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

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

#### [TDD – USCH Addition/Modification/Deletion]:

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified, if the *TNL QoS* IE is included and if ALCAP is not used, the Node B may use the *TNL QoS* IE to determine the transport bearer characteristics to apply between the Node B and the CRNC for the related USCHs.]
- [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 *Qth Parameter* IE and the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B shall use the *Qth Parameter* IE, if Qth signalling is supported, when SSDT is activated in the new configuration.]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information* IE includes a *DL Code Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- [FDD - 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. During compressed mode, the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [3.84 Mcps TDD - If the *DL CCH To Add* IE is included, the Node B shall determine the maximum CCH DL power for the DCH type CCH by the following rule: If the *CCH Maximum DL Transmission Power* IE is included for that CCH, then the Node B shall use that power for the maximum CCH DL power, otherwise the maximum CCH DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. If no *Maximum Downlink Power* IE is included (even if *CCH Maximum DL Transmission Power* IEs are included), any maximum DL power stored for already existing DCH type CCHs for this Node B Communication Context shall be applied.]
- [3.84 Mcps TDD - If the *DL CCH To Add* IE is included, the Node B shall determine the minimum CCH DL power for the DCH type CCH by the following rule: If the *CCH Minimum DL Transmission Power* IE is included for that CCH, then the Node B shall use that power for the minimum CCH DL power, otherwise the minimum CCH DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. If no *Minimum Downlink Power* IE is included (even if *CCH Minimum DL Transmission Power* IEs are included), any minimum DL power stored for already existing DCH type CCHs for this Node B Communication Context shall be applied.]
- [3.84 Mcps TDD - If the *DL CCH To Modify* IE is included and *Maximum CCH DL Power to Modify* IE and/or *Minimum CCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DCH type CCH. If the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values for all other DCH type CCHs of the radio link.]
- [1.28 Mcps TDD - If the *DL CCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DCH type CCH by the following rule: If the *Maximum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL DPCH. If no *Maximum Downlink Power* IE is included, any maximum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD - If the *DL CCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DCH type CCH by the following rule: If the *Minimum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum Downlink Power* IE included in the *RL*

*Information IE.* The Node B shall store this value and not transmit with a lower power on any applicable DL DPCH. If no *Minimum Downlink Power IE* is included, any minimum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]

- [1.28 Mcps TDD - If the *DL CCH To Modify IE* is included and *Maximum DL Power to Modify LCR IE* and/or *Minimum DL Power to Modify LCR IE* are included, the Node B shall apply the values in the new configuration for this timeslot, if the *RL Information IE* includes *Maximum Downlink Power* and/or the *Minimum Downlink Power IEs*, the Node B shall apply the values in the new configuration for all other timeslots.]
- [3.84Mcps TDD – If the *RL Information IE* includes the *Initial DL Transmission Power IE*, the Node B shall determine the initial CCH DL power for each DCH type CCH by the following rule: If the *CCH Initial DL Transmission Power IE* is included for that CCH, then the Node B shall use that power for the initial CCH DL power, otherwise the initial CCH DL power is the *Initial DL Transmission Power IE* included in the *RL Information IE*. The Node B shall apply the determined initial CCH DL power to the transmission on each DPCH of the CCH when starting transmission on a new CCH until the UL synchronisation on the Uu interface is achieved for the CCH. If no *Initial DL Transmission Power IE* is included with a new CCH (even if *CCH Initial DL Transmission Power IEs* are included), the Node B shall use any transmission power level currently used on already existing CCHs when starting transmission for a new CCH. 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.[21], subclause 4.2.3.4).]
- [3.84Mcps TDD - The initial power, maximum power, and minimum power for a DSCH type CCH to be added or modified, shall be determined as follows:
  - If the DSCH type CCH is paired with an uplink CCH(s) for inner loop power control, the minimum, maximum and initial power for each PDSCH is determined in the same way as described above for DCH type CCHs.
  - If the DSCH type CCH is not paired with an uplink CCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCHs. The minimum and initial powers, however, are subject to control by the CRNC via the frame protocol].
- [1.28 Mcps TDD – If the *RL Information IE* includes the *Initial DL Transmission Power IE*, the Node B shall determine the initial DL power for each timeslot in a DCH type CCH by the following rule: If the *Initial DL Transmission Power IE* is included in the *DL Timeslot Information LCR IE*, then the Node B shall use that power for the initial DL power, otherwise the initial DL power is the *Initial DL Transmission Power IE* included in the *RL Information IE*. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCH. If no *Initial DL Transmission Power IE* is included, the Node B shall use any transmission power level currently used on already existing timeslots for this Node B Communication Context. 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.[21], subclause 5.1.2.4).]
- [1.28Mcps TDD - If the *RL Information IE* includes the *Initial DL Transmission Power IE*, the Node B shall determine the initial DL power for each timeslot within the DSCH type CCH by the following rule: If both the *CCH Initial DL Transmission Power IE* and the *DL Time Slot ISCP Info LCR IE* are included then the Node B shall use that power for the PDSCH power, otherwise the PDSCH power is the *Initial DL Transmission Power IE* included in the *RL Information IE*. If *DL Time Slot ISCP info LCR IE* is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall apply the given power to the transmission on each PDSCH and on each timeslot of the CCH when starting transmission on a new CCH until the UL synchronisation on the Uu interface is achieved for the CCH. If no *Initial DL Transmission Power IE* is included with a new CCH (even if *CCH Initial DL Transmission Power IEs* are included), the Node B shall use any transmission power level currently used on already existing RL/timeslots when starting transmission for a new CCH. 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.[21], subclause 5.1.2.4).]
- [1.28 Mcps TDD - If the *DL CCH To Add IE* is included, the Node B shall determine the maximum DL power for each timeslot within a DSCH type CCH by the following rule: If the *CCH Maximum DL*

*Transmission Power* IE is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL PDSCH. If no *Maximum Downlink Power* IE is included, any maximum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]

- [1.28 Mcps TDD - If the *DL CCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DSCH type CCH by the following rule: If the *CCH Minimum DL Transmission Power* IE is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL PDSCH. If no *Minimum Downlink Power* IE is included, any minimum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD - If the *DL CCH To Modify* IE is included and the *Maximum CCH DL Power to Modify* IE and/or the *Minimum CCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DSCH type CCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [FDD- If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the Node B shall adjust the timing of the radio link accordingly in the new configuration.]
- [1.28Mcps TDD – If the *RL Information* IE message contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]

#### [TDD - PDSCH RL ID]:

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

#### Signalling bearer rearrangement:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Signalling Bearer Request Indicator* IE the Node B shall allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION READY message.

#### HS-DSCH Setup:

If the *HS-DSCH Information* IE is present in the RADIO LINK RECONFIGURATION PREPARE message, then:

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID* IE.
- The Node B shall include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE for a Priority Queue in the *HS-DSCH MAC-d Flows Information* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].

- [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-SCCH Power Offset* IE in the *HS-DSCH Information* IE, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD – The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD – The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD – *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD – *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10].]

#### **Intra-Node B Serving HS-DSCH Radio Link Change:**

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- In the new configuration the Node B shall de-allocate the HS-PDSCH resources of the old Serving HS-PDSCH Radio Link and allocate the HS-PDSCH resources for the new Serving HS-PDSCH Radio Link.
- The Node B may include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION READY message.
- [FDD – The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD – The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD – *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD – *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

#### **HS-DSCH Modification:**

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify* IE, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE for every HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Window Size* IE or *T1* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated values in the new configuration for the related HSDPA Priority Queue.

- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-d PDU Size Index* IE in the *Modify Priority Queue* choice, the Node B shall delete the previous list of MAC-d PDU Size Index values for the related HSDPA Priority Queue and use the MAC-d PDU Size Index values indicated in the *MAC-d PDU Size Index* IE in the new configuration.
- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *CQI Feedback Cycle k* IE, the *CQI Repetition Factor* IE, the *ACK-NACK Repetition Factor* IE, the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated CQI Feedback Cycle k value, the CQI Repetition Factor or the ACK-NACK Repetition Factor, ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD - If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To Modify* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes *Measurement Power Offset* IE in the *HS-DSCH Information* IE or the *HS-DSCH Information To Modify* IE, then the Node B shall use the measurement power offset as described in [10] subclause 6A.2.]
- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To Modify* IE, the Node B shall use the indicated power offset in the new configuration.]
- [FDD - If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH codes corresponding to the HS-DSCH. The Node B shall then report the codes which are used in the new configuration specified in the *HS-SCCH Specific Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD - If the *HS-DSCH Information To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH parameters corresponding to the HS-DSCH. The Node B shall then report the values for the parameters which are used in the new configuration specified in the [3.84Mcps TDD - *HS-SCCH Specific Information Response*] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR*] IEs in the RADIO LINK RECONFIGURATION READY message.]
- [FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated HARQ Preamble Mode in the new configuration as described in [10].]

#### **HS-DSCH MAC-d Flow Addition/Deletion:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated HS-DSCH MAC-d flows. When an HS-DSCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH MAC-d Flows To Delete* IE requesting the deletion of all remaining HS-DSCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the HS-DSCH configuration from the Node B Communication Context and release the HS-PDSCH resources.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH MAC-d Flows To Add* IE, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for every HS-DSCH MAC-d flow being added, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.

- The Node B may include the *HARQ Memory Partitioning* IE in the RADIO LINK RECONFIGURATION READY message.

### E-DCH Setup:

If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION PREPARE message:

- The Node B shall setup the requested E-DCH resources on the Radio Links indicated by the *E-DCH RL Indication* IE in the *RL Information* IE.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *Data Description Indicator* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the the *Maximum Number Of Retransmissions For E-DCH* IE in the *E-DCH FDD Information* IE, then the Node B shall use this information to report if the maximum number of retransmissions has elapsed.
- If the *TNL QoS* IE is included for a E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.
- The Node B shall include the ~~E-AGCH And E-RGCH/E-HICH FDD Scrambling Code~~ *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE, the ~~E-RGCH/E-HICH Channelisation Code~~ *E-RGCH/E-HICH Channelisation Code* IE and the corresponding ~~E-RGCH Signature Sequence and Sequence Number~~ *E-HICH Signature Sequence* IEs in the ~~E-DCH FDD DL Control Channel Information~~ *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message for every RL indicated by the ~~E-DCH RL Indication~~ *E-DCH RL Indication* IE in the ~~RL Information~~ *RL Information* IE.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Serving E-DCH RL* IE indicating that the Serving E-DCH RL is in this Node B, then the Node B shall allocate an E-RNTI identifier for the corresponding RL and include this E-RNTI identifier and the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message.

### Serving E-DCH Radio Link Change:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Serving E-DCH RL* IE, this indicates the new Serving E-DCH Radio Link:

- If the old Serving E-DCH RL is in this Node B, the Node B shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link.
- If the new Serving E-DCH RL is in this Node B, the Node B shall allocate an E-RNTI identifier for the new Serving E-DCH Radio Link and include this identifier along with the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION READY message.

### E-DCH Modification:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH FDD Information To Modify* IE, then:

- If the RADIO LINK RECONFIGURATION PREPARE message includes the *Data Description Indicator* IE, the Node B shall delete the previous list of Data Description Indicator values for this Node B Communication Context and use the DDI values indicated in the *Data Description Indicator* IE in the new configuration.

### E-DCH MAC-d Flow Addition/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *E-DCH MAC-d Flows To Add* or *E-DCH MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *E-DCH MAC-d Flows To Delete* IE requesting the deletion of all remaining E-DCH MAC-d flows for the UE Context, then the Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *E-DCH MAC-d Flows To Add* IE, then:

- If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION PREPARE message includes the the *Maximum Number of Retransmissions for E-DCH* IE in the *E-DCH MAC-d Flows To Add* IE, then the Node B shall use this information to report if the maximum number of retransmissions has elapsed.

**[FDD - Phase Reference Handling]:**

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Primary CPICH Usage For Channel Estimation* IE, the Node B shall assume that Primary CPICH usage for channel estimation has been reconfigured.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Secondary CPICH Information Change* IE, the Node B shall assume that Secondary CPICH usage for channel estimation has been reconfigured.]

**General**

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IEs in the *DSCHs To Modify*, *DSCHs To Add*, [TDD - *USCHs To Modify*, *USCHs To Add*], *HS-DSCH Information*, *HS-DSCH Information To Modify*, *HS-DSCH MAC-d Flows To Add*, *E-DCH Information*, *E-DCH Information To Modify*, *E-DCH MAC-d Flows To Add* or in the *RL Specific DCH Information* IEs, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel or MAC-d flow being added, or any Transport Channel or MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

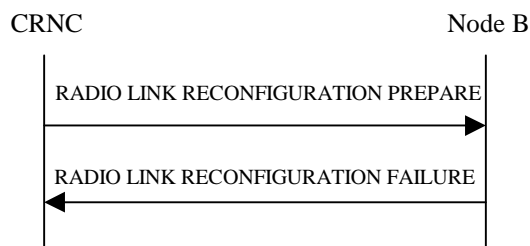
If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully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

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

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

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

### 8.3.2.3 Unsuccessful Operation



**Figure 31: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation**

If the Node B cannot reserve the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be added, it shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed.



If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLs, the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

#### Radio Network Layer Cause

- UL SF not supported
- DL SF not supported
- Downlink Shared Channel Type not supported
- Uplink Shared Channel Type not supported
- CM not supported
- Number of DL codes not supported
- Number of UL codes not supported
- RL Timing Adjustment not supported
- HARQ Preamble Mode not supported

#### Transport Layer Cause

- Transport Resources Unavailable

#### Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

### 8.3.2.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector* IE set to "selected"], the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE" and SSDT is not active in the current configuration, the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as failed if the *UL DPCH Information* IE does not include the *SSDT Cell Identity Length* IE. In this case, it shall respond with a RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message includes a *DCHs To Modify* IE or *DCHs To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs To Modify* IE or *DCHs To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-Static Transport Format Information* IE, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *DL Reference Power* IE, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the Node B shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the RADIO LINK RECONFIGURATION PREPARE message IE includes more than one *DL Reference Power* IE, the Node B shall regard the Synchronised Radio Link Reconfiguration

Preparation procedure as having failed and the Node B shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Length Of TFCI2* IE but the *TFCI Signalling Option* IE is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Length Of TFCI2* IE but the *Split Type* IE is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *Split Type* IE set to the value "Hard" and the *Length Of TFCI2* IE set to the value "1", "2", "5", "8", "9" or "10", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message is to modify UE channel estimation information for an existing RL and the modification is not allowed according to [10] subclause 4.3.2.1, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-DSCH Information To Modify* IE deleting the last remaining Priority Queue of an HS-DSCH MAC-d Flow, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[TDD - If multiple radio links exist within the Node B Communication Context and the RADIO LINK RECONFIGURATION PREPARE message does not include a *RL ID* IE within each *UL DPCH To Add Per RL* IE, *DL DPCH To Add Per RL* IE, *UL DPCH To Modify Per RL* IE, and *DL DPCH To Modify Per RL* IE that is present in the message, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

## 8.3.5 Unsynchronised Radio Link Reconfiguration

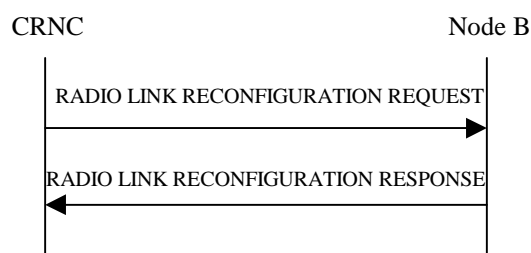
### 8.3.5.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Unsynchronised Radio Link Reconfiguration procedure is used when there is no need to synchronise the time of the switching from the old to the new configuration in one Node B used for a UE-UTRAN connection with any other Node B also used for the UE-UTRAN connection.

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

### 8.3.5.2 Successful Operation



**Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation**

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

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

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

#### **DCH Modification:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Modify* IE 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 Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs To Modify* IE includes the *TNL QoS* IE for a DCH or a set of co-ordinated DCHs to be modified and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply for the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the UL, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the DL, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *Allocation/Retention Priority* IE for a DCH, the Node B shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCHs To Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

#### **DCH Addition:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCH To Add* IE, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCHs in the new configuration. In particular:

- If a *DCHs To Add* IE includes multiple *DCH Specific Info* IEs for a DCH to be added, the Node B shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Uplink DCH only", the Node B shall ignore the *Transport Format Set* IE for the downlink for this DCH. As a consequence this DCH is not included as a part of the downlink CCTrCH.
- [TDD – If the *DCH Specific Info* IE includes the *Unidirectional DCH Indicator* IE set to "Downlink DCH only", the Node B shall ignore the *Transport Format Set* IE for the uplink for this DCH. As a consequence this DCH is not included as a part of the uplink CCTrCH.]
- [FDD - For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Node B shall use the Transport channel BER from that DCH as the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Node B shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" as the QE in the UL data frames [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *TNL QoS* IE is included for a DCH or a set of co-ordinated DCHs and if ALCAP is not used, the Node B may store this information for this DCH in the new configuration. The *TNL QoS* IE may be used to determine the transport bearer characteristics to apply for the uplink between the Node B and the CRNC for the related DCH or set of co-ordinated DCHs.
- 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 Startpoint 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 Endpoint in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be added, the Node B shall apply the new CCTrCH ID in the downlink of this DCH in the new configuration.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be added, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

#### **DCH Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the Node B shall not include this DCH in the new configuration.

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

#### **[FDD - Physical Channel Modification]:**

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

- [FDD - If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the Node B shall apply the new TFCS in the Uplink of the new configuration.]

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

- [FDD – If the *DL DPCH Information* IE includes on the *TFCS* IE for the DL, the Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the Node B shall use the information when building TFCIs in the new configuration.
  - [FDD – If the *Length Of TFCI2* IE is included, then the Node B shall apply the length of TFCI (field 2) indicated in the message in the new configuration.]
  - [FDD – If the *Length Of TFCI2* IE is not included and the *Split Type* IE is present with the value "Hard", then the Node B shall assume the value of the TFCI (field 2) is 5 bits in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transmission Gap Pattern Sequence Information* IE, the Node B shall store the new information about the Transmission Gap Pattern Sequences to be used in the new Compressed Mode Configuration. Any Transmission Gap Pattern Sequences already existing in the previous Compressed Mode Configuration are replaced by the new sequences once the new Compressed Mode Configuration has been activated. 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.]

#### **[FDD - E-DPCH Handling]:**

~~[FDD – If the *UL DPDCH Indicator F or E-DCH Operation* IE is set to "UL DPDCH not present" the *Min UL Channelisation Code Length* IE, the *Puncture Limit* IE and the *TFCS* IE within the *UL DPCH Information* IE shall be ignored.]~~

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DPCH Information* IE which contains the *E-TFCS* IE, the Node B shall use the *E-TFCS* IE for the E-DCH 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.]

**[TDD – UL/DL CCTrCH Modification]**

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Modify* IE or *DL CCTrCH To Modify* IE in the Radio Link(s), the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message.]

[TDD – If the *UL CCTrCH To Modify* IE or *DL CCTrCH To Modify* IE includes *TFCS* IE and/or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

[1.28Mcps TDD - If the *UL CCTrCH To Modify* IE includes *UL SIR Target* IE, the Node B shall apply this value as the new configuration and use it for the UL inner loop power control according [19] and [21].]

**[TDD – UL/DL CCTrCH Deletion]**

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Delete* IE or *DL CCTrCH To Delete* IE, the Node B shall not include this CCTrCH in the new configuration.]

**DL Power Control:**

- [FDD – If the *Radio Link Information* IE includes the *DL Reference Power* IE and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported, using the *DL Reference Power* IE in the RADIO LINK RECONFIGURATION REQUEST message. The updated reference power shall be used from the next adjustment period.]

[FDD – If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

**RL Information:**

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

- [FDD - If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and not transmit with a higher power on any Downlink DPCH of the Radio Link once the new configuration is being used. During compressed mode, the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [FDD - If the *RL Information* IE includes the *Minimum DL Power* IE, the Node B shall apply this value to the new configuration and never transmit with a lower power on any Downlink Channelisation Code of the Radio Link once the new configuration is being used.]
- [3.84 Mcps TDD - If the *CCTrCH Maximum DL Transmission Power* IE and/or the *CCTrCH Minimum DL Transmission Power* IE are included, the Node B shall apply the values in the new configuration for this DCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other DCH type CCTrCHs.]
- [3.84 Mcps TDD – The maximum power and minimum power for a DSCH type CCTrCH to be modified, shall be determined as follows:
  - If the DSCH type CCTrCH is paired with an uplink CCTrCH(s) for inner loop power control, the minimum and maximum power for each PDSCH is determined in the same way as described above for DCH type CCTrCHs.
  - If the DSCH type CCTrCH is not paired with an uplink CCTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCTrCHs. The minimum power, however, is subject to control by the CRNC via the frame protocol].
- [1.28 Mcps TDD - If *Maximum DL Power* IE and/or *Minimum DL Power* IE are included within *DL Timeslot Information LCR* IE, the the Node B shall apply the values in the new configuration for this timeslot within a DCH type CCTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]

- [1.28 Mcps TDD - If the *CCTrCH Maximum DL Transmission Power IE* and/or the *CCTrCH Minimum DL Transmission Power IE* are included, the Node B shall apply the values in the new configuration for this DSCH type CCTrCH, if the *RL Information IE* includes the *Maximum Downlink Power* and/or the *Minimum Downlink Power IEs*, the Node B shall apply the values in the new configuration for other timeslots.]
- [FDD – If the *RL Information IE* contains the *Transmission Gap Pattern Sequence Code Information IE* in the *DL Code Information IE* for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- [1.28Mcps TDD – If the *RL Information IE* contains the *Uplink Synchronisation Parameters LCR IE*, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize IE* and *Uplink Synchronisation Frequency IE* when evaluating the timing of the UL synchronisation.]

### Signalling Bearer Re-arrangement:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Signalling Bearer Request Indicator IE*, the Node B shall allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID IE* in the RADIO LINK RECONFIGURATION RESPONSE message.

### HS-DSCH Setup:

If the *HS-DSCH Information IE* is present in the RADIO LINK RECONFIGURATION REQUEST message, then:

- The Node B shall setup the requested HS-PDSCH resources on the Serving HS-DSCH Radio Link indicated by the *HS-PDSCH RL ID IE*.
- The Node B shall include the *HARQ Memory Partitioning IE* in the [FDD – *HS-DSCH FDD Information Response IE*] [TDD – *HS-DSCH TDD Information Response IE*] in the RADIO LINK RECONFIGURATION RESPONSE message.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate IE* for a Priority Queue in the *HS-DSCH MAC-d Flows Information IE* in the *HS-DSCH Information IE*, then the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer IE* for a Priority Queue in the *HS-DSCH MAC-d Flows Information IE* in the *HS-DSCH Information IE*, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- The Node B shall include the *HS-DSCH Initial Capacity Allocation IE* in the [FDD – *HS-DSCH FDD Information Response IE*] [TDD – *HS-DSCH TDD Information Response IE*] in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being established, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- [FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-SCCH Power Offset IE* in the *HS-DSCH Information IE*, then the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *Measurement Power Offset IE* in the *HS-DSCH Information IE*, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]
- [FDD - The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response IE* in the *HS-DSCH FDD Information Response IE* in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD - The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD - *HS-SCCH Specific Information Response IE*] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR IE*] in the *HS-DSCH TDD Information Response IE* in the RADIO LINK RECONFIGURATION RESPONSE message.]

- [FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information* IE, then the Node B shall use the indicated HARQ Preamble Mode as described in [10].]

#### **Intra-Node B Serving HS-DSCH Radio Link Change:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL ID* IE, this indicates the new Serving HS-DSCH Radio Link:

- The Node B shall release the HS-PDSCH resources on the old Serving HS-DSCH Radio Link and setup the HS-PDSCH resources on the new Serving HS-DSCH Radio Link.
- The Node B may include the *HARQ Memory Partitioning* IE in the [FDD – *HS-DSCH FDD Information Response* IE] [TDD – *HS-DSCH TDD Information Response* IE] in the RADIO LINK RECONFIGURATION RESPONSE message.
- [FDD – The Node B shall allocate HS-SCCH codes corresponding to the HS-DSCH and include the *HS-SCCH Specific Information Response* IE in the *HS-DSCH FDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]
- [TDD – The Node B shall allocate HS-SCCH parameters corresponding to the HS-DSCH and include the [3.84Mcps TDD – *HS-SCCH Specific Information Response* IE] [1.28Mcps TDD – *HS-SCCH Specific Information Response LCR* IE] in the *HS-DSCH TDD Information Response* IE in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### **HS-DSCH Modification:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information To ModifyUnsynchronised* IE and if the Serving HS-DSCH Radio Link is in the Node B, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE for every HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [32].
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.
- [FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use the indicated ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]
- [FDD - If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, the Node B shall use the indicated power offset in the new configuration.]
- [FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *HARQ Preamble Mode* IE in the *HS-DSCH Information To ModifyUnsynchronised* IE, then the Node B shall use the indicated HARQ Preamble Mode in the new configuration as described in [10].]

#### **HS-DSCH MAC-d Flow Addition/Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *HS-DSCH MAC-d Flows To Add* or *HS-DSCH MAC-d Flows To Delete* IEs and if the Serving HS-DSCH Radio Link is in the Node B, then the Node B shall



use this information to add/delete the indicated HS-DSCH MAC-d flows on the Serving HS-DSCH Radio Link. When an HS-DSCH MAC-d flow is deleted, all its associated Priority Queues shall also be removed.

If the RADIO LINK RECONFIGURATION REQUEST message includes an *HS-DSCH MAC-d Flows To Delete* IE requesting the deletion of all remaining HS-DSCH MAC-d flows for the Node B Communication Context, then the Node B shall delete the HS-DSCH configuration from the Node B Communication Context and release any existing HS-PDSCH resources.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH MAC-d Flows To Add* IE and if the Serving HS-DSCH Radio Link is in the Node B, then:

- The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every HS-DSCH MAC-d flow being added, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH MAC-d Flows To Add* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions for the related HSDPA Priority Queue.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Discard Timer* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard out-of-date MAC-hs SDUs from the related HSDPA Priority Queue.

#### E-DCH Setup:

If the *E-DCH FDD Information* IE is present in the RADIO LINK RECONFIGURATION REQUEST message:

- The Node B shall setup the requested E-DCH resources on the Radio Links indicated by the *E-DCH RL Indication* IE in the *RL Information* IE.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate* IE in the *E-DCH MAC-d Flows Information* IE, then the Node B shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the the *Maximum Number Of Retransmissions For E-DCH* IE in the *E-DCH MAC-d Flows Information* IE, then the Node B shall use this information to report if the maximum number of retransmissions has elapsed.
- If the *TNL QoS* IE is included for a E-DCH MAC-d flow and if ALCAP is not used, the *TNL QoS* IE may be used by the Node B to determine the transport bearer characteristics to apply in the uplink for the related MAC-d flow.
- The Node B shall include the ~~E-AGCH And E-RGCH/E-HICH FDD Scrambling Code~~ *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE, the ~~E-RGCH/E-HICH Channelisation Code~~ *E-RGCH/E-HICH Channelisation Code* IE and the corresponding *E-RGCH Signature Sequence* and *E-HICH Signature Sequence* IEs in the ~~E-DCH FDD DL Control Channel Information~~ *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message for every RL indicated by the ~~E-DCH RL Indication~~ *E-DCH RL Indication* IE in the ~~RL Information~~ *RL Information* IE.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Serving E-DCH RL* IE, then the Node B shall allocate an E-RNTI identifier for the corresponding RL and include this E-RNTI identifier and the channelisation code of the corresponding E-AGCH in the *E-DCH FDD DL Control Channel Information* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

#### Serving E-DCH Radio Link Change:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Serving E-DCH RL* IE, this indicates the new Serving E-DCH Radio Link:

- If the old Serving E-DCH RL is in this Node B, the Node B shall de-allocate the E-AGCH resources of the old Serving E-DCH Radio Link.
- If the New Serving E-DCH RL is in this Node B, the Node B shall allocate an E-RNTI identifier for the new Serving E-DCH Radio Link and include this identifier along with the channelisation code of the corresponding

E-AGCH in the *E-DCH FDD DL Control Channel Information IE* in the RADIO LINK RECONFIGURATION RESPONSE message.

#### **E-DCH Modification:**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH FDD Information To Modify IE*, then:

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Data Description Indicator IE*, the Node B shall delete the previous list of DDI values for this Node B Communication Context and use the DDI values indicated in the *Data Description Indicator IE* in the new configuration.

#### **E-DCH MAC-d Flow Addition/Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *E-DCH MAC-d Flows To Add* or *E-DCH MAC-d Flows To Delete* IEs, then the Node B shall use this information to add/delete the indicated E-DCH MAC-d flows. When an E-DCH MAC-d flow is deleted, all its associated configuration data shall also be removed.

If the RADIO LINK RECONFIGURATION REQUEST message includes an *E-DCH MAC-d Flows To Delete IE* requesting the deletion of all remaining E-DCH MAC-d flows for the UE Context, then the Node B shall delete the E-DCH configuration from the Node B Communication Context and release the E-DCH resources.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *E-DCH MAC-d Flows To Add IE*, then:

- If the RADIO LINK RECONFIGURATION REQUEST message includes the *MAC-es Guaranteed Bit Rate IE* in the *E-DCH MAC-d Flows To Add IE*, the Node B shall use this information to optimise MAC-e scheduling decisions.
- If the RADIO LINK RECONFIGURATION REQUEST message includes the *Maximum Number Of Retransmissions For E-DCH IE* in the *E-DCH MAC-d Flows To Add IE*, then the Node B shall use this information to report if the maximum number of retransmissions has elapsed.

#### **General**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Transport Layer Address IE* and *Binding ID IEs* in the *HS-DSCH Information IE*, *HS-DSCH Information To Modify Unsynchronised IE*, *HS-DSCH MAC-d Flows To Add IE*, *E-DCH Information IE*, *E-DCH Information To Modify IE*, *E-DCH MAC-d Flows To Add IE* or in the *RL Specific DCH Information IE*, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel or MAC-d flow being added or any Transport Channel or MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*.

If the requested modifications are allowed by the Node B, the Node B has successfully allocated the required resources, and changed to the new configuration, it shall respond to the CRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

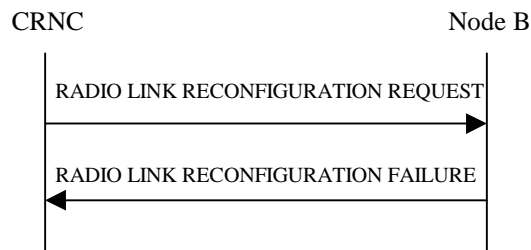
The Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Transport Layer Address IE* and the *Binding ID IE* for any Transport Channel or MAC-d flow being added or any Transport Channel or MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator IE*. The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1.

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

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

In the case of a signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has sent the RADIO LINK RECONFIGURATION RESPONSE message via the old Communication Control Port.

### 8.3.5.3 Unsuccessful Operation



**Figure 35: Unsynchronised Radio Link Reconfiguration procedure, Unsuccessful Operation**

If the Node B cannot allocate the necessary resources for all the new DCHs of one set of co-ordinated DCHs requested to be set-up, it shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed.

If the requested Unsynchronised Radio Link Reconfiguration procedure fails for one or more Radio Link(s), the Node B shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC, indicating the reason for failure.

Typical cause values are as follows:

#### Radio Network Layer Cause

- CM not supported
- HARQ Preamble Mode not supported

#### Transport Layer Cause

- Transport Resources Unavailable

#### Miscellaneous Cause

- O&M Intervention
- Control processing overload
- HW failure

### 8.3.5.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

[FDD – If the *RL Information IE* contains the *DL Code Information IE* and this IE includes *DL Scrambling Code* and *FDD DL Channelisation Code Number IEs* not matching the DL Channelisation code(s) already allocated to the Radio Link identified by *RL ID IE*, then the Node B shall consider the Unsynchronised Radio Link Reconfiguration procedure as having failed and it shall send the RADIO LINK RECONFIGURATION FAILURE message to the CRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector IE* set to "selected" [TDD – or no DCH of a set of co-ordinated DCHs has the *QE-Selector IE* set to "selected"], the Node B shall regard the Unsynchronised Radio Link Reconfiguration Preparation procedure as failed and shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes a *DCHs To Modify IE* or *DCHs To Add IE* with multiple *DCH Specific Info IEs*, and if the DCHs in the *DCHs To Modify IE* or *DCHs To Add IE* do not have the same *Transmission Time Interval IE* in the *Semi-Static Transport Format Information IE*, then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information IE* includes the *DL Reference Power IEs*, but the power balancing is not active in the indicated RL(s), the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Common" in the existing RL(s) but the *RL Information* IE includes more than one *DL Reference Power* IEs, the Node B shall regard the Unsynchronised Radio Link Reconfiguration procedure as having failed and the Node B shall respond the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Length Of TFCI2* IE but the *TFCI Signalling Option* IE is set to "Normal", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message does not include the *Length Of TFCI2* IE but the *Split Type* IE is set to "Logical", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *Split Type* IE set to the value "Hard" and the *Length Of TFCI2* IE set to the value "1", "2", "5", "8", "9" or "10", then the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION REQUEST message contains the *Transport Layer Address* IE or the *Binding ID* IE when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE, and not both are present for a transport bearer intended to be established, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE or *HS-DSCH MAC-d Flows To Delete* IE in addition to the *HS-DSCH Information* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information To Modify* IE, *HS-DSCH MAC-d Flows To Add* IE, *HS-DSCH MAC-d Flows To Delete* IE or *HS-PDSCH RL ID* IE and the Serving HS-DSCH Radio Link is not in the Node B, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-DSCH Information* IE and does not include the *HS-PDSCH RL-ID* IE, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message includes the *HS-PDSCH RL-ID* IE indicating a Radio Link not existing in the Node B Communication Context, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

If the RADIO LINK RECONFIGURATION REQUEST message contains any of the *HS-DSCH Information* IE, *HS-DSCH Information To Modify* IE, or *HS-DSCH MAC-d Flows To Add* IE and if in the new configuration the Priority Queues associated with the same *HS-DSCH MAC-d Flow ID* IE have the same *Scheduling Priority Indicator* IE value, the Node B shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

## 9.1.36 RADIO LINK SETUP REQUEST

## 9.1.36.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	reject
<b>UL DPCH Information</b>		1			YES	reject
>UL Scrambling Code	M		9.2.2.59		–	
>Min UL Channelisation Code Length	M		9.2.2.22		–	
>Max Number of UL DPDCHs	C-CodeLen		9.2.2.21		–	
>Puncture Limit	M		9.2.1.50	For UL	–	
>TFCS	M		9.2.1.58	For UL	–	
>UL DPCCH Slot Format	M		9.2.2.57		–	
>UL SIR Target	M		UL SIR 9.2.1.67A		–	
>Diversity Mode	M		9.2.2.9		–	
>SSDT Cell ID Length	O		9.2.2.45		–	
>S Field Length	O		9.2.2.40		–	
>DPC Mode	O		9.2.2.13C		YES	reject
>UL DPDCH Indicator For E-DCH Operation	C-ifEDPCHInfo		9.2.2.x4ENUMERATED (UL-DPDCH present, UL-DPDCH not present)		YES	reject
<b>E-DPCH Information</b>		0..1			YES	reject
>Min UL Channelisation Code Length For E-DCH FDD	M		9.2.2.22a		–	
>Max Number Of UL E-DPDCHs	C-CodeLenE DCH		9.2.2.20B	more than one E-DPDCHs possible in case of SF=[2 or 4]	–	
>Puncture Limit	M		9.2.1.50		–	
>E-TFCS	M		9.2.1.29ag		–	
>E-TTI	M		ENUMERATED (2ms, 40ms)		–	
<b>DL DPCH Information</b>		1			YES	reject
>TFCS	M		9.2.1.58	For DL	–	
>DL DPCH Slot Format	M		9.2.2.10		–	
>TFCI Signalling Mode	M		9.2.2.50		–	
>TFCI Presence	C-SlotFormat		9.2.1.57		–	
>Multiplexing Position	M		9.2.2.23		–	
>PDSCH RL ID	C-DSCH		RL ID 9.2.1.53		–	
>PDSCH Code Mapping	C-DSCH		9.2.2.25		–	
<b>&gt;Power Offset Information</b>		1			–	

>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	–	
>>PO2	M		Power Offset 9.2.2.29	Power offset for the TPC bits	–	
>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	–	
>FDD TPC DL Step Size	M		9.2.2.16		–	
>Limited Power Increase	M		9.2.2.18A		–	
>Inner Loop DL PC Status	M		9.2.2.18B		–	
DCH Information	M		DCH FDD Information 9.2.2.4D		YES	reject
DSCH Information	O		DSCH FDD Information 9.2.2.13B		YES	reject
<b>TFCI2 Bearer Information</b>		0..1			YES	ignore
>ToAWS	M		9.2.1.61		–	
>ToAWE	M		9.2.1.60		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
<b>RL Information</b>		1..<maxno ofRLs>			EACH	notify
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	
>First RLS Indicator	M		9.2.2.16A		–	
>Frame Offset	M		9.2.1.31		–	
>Chip Offset	M		9.2.2.2		–	
>Propagation Delay	O		9.2.2.35		–	
>Diversity Control Field	C-NotFirstRL		9.2.1.25		–	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		–	
>Initial DL Transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL Power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>SSDT Cell Identity	O		9.2.2.44		–	
>Transmit Diversity Indicator	C-Diversity mode		9.2.2.53		–	
>SSDT Cell Identity For EDSCHPC	C-EDSCHPC		9.2.2.44A		YES	ignore
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
>Delayed Activation	O		9.2.1.24C		YES	reject
>Qth Parameter	O		9.2.2.36A		YES	ignore
>Primary CPICH Usage For	O		9.2.2.33A		YES	ignore

Channel Estimation						
>Secondary CPICH Information	O		Common Physical Channel ID 9.2.1.13		YES	ignore
>E-DCH RL Indication	O		9.2.2.13De		YES	reject
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
Active Pattern Sequence Information	O		9.2.2.A		YES	reject
DSCH Common Information	O		DSCH FDD Common Information 9.2.2.13D		YES	ignore
DL Power Balancing Information	O		9.2.2.12B		YES	ignore
HS-DSCH Information	O		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH-RNTI	C-InfoHSDSCH		9.2.1.31J		YES	reject
HS-PDSCH RL ID	C-InfoHSDSCH		RL ID 9.2.1.53		YES	reject
<b>E-DPCH Information</b>		<u>0..1</u>			<u>YES</u>	<u>reject</u>
>Min UL Channelisation Code Length For E-DCH FDD	<u>M</u>		<u>9.2.2.22a</u>		<u>=</u>	
>Max Number Of UL E-DPDCHs	<u>C-CodeLenEDCH</u>		<u>9.2.2.20B</u>		<u>=</u>	
>Puncture Limit	<u>M</u>		<u>9.2.1.50</u>		<u>=</u>	
>E-TFCS	<u>M</u>		<u>9.2.2.x2</u>		<u>=</u>	
>E-TTI	<u>M</u>		<u>9.2.2.x3</u>		<u>=</u>	
E-DCH FDD Information	C-EDPCHInfo		9.2.2.13Da		YES	reject
Serving E-DCH RL	C-EDPCHInfo		9.2.1.53Ha		YES	reject

Condition	Explanation
CodeLen	The IE shall be present if <i>Min UL Channelisation Code Length</i> IE equals to 4.
NotFirstRL	The IE shall be present if the RL is not the first one in the <i>RL Information</i> IE.
DSCH	The IE shall be present if the <i>DSCH Information</i> IE is present.
SlotFormat	The IE shall be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE in <i>UL DPCH Information</i> IE is not set to "none".
EDSCHPC	The IE shall be present if <i>Enhanced DSCH PC</i> IE is present in the <i>DSCH Common Information</i> IE.
InfoHSDSCH	The IE shall be present if <i>HS-DSCH Information</i> IE is present.
EDPCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.
CodeLenEDCH	The IE shall be present if <i>Min UL Channelisation Code Length For E-DCH FDD</i> IE equals <del>{2 or 4}</del> .

Range Bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for one UE



## 9.1.37 RADIO LINK SETUP RESPONSE

## 9.1.37.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	ignore
Communication Control Port ID	M		9.2.1.15		YES	ignore
<b>RL Information Response</b>		1..<maxno ofRLs>			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		–	
>CHOICE <i>Diversity Indication</i>	M				–	
>> <i>Combining</i>					–	
>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	–	
>> <i>Non Combining or First RL</i>					–	
>>>DCH Information Response	M		9.2.1.20C		–	
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>SSDT Support Indicator	M		9.2.2.46		–	
>DL Power Balancing Activation Indicator	O		9.2.2.12C		YES	ignore
>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	O		9.2.2.13Dc		YES	ignore
TFCI2 Bearer Information Response	O		9.2.2.49A		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
HS-DSCH Information Response	O		HS-DSCH FDD Information Response 9.2.2.18E		YES	ignore
E-DCH FDD Information Response	O		9.2.2.13Db		YES	ignore

Range Bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for one UE

## 9.1.38 RADIO LINK SETUP FAILURE

## 9.1.38.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
Node B Communication Context ID	C-Success		9.2.1.48	The reserved value "All NBCC" shall not be used	YES	ignore
Communication Control Port ID	O		9.2.1.15		YES	ignore
CHOICE <i>Cause Level</i>	M				YES	ignore
> <i>General</i>					–	
>> <i>Cause</i>	M		9.2.1.6		–	
> <i>RL Specific</i>					–	
>> <b>Unsuccessful RL Information Response</b>		1..<maxno ofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>> <b>Successful RL Information Response</b>		0..<maxno ofRLs>		Note: There will never be maxnoofRLs repetitions of this sequence.	EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>RL Set ID	M		9.2.2.39		–	
>>>Received Total Wide Band Power	M		9.2.2.39A		–	
>>>CHOICE <i>Diversity Indication</i>	M				–	
>>>> <i>Combining</i>					–	
>>>>>RL ID	M		9.2.1.53	Reference RL ID for the combining	–	
>>>>> <i>Non Combining or First RL</i>					–	
>>>>>DCH Information Response	M		9.2.1.20C		–	
>>>DSCH Information Response	O		9.2.1.27A		YES	ignore
>>>TFCI2 Bearer Information Response	O		9.2.2.49A	There shall be only one TFCI2 bearer per Node B Communication Context.	–	
>>>SSDT Support Indicator	M		9.2.2.46		–	
>>>DL Power Balancing Activation Indicator	O		9.2.2.12C		YES	ignore
>>>E-DCH RL Set ID	O		<a href="#">RL Set ID</a>		YES	ignore

			9.2.2.39			
>>>E-DCH FDD DL Control Channel Information	O		9.2.2.13Dc		YES	ignore
>>HS-DSCH Information Response	O		HS-DSCH FDD Information Response 9.2.2.18E		YES	ignore
>>E-DCH Information Response	O		E-DCH FDD Information Response 9.2.2.13Db		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Condition	Explanation
Success	The IE shall be present if at least one of the radio links has been successfully set up.

Range Bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for one UE

## 9.1.39 RADIO LINK ADDITION REQUEST

## 9.1.39.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
Compressed Mode Deactivation Flag	O		9.2.2.3A		YES	reject
<b>RL Information</b>		<i>1..&lt;maxno ofRLs-1&gt;</i>			EACH	notify
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	
>Chip Offset	M		9.2.2.2		–	
>Diversity Control Field	M		9.2.1.25		–	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		–	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>SSDT Cell Identity	O		9.2.2.44		–	
>Transmit Diversity Indicator	O		9.2.2.53		–	
>DL Reference Power	O		DL power 9.2.1.21	Power on DPCH	YES	ignore
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
>E-DCH RL Indication	⊖		<del>9.2.2.13De</del>		<del>YES</del>	<del>reject</del>
>Delayed Activation	O		9.2.1.24C		YES	reject
>Qth Parameter	O		9.2.2.36A		YES	ignore
>Primary CPICH Usage For Channel Estimation	O		9.2.2.33A		YES	ignore
>E-DCH RL Indication	⊖		9.2.2.13De		YES	reject

Range Bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for one UE

## 9.1.40 RADIO LINK ADDITION RESPONSE

## 9.1.40.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
<b>RL Information Response</b>		<i>1..&lt;maxno ofRLs-1&gt;</i>			EACH	ignore
>RL ID	M		9.2.1.53		–	
>RL Set ID	M		9.2.2.39		–	
>Received Total Wide Band Power	M		9.2.2.39A		–	
>CHOICE <i>Diversity Indication</i>	M				–	
>> <i>Combining</i>					–	
>>>RL ID	M		9.2.1.53	Reference RL	–	
>> <i>Non Combining</i>					–	
>>>DCH Information Response	M		9.2.1.20C		–	
>SSDT Support Indicator	M		9.2.2.46		–	
>DL Power Balancing Activation Indicator	O		9.2.2.12C		YES	ignore
>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	O		9.2.2.13Dc		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for one UE

## 9.1.41 RADIO LINK ADDITION FAILURE

## 9.1.41.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
CHOICE <i>Cause Level</i>	M				YES	ignore
> <i>General</i>					–	
>> <i>Cause</i>	M		9.2.1.6		–	
> <i>RL Specific</i>					–	
>> <b>Unsuccessful RL Information Response</b>		1..<maxno ofRLs-1>			EACH	ignore
>>>RL ID	M		9.2.1.53		–	
>>>Cause	M		9.2.1.6		–	
>> <b>Successful RL Information Response</b>		0..<maxno ofRLs-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		–	
>>>CHOICE <i>Diversity Indication</i>	M				–	
>>>> <i>Combining</i>					–	
>>>>>RL ID	M		9.2.1.53	Reference RL	–	
>>>> <i>Non Combining</i>					–	
>>>>>DCH Information Response	M		9.2.1.20C		–	
>>>SSDT Support Indicator	M		9.2.2.46		–	
>>>DL Power Balancing Activation Indicator	O		9.2.2.12C		YES	ignore
>>>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.39		YES	ignore
>>>E-DCH FDD DL Control Channel Information	O		9.2.2.13Dc		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore

Range Bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for one UE

## 9.1.42 RADIO LINK RECONFIGURATION PREPARE

## 9.1.42.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
<b>UL DPCH Information</b>		<i>0..1</i>			YES	reject
>UL Scrambling Code	O		9.2.2.59		–	
>UL SIR Target	O		UL SIR 9.2.1.67A		–	
>Min UL Channelisation Code Length	O		9.2.2.22		–	
>Max Number of UL DPDCHs	C-CodeLen		9.2.2.21		–	
>Puncture Limit	O		9.2.1.50	For UL	–	
>TFCS	O		9.2.1.58		–	
>UL DPCCH Slot Format	O		9.2.2.57		–	
>Diversity Mode	O		9.2.2.9		–	
>SSDT Cell Identity Length	O		9.2.2.45		–	
>S-Field Length	O		9.2.2.40		–	
>UL-DPDCH Indicator For E-DCH Operation	<del>C-#EDPCHInfo</del>		<del>ENUMERATED (UL-DPDCH present, UL-DPDCH not present)</del>		<del>YES</del>	<del>reject</del>
<b>DL DPCH Information</b>		<i>0..1</i>			YES	reject
>TFCS	O		9.2.1.58		–	
>DL DPCH Slot Format	O		9.2.2.10		–	
>TFCI Signalling Mode	O		9.2.2.50		–	
>TFCI Presence	C-SlotFormat		9.2.1.57		–	
>Multiplexing Position	O		9.2.2.23		–	
>PDSCH Code Mapping	O		9.2.2.25		–	
>PDSCH RL ID	O		RL ID 9.2.1.53		–	
>Limited Power Increase	O		9.2.2.18A		–	
<b>E-DPCH Information</b>		<i>0..1</i>			<del>YES</del>	<del>reject</del>
>Min UL Channelisation Code Length For E-DCH FDD	<del>O</del>		<del>9.2.2.22a</del>		<del>–</del>	
>Max Number Of UL E-DPDCHs	<del>C-CodeLenE DCH</del>		<del>9.2.2.20B</del>	<del>more than one E-DPDCHs possible in case of SF={2 or 4}</del>	<del>–</del>	
>Puncture Limit	<del>O</del>		<del>9.2.1.50</del>		<del>–</del>	
>E-TFCS	<del>O</del>		<del>9.2.1.29ag</del>		<del>–</del>	
>E-TTI	<del>O</del>		<del>ENUMERATED (2ms, 40ms)</del>		<del>–</del>	
DCHs To Modify	O		DCHs FDD To Modify 9.2.2.4E		YES	reject

DCHs To Add	O		DCH FDD Information 9.2.2.4D		YES	reject
<b>DCHs To Delete</b>		<i>0..&lt;maxno ofDCHs&gt;</i>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
<b>DSCH To Modify</b>		<i>0..&lt;maxno ofDSCHs&gt;</i>			EACH	reject
>DSCH ID	M		9.2.1.27		–	
>Transport Format Set	O		9.2.1.59	For the DL.	–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>Transport Bearer Request Indicator	M		9.2.1.62A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCH To Add	O		DSCH FDD Information 9.2.2.13B		YES	reject
<b>DSCH To Delete</b>		<i>0..&lt;maxno ofDSCHs&gt;</i>			EACH	reject
>DSCH ID	M		9.2.1.27		–	
<b>TFCI2 Bearer Information</b>		<i>0..1</i>			YES	reject
>CHOICE <i>TFCI2 Bearer Action</i>	M				–	
>>Add or modify					–	
>>>ToAWS	M		9.2.1.61		–	
>>>ToAWE	M		9.2.1.60		–	
>>>TFCI2 Bearer Request Indicator	O		9.2.1.56C		YES	reject
>>>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>Delete			NULL		–	
<b>RL Information</b>		<i>0..&lt;maxno ofRLs&gt;</i>			EACH	reject
>RL ID	M		9.2.1.53		–	
>DL Code Information	O		FDD DL Code Information 9.2.2.14A		–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	



>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>SSDT Indication	O		9.2.2.47		–	
>SSDT Cell Identity	C- SSDTIndO N		9.2.2.44		–	
>Transmit Diversity Indicator	C-Diversity mode		9.2.2.53		–	
>SSDT Cell Identity For EDSCHPC	C- EDSCHPC		9.2.2.44A		YES	ignore
>DL Reference Power	O		DL Power 9.2.1.21	Power on DPCH	YES	ignore
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
>DL DPCH Timing Adjustment	O		9.2.2.10A	Required RL Timing Adjustment	YES	reject
>Qth Parameter	O		9.2.2.36A		YES	ignore
>Primary CPICH Usage For Channel Estimation	O		9.2.2.33A		YES	ignore
>Secondary CPICH Information Change	O		9.2.2.43A		YES	ignore
>E-DCH RL Indication	O		9.2.2.13De		YES	reject
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
DSCH Common Information	O		DSCH FDD Common Information 9.2.2.13D		YES	ignore
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject
HS-DSCH Information	O		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH Information To Modify	O		9.2.1.31H		YES	reject
HS-DSCH MAC-d Flows To Add	O		HS-DSCH MAC-d Flows Information 9.2.1.31IA		YES	reject
HS-DSCH MAC-d Flows To Delete	O		9.2.1.31IB		YES	reject
HS-DSCH-RNTI	C- HSDSCH RadioLink		9.2.1.31J		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.53		YES	reject
<b><u>E-DPCH Information</u></b>		<u>0..1</u>			<u>YES</u>	<u>reject</u>
<u>&gt;Min UL Channelisation Code Length For E-DCH FDD</u>	<u>O</u>		<u>9.2.2.22a</u>		<u>=</u>	
<u>&gt;Max Number Of UL E- DPDCHs</u>	<u>C- CodeLenE DCH</u>		<u>9.2.2.20B</u>		<u>=</u>	
<u>&gt;Puncture Limit</u>	<u>O</u>		<u>9.2.1.50</u>		<u>=</u>	
<u>&gt;E-TFCS</u>	<u>O</u>		<u>9.2.2.x2</u>		<u>=</u>	
<u>&gt;E-TTI</u>	<u>O</u>		<u>9.2.2.x3</u>		<u>=</u>	
E-DCH FDD Information	O		E-DCH FDD Information		YES	reject

			9.2.2.13Da			
E-DCH FDD Information To Modify	O		9.2.2.13Df		YES	reject
E-DCH MAC-d Flows To Add	O		E-DCH MAC-d Flows Information 9.2.12.29ab		YES	reject
E-DCH MAC-d Flows To Delete	O		9.2.1.29ac		YES	reject
Serving E-DCH RL	O		9.2.1.53Ha		YES	reject

Condition	Explanation
SSDTIndON	The IE shall be present if the <i>SSDT Indication</i> IE is set to "SSDT Active in the UE".
CodeLen	The IE shall be present if the <i>Min UL Channelisation Code Length</i> IE is equals to 4.
SlotFormat	The IE shall be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if the <i>Diversity Mode</i> IE is present in the <i>UL DPCH Information</i> IE and is not set to "none".
EDSCHPC	The IE shall be present if the <i>Enhanced DSCH PC</i> IE is present in the <i>DSCH Common Information</i> IE.
HSDSCHRadio Link	The IE shall be present if <i>HS-PDSCH RL ID</i> IE is present.
EDPCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.
CodeLenEDCH	The IE shall be present if <i>Min UL Channelisation Code Length For E-DCH FDD</i> IE equals <del>{2 or 4}</del> .

Range Bound	Explanation
<i>maxnoofDCHs</i>	Maximum number of DCHs for a UE
<i>maxnoofDSCHs</i>	Maximum number of DSCHs for a UE
<i>maxnoofRLs</i>	Maximum number of RLs for a UE

## 9.1.43 RADIO LINK RECONFIGURATION READY

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
<b>RL Information Response</b>		<i>0..&lt;maxno ofRLs&gt;</i>			EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29	TDD only	YES	ignore
>TFCI2 Bearer Information Response	O		9.2.2.49A	FDD only. There shall be only one TFCI2 bearer per Node B Communication Context.	–	
>DL Power Balancing Updated Indicator	O		9.2.2.12D		YES	ignore
>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	O		9.2.2.13Dc		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
Target Communication Control Port ID	O		Communication Control Port ID 9.2.1.15		YES	ignore
HS-DSCH FDD Information Response	O		9.2.2.18E	FDD only	YES	ignore
HS-DSCH TDD Information Response	O		9.2.3.5G	TDD only	YES	ignore
E-DCH FDD Information Response	O		9.2.2.13Db		YES	ignore

Range Bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for a UE

## 9.1.47 RADIO LINK RECONFIGURATION REQUEST

## 9.1.47.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
<b>UL DPCH Information</b>		<i>0..1</i>			YES	reject
>TFCS	O		9.2.1.58	For the UL.	–	
>UL-DPDCH Indicator For E-DCH Operation	C-ifEDPCHIn fo		ENUMERATED (UL-DPDCH present, UL-DPDCH not present)		YES	reject
<b>E-DPCH Information</b>		<i>0..1</i>			YES	reject
>E-TFCS	O		9.2.1.29ag		–	
<b>DL DPCH Information</b>		<i>0..1</i>			YES	reject
>TFCS	O		9.2.1.58	For the DL.	–	
>TFCI Signalling Mode	O		9.2.2.50		–	
>Limited Power Increase	O		9.2.2.18A		–	
DCHs To Modify	O		DCHs FDD To Modify 9.2.2.4E		YES	reject
DCHs To Add	O		DCH FDD Information 9.2.2.4D		YES	reject
<b>DCHs To Delete</b>		<i>0..&lt;maxno ofDCHs&gt;</i>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
<b>Radio Link Information</b>		<i>0..&lt;maxno ofRLs&gt;</i>			EACH	reject
>RL ID	M		9.2.1.53		–	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Code Information	C-SF/2		FDD DL Code Information 9.2.2.14A		–	
>DL Reference Power	O		DL Power 9.2.1.21	Power on DPCH	YES	ignore
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
>E-DCH RL Indication	O		9.2.2.13De		YES	reject
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject
HS-DSCH Information	O		HS-DSCH FDD Information		YES	reject

			9.2.2.18D			
HS-DSCH Information To Modify Unsynchronised	O		9.2.1.31HA		YES	reject
HS-DSCH MAC-d Flows To Add	O		HS-DSCH MAC-d Flows Information 9.2.1.31IA		YES	reject
HS-DSCH MAC-d Flows To Delete	O		9.2.1.31IB		YES	reject
HS-DSCH-RNTI	C-HSDSCH RadioLink		9.2.1.31J		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.53		YES	reject
<u>E-DPCH Information</u>		<u>0..1</u>			<u>YES</u>	<u>reject</u>
<u>&gt;E-TFCS</u>	<u>0</u>		<u>9.2.2.x2</u>		<u>=</u>	
E-DCH FDD Information	O		E-DCH FDD Information 9.2.2.13Da		YES	reject
E-DCH FDD Information To Modify	O		9.2.2.13Df		YES	reject
E-DCH MAC-d Flows To Add	O		E-DCH FDD MAC-d Flows Information 9.2.2.1.29ab		YES	reject
E-DCH MAC-d Flows To Delete	O		9.2.1.29ac		YES	reject
Serving E-DCH RL	O		9.2.1.53Ha		YES	reject

Range Bound	Explanation
<i>maxnoofDCHs</i>	Maximum number of DCHs for a UE
<i>maxnoofRLs</i>	Maximum number of RLs for a UE
<i>maxnoofMACdFlows</i>	Maximum number of MAC-d Flows
EDPCHInfo	This IE shall be present if <i>E-DPCH Information</i> IE is present.

Condition	Explanation
SF/2	The IE shall be present if the <i>Transmission Gap Pattern Sequence Information</i> IE is included and the indicated Downlink Compressed Mode method for at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".
HSDSCHRadio Link	The IE shall be present if <i>HS-PDSCH RL ID</i> IE is present.

## 9.1.48 RADIO LINK RECONFIGURATION RESPONSE

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	ignore
<b>RL Information Response</b>		<i>0..&lt;maxno ofRLs&gt;</i>			EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DL Power Balancing Updated Indicator	O		9.2.2.12D	FDD only	YES	ignore
>E-DCH RL Set ID	O		<a href="#">RL Set ID</a> 9.2.2.39		YES	ignore
>E-DCH FDD DL Control Channel Information	O		9.2.2.13Dc		YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
Target Communication Control Port ID	O		Communication Control Port ID 9.2.1.15		YES	ignore
HS-DSCH FDD Information Response	O		9.2.2.18E	FDD only	YES	ignore
HS-DSCH TDD Information Response	O		9.2.3.5G	TDD only	YES	ignore
E-DCH FDD Information Response	O		9.2.2.13Db		YES	ignore

Range Bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for a UE

## 9.2.1.29ab E-DCH MAC-d Flows Information

The *E-DCH MAC-d Flows Information* IE is used for the establishment of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
<b>E-DCH MAC-d Flow Specific Information</b>		1..<maxno of EDCHMACdFlows >		
>E-DCH MAC-d Flow ID	M		9.2.1.29ad	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
>Allocation/Retention Priority	M		9.2.1.1A	
>TNL QoS	O		9.2.1.58A	
>Payload CRC Presence Indicator	M		9.2.1.49	
>Maximum Number Of Retransmissions For E-DCH	M		9.2.1.39a	
<b>Data Description Indicator</b>		1..<maxno of DDIs>		
>E-DCH DDI Value	M		9.2.1.29af	
>Associated E-DCH MAC-d Flow ID	M		E-DCH MAC-d Flow ID 9.2.1.29ad	<a href="#">The E-DCH MAC-d Flow ID shall be one of the flow IDs defined in the E-DCH MAC-d Flow Specific Information of this IE.</a> <a href="#">Multiple E-DCH DDI Values can be associated with the same E-DCH MAC-d Flow ID.</a>
>MAC-d PDU Size	M		9.2.1.38A	
>Scheduling Priority Indicator	M		9.2.1.53H	
>MAC-es Guaranteed Bit Rate	O		9.2.1.38aa	

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows
maxnoofDDIs	Maximum number of Data Description Indicators

## 9.2.1.29ac E-DCH MAC-d Flows To Delete

The *E-DCH MAC-d Flows To Delete* IE is used for the removal of E-DCH MAC-d flows.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
<b>E-DCH MAC-d Flows To Delete</b>		1..<maxno of EDCHMACdFlows >		
>E-DCH MAC-d Flow ID	M		9.2.1.29ad	

Range Bound	Explanation
maxnoofEDCHMACdFlows	Maximum number of E-DCH MAC-d flows

## 9.2.1.29ad E-DCH MAC-d Flow ID

The E-DCH MAC-d Flow ID is the unique identifier for one MAC-d flow on E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH MAC-d Flow ID			INTEGER (0.. <a href="#">maxnoofEDCHMACdFlows - 1</a> )	
<a href="#">Range Bound</a>		<a href="#">Explanation</a>		
<a href="#">maxnoofEDCHMACdFlows</a>		Maximum number of E-DCH MAC-d flows		

~~9.2.1.29ae E-DCH Physical Layer Category~~

~~The E-DCH Physical Layer Category IE defines a set of UE radio access capabilities related to E-DCH, as defined in [42].~~

~~Note: Coding is FFS.~~

## 9.2.1.29aef E-RNTI

The E-RNTI is needed for the UE (or UE group) specific CRC in E-AGCH, see ref. [38].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-RNTI			INTEGER (0..65535)	

~~9.2.1.29ag E-DCH Transport Format Combination Set (E-TFCS)~~

~~Note: Coding is FFS~~

## 9.2.1.29afh E-DCH DDI Value

The E-DCH DDI Value is the Data Description Indicator value identifying a unique combination of E-DCH MAC-d Flow ID and MAC-d PDU Size.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-DCH DDI Value			INTEGER (0.. <a href="#">3</a> )	



9.2.1.39a Maximum Number Of **Ret**ransmissions For E-DCH

The *Maximum Number Of **Ret**ransmissions For E-DCH* IE specifies the upper boundary for retransmissions for a single MAC-d flow.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number Of <b>Ret</b> ransmissions For E-DCH			INTEGER (0..15)	

## 9.2.2.13Da E-DCH FDD Information

The E-DCH *FDD Information* IE provides information for an E-DCH to be established.

<a href="#">IE/Group Name</a>	<a href="#">Presence</a>	<a href="#">Range</a>	<a href="#">IE Type and Reference</a>	<a href="#">Semantics Description</a>
<a href="#">E-DCH MAC-d Flows Information</a>	<a href="#">M</a>		<a href="#">9.2.1.29ab</a>	
<a href="#">UE Capabilities Information</a>		<a href="#">1</a>		
<a href="#">&gt;E-DCH Physical Layer Category</a>	<a href="#">M</a>		<a href="#">9.2.2.x1</a>	

<a href="#">IE/Group Name</a>	<a href="#">Presence</a>	<a href="#">Range</a>	<a href="#">IE Type and Reference</a>	<a href="#">Semantics Description</a>	<a href="#">Criticality</a>	<a href="#">Assigned Criticality</a>
<a href="#">E-DCH MAC-d Flows Information</a>	<a href="#">M</a>		<a href="#">9.2.1.29ab</a>			
<a href="#">UE Capabilities Information</a>		<a href="#">4</a>				
<a href="#">&gt;E-DCH Physical Layer Category</a>	<a href="#">M</a>		<a href="#">9.2.1.29ae</a>			

<a href="#">Range bound</a>	<a href="#">Explanation</a>
<a href="#">maxnoofMACdFlows</a>	Maximum number of MAC-d flows.

## 9.2.2.13Db E-DCH FDD Information Response

The E-DCH *FDD Information Response* IE provides information for E-DCH MAC-d flows that have been established or modified. It also provides additional E-DCH information determined within the Node B.

<a href="#">IE/Group Name</a>	<a href="#">Presence</a>	<a href="#">Range</a>	<a href="#">IE Type and Reference</a>	<a href="#">Semantics Description</a>
<a href="#">E-DCH MAC-d Flow Specific Information Response</a>		<a href="#">0..&lt;maxno ofEDCHMACdFlows &gt;</a>		
<a href="#">&gt;E-DCH MAC-d Flow ID</a>	<a href="#">M</a>		<a href="#">9.2.1.29ad</a>	
<a href="#">&gt;Binding ID</a>	<a href="#">O</a>		<a href="#">9.2.1.4</a>	
<a href="#">&gt;Transport Layer Address</a>	<a href="#">O</a>		<a href="#">9.2.1.63</a>	

<a href="#">Range bound</a>	<a href="#">Explanation</a>
<a href="#">maxnoofEDCHMACdFlows</a>	Maximum number of MAC-d flows.

## 9.2.2.13Dc E-DCH FDD DL Control Channel Information

The *E-DCH FDD DL Control Channel Information* IE provides information for E-DCH specific DL Control Channels to be provided to UE via RRC signalling.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
E-AGCH And E-RGCH/E-HICH FDD Scrambling Code	O		DL Scrambling Code 9.2.2.13	Scrambling code on which E-AGCH, E-RGCH and E-HICH are transmitted. <del>0 = Primary scrambling code of the cell 1...15 = Secondary scrambling code</del>
E-AGCH Channelisation Code	O		<a href="#">FDD DL Channelisation Code Number</a> 9.2.2.14	
E-RNTI	O		9.2.1.29a <del>e</del>	
E-RGCH/E-HICH Channelisation Code	M		<a href="#">FDD DL Channelisation Code Number</a> 9.2.2.14	
E-RGCH <a href="#">Signature Number</a> Sequence	M		INTEGER ( <del>4</del> 0.. <a href="#">maxnoofSigSeq E-RGHICH - 1</a> <del>20</del> )	
E-HICH <a href="#">Signature Number</a> Sequence	M		INTEGER ( <del>4</del> 0.. <a href="#">maxnoofSigSeq E-RGHICH - 1</a> <del>20</del> )	
		<a href="#">Range bound</a>	<a href="#">Explanation</a>	
		<a href="#">maxnoofSigSeqE-RGHICH</a>	Maximum number of Signature Sequences for E-RGCH/E-HICH.	

## 9.2.2.13Df E-DCH FDD Information to Modify

The *E-DCH FDD Information to Modify* IE is used for the modification of an E-DCH.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
<b>E-DCH MAC-d Flow Specific Information</b>		<i>0..&lt;maxno of EDCH MACdFlows &gt;</i>		
>E-DCH MAC-d Flow ID	M		9.2.1.34 <del>29ad</del>	
>Allocation/Retention Priority	O		9.2.1.1A	
>Transport Bearer Request Indicator	M		9.2.1.62A	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.
<u>&gt;TNL QoS</u>	<u>O</u>		<u>9.2.1.58A</u>	
>Maximum Number Of Retransmissions For E-DCH	O		9.2.1.39a	
<b>Data Description Indicator</b>		<i>0..&lt;maxno of DDIs&gt;</i>		
>E-DCH DDI Value	M		9.2.1.29a <del>f</del>	
>Associated E-DCH MAC-d Flow ID	M		E-DCH MAC-d Flow ID 9.2.1.29ad	<u>Shall only refer to an E-DCH MAC-d flow identified by the E-DCH MAC-d Flow ID IE above. Multiple E-DCH DDI Values can be associated with the same E-DCH MAC-d Flow ID.</u>
>MAC-d PDU Size	M		9.2.1.38A	
>Scheduling Priority Indicator	M		9.2.1.53H	
>MAC-es Guaranteed Bit Rate	O		9.2.1.38aa	

Range bound	Explanation
<i>maxno of EDCH MACdFlows</i>	Maximum number of E-DCH MAC-d flows.
<i>maxno of DDIs</i>	Maximum number of Data Description Indicators

9.2.2.x1 E-DCH Physical Layer Category

The E-DCH Physical Layer Category IE defines a set of UE radio access capabilities related to E-DCH, as defined in [42].

Note: Coding is FFS.

9.2.2.x2 E-DCH Transport Format Combination Set (E-TFCS)

Note: Coding is FFS

9.2.2.x3 E-TTI

The E-TTI parameter indicates the Transmission Time Interval for E-DPCH operation.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE Type and Reference</u>	<u>Semantics Description</u>
<u>E-TTI</u>			<u>ENUMERATED</u> <u>(2ms, 10ms)</u>	

9.2.2.22a ~~Minimum~~ UL Channelisation Code Length For E-DCH FDD

Minimum UL channelisation code length (spreading factor) of a E-DPDCH during the connection. Needed by rate matching algorithm.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Min UL Channelisation Code Length for E-DCH			ENUMERATED (2, 4, 8, 16, 32, 64, ...)	

### 9.2.2.x4 UL DPDCH Indicator For E-DCH Operation

The UL DPDCH Indicator For E-DCH Operation parameter indicates whether some UL DPCH parameters should be ignored or not in the message in which the *UL DPDCH Indicator For E-DCH Operation* IE was included.

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE Type and Reference</u>	<u>Semantics Description</u>
<u>UL DPDCH Indicator For E-DCH Operation</u>			ENUMERATED ( <u>UL-DPDCH present</u> , <u>UL-DPDCH not present</u> )	

### 9.3.3 PDU Definitions

```

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

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

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

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

```



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

DSCH-FDD-Common-Information,  
DSCH-FDD-Information,  
DSCH-InformationResponse,  
DSCH-TDD-Information,  
DwPCH-Power,  
E-AGCH-FDD-Code-Information,  
E-DCH-Capability,  
E-DCH-FDD-DL-Control-Channel-Information,  
E-DCH-FDD-Information,  
E-DCH-FDD-Information-Response,  
E-DCH-FDD-Information-to-Modify,  
E-DCH-MACdFlows-Information,  
E-DCH-MACdFlows-to-Delete,  
E-DCH-RL-Indication,  
E-RGCH-E-HICH-FDD-Code-Information,  
End-Of-Audit-Sequence-Indicator,  
EnhancedDSCHPC,  
EnhancedDSCHPCCounter,  
EnhancedDSCHPCIndicator,  
EnhancedDSCHPCWnd,  
EnhancedDSCHPowerOffset,  
E-TFCS,  
E-TTI,  
FDD-DL-ChannelisationCodeNumber,  
FDD-DL-CodeInformation,  
FDD-S-CCPCH-Offset,  
FDD-TPC-DownlinkStepSize,  
FirstRLS-Indicator,  
FNReportingIndicator,  
FPACH-Power,  
FrameAdjustmentValue,  
FrameHandlingPriority,  
FrameOffset,  
HSDPA-Capability,  
HS-PDSCH-FDD-Code-Information,  
HS-SCCH-ID,  
HS-SCCH-FDD-Code-Information,  
HS-SICH-ID,  
IB-OC-ID,  
IB-SG-DATA,  
IB-SG-POS,  
IB-SG-REP,  
IB-Type,  
InformationExchangeID,  
InformationReportCharacteristics,  
InformationType,  
InnerLoopDLPCStatus,  
IPDL-FDD-Parameters,  
IPDL-TDD-Parameters,  
IPDL-Indicator,  
IPDL-TDD-Parameters-LCR,  
LimitedPowerIncrease,  
Local-Cell-ID,

MaximumDL-PowerCapability,  
MaximumPDSCH-Power,  
MaximumTransmissionPower,  
Max-Number-of-PCPCHes,  
MaxNrOfUL-DPDCHs,  
MaxNrOfUL-E-DPDCHs,  
MaxPRACH-MidambleShifts,  
MeasurementFilterCoefficient,  
MeasurementID,  
MeasurementRecoveryBehavior,  
MeasurementRecoveryReportingIndicator,  
MeasurementRecoverySupportIndicator,  
MICH-CFN,  
MICH-Mode,  
MidambleAllocationMode,  
MidambleShiftAndBurstType,  
MidambleShiftLCR,  
MinimumDL-PowerCapability,  
MinSpreadingFactor,  
MinUL-ChannelisationCodeLength,  
MinUL-ChannelisationCodeLengthforE-DCH-FDD,  
Modification-Period,  
MultiplexingPosition,  
NEOT,  
NCyclesPerSFNperiod,  
NFmax,  
NRepetitionsPerCyclePeriod,  
N-INSYNC-IND,  
N-OUTSYNC-IND,  
NeighbouringCellMeasurementInformation,  
NeighbouringFDDCellMeasurementInformation,  
NeighbouringTDDCellMeasurementInformation,  
NI-Information,  
NodeB-CommunicationContextID,  
NotificationIndicatorLength,  
NumberOfReportedCellPortions,  
NStartMessage,  
NSubCyclesPerCyclePeriod,  
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,  
Primary-CPICH-Usage-for-Channel-Estimation,  
PrimaryScramblingCode,  
PropagationDelay,  
SCH-TimeSlot,  
PunctureLimit,  
PUSCHSet-ID,  
PUSCH-ID,  
QE-Selector,  
Qth-Parameter,  
RACH-SlotFormat,  
RACH-SubChannelNumbers,  
ReferenceClockAvailability,  
ReferenceSFNoffset,  
RepetitionLength,  
RepetitionPeriod,  
ReportCharacteristics,  
RequestedDataValue,  
RequestedDataValueInformation,  
ResourceOperationalState,  
RL-Set-ID,  
RL-ID,  
RL-Specific-DCH-Info,  
Received-total-wide-band-power-Value,  
AdjustmentPeriod,  
ScaledAdjustmentRatio,  
MaxAdjustmentStep,  
RNC-ID,  
ScramblingCodeNumber,  
Secondary-CPICH-Information-Change,  
SecondaryCCPCH-SlotFormat,  
Segment-Type,  
Serving-E-DCH-RL-ID,  
S-FieldLength,  
SFN,  
SFNSFNChangeLimit,  
SFNSFNDriftRate,  
SFNSFNDriftRateQuality,  
SFNSFNQuality,  
ShutdownTimer,  
SIB-Originator,  
SpecialBurstScheduling,  
SignallingBearerRequestIndicator,  
SSDT-Cell-Identity,  
SSDT-CellID-Length,  
SSDT-Indication,  
Start-Of-Audit-Sequence-Indicator,  
STTD-Indicator,  
SSDT-SupportIndicator,  
SyncCase,  
SYNCD1CodeId,

SyncFrameNumber,  
SynchronisationReportCharacteristics,  
SynchronisationReportType,  
T-Cell,  
T-RLFAILURE,  
TDD-ChannelisationCode,  
TDD-ChannelisationCodeLCR,  
TDD-DL-Code-LCR-Information,  
TDD-DPCHOffset,  
TDD-TPC-DownlinkStepSize,  
TDD-PhysicalChannelOffset,  
TDD-UL-Code-LCR-Information,  
TFCI2-BearerInformationResponse,  
TFCI2BearerRequestIndicator,  
TFCI-Coding,  
TFCI-Presence,  
TFCI-SignallingMode,  
TFCS,  
TimeSlot,  
TimeSlotLCR,  
TimeSlotDirection,  
TimeSlotStatus,  
TimingAdjustmentValue,  
TimingAdvanceApplied,  
TnlQos,  
ToAWE,  
ToAWS,  
TransmissionDiversityApplied,  
TransmitDiversityIndicator,  
TransmissionGapPatternSequenceCodeInformation,  
Transmission-Gap-Pattern-Sequence-Information,  
TransportBearerRequestIndicator,  
TransportFormatSet,  
TransportLayerAddress,  
TSTD-Indicator,  
TUTRANGPS,  
TUTRANGPSChangeLimit,  
TUTRANGPSDriftRate,  
TUTRANGPSDriftRateQuality,  
TUTRANGPSQuality,  
UARFCN,  
UC-Id,  
USCH-Information,  
USCH-InformationResponse,  
UL-CapacityCredit,  
UL-DPCCCH-SlotFormat,  
UL-DPDCH-Indicator-For-E-DCH-Operation,  
UL-SIR,  
UL-FP-Mode,  
UL-PhysCH-SF-Variation,  
UL-ScramblingCode,  
UL-Timeslot-Information,

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UL-TimeslotLCR-Information,  
UL-TimeSlot-ISCP-Info,  
UL-TimeSlot-ISCP-LCR-Info,  
UL-TimeslotISCP-Value,  
UL-TimeslotISCP-Value-IncrDecrThres,  
USCH-ID,  
HSDSCH-FDD-Information,  
HSDSCH-FDD-Information-Response,  
HSDSCH-Information-to-Modify,  
HSDSCH-Information-to-Modify-Unsynchronised,  
HSDSCH-MACdFlow-ID,  
HSDSCH-MACdFlows-Information,  
HSDSCH-MACdFlows-to-Delete,  
HSDSCH-RNTI,  
HSDSCH-TDD-Information,  
HSDSCH-TDD-Information-Response,  
PrimaryCCPCH-RSCP,  
HSDSCH-FDD-Update-Information,  
HSDSCH-TDD-Update-Information,  
UL-Synchronisation-Parameters-LCR,  
TDD-DL-DPCH-TimeSlotFormat-LCR,  
TDD-UL-DPCH-TimeSlotFormat-LCR,  
TDD-TPC-UplinkStepSize-LCR,  
CellSyncBurstTimingLCR,  
TimingAdjustmentValueLCR,  
PrimaryCCPCH-RSCP-Delta  
FROM NBAP-IEs  
  
PrivateIE-Container{ },  
ProtocolExtensionContainer{ },  
ProtocolIE-Container{ },  
ProtocolIE-Single-Container{ },  
ProtocolIE-ContainerList{ },  
NBAP-PRIVATE-IES,  
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FROM NBAP-Containers  
  
id-Active-Pattern-Sequence-Information,  
id-Additional-S-CCPCH-Parameters-CTCH-ReconfRqstTDD,  
id-Additional-S-CCPCH-Parameters-CTCH-SetupRqstTDD,  
id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRqstTDD,  
id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRqstTDD,  
id-AdjustmentRatio,  
id-AICH-Information,  
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,  
id-AP-AICH-Information,  
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,  
id-BCH-Information,  
id-BCCH-ModificationTime,  
id-bindingID,  
id-BlockingPriorityIndicator,  
id-Cause,
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id-CauseLevel-PSCH-ReconfFailure,  
id-CauseLevel-RL-AdditionFailureFDD,  
id-CauseLevel-RL-AdditionFailureTDD,  
id-CauseLevel-RL-ReconfFailure,  
id-CauseLevel-RL-SetupFailureFDD,  
id-CauseLevel-RL-SetupFailureTDD,  
id-CauseLevel-SyncAdjustmntFailureTDD,  
id-CCP-InformationItem-AuditRsp,  
id-CCP-InformationList-AuditRsp,  
id-CCP-InformationItem-ResourceStatusInd,  
id-CCTrCH-InformationItem-RL-FailureInd,  
id-CCTrCH-InformationItem-RL-RestoreInd,  
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD,  
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD,  
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD,  
id-CDCA-ICH-Information,  
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,  
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,  
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD,  
id-Cell-InformationItem-AuditRsp,  
id-Cell-InformationItem-ResourceStatusInd,  
id-Cell-InformationList-AuditRsp,  
id-CellParameterID,  
id-CellPortion-InformationItem-Cell-SetupRqstFDD,  
id-CellPortion-InformationList-Cell-SetupRqstFDD,  
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,  
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,  
id-cellSyncBurstRepetitionPeriod,  
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD,  
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,  
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,  
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,  
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,  
id-CellSyncInfo-CellSyncReprtTDD,  
id-CFN,  
id-CFNReportingIndicator,  
id-C-ID,  
id-Closed-Loop-Timing-Adjustment-Mode,  
id-CommonMeasurementAccuracy,  
id-CommonMeasurementObjectType-CM-Rprt,  
id-CommonMeasurementObjectType-CM-Rqst,  
id-CommonMeasurementObjectType-CM-Rsp,  
id-CommonMeasurementType,  
id-CommonPhysicalChannelID,  
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,  
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,  
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,  
id-CommunicationContextInfoItem-Reset,  
id-CommunicationControlPortID,  
id-CommunicationControlPortInfoItem-Reset,  
id-Compressed-Mode-Deactivation-Flag,  
id-ConfigurationGenerationID,  
id-CPCH-Information,

id-CPCH-Parameters-CTCH-SetupRsp,  
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,  
id-CRNC-CommunicationContextID,  
id-CriticalityDiagnostics,  
id-CSBTransmissionID,  
id-CSBMeasurementID,  
id-DCHs-to-Add-FDD,  
id-DCHs-to-Add-TDD,  
id-DCH-AddList-RL-ReconfPrepTDD,  
id-DCH-DeleteList-RL-ReconfPrepFDD,  
id-DCH-DeleteList-RL-ReconfPrepTDD,  
id-DCH-DeleteList-RL-ReconfRqstFDD,  
id-DCH-DeleteList-RL-ReconfRqstTDD,  
id-DCH-FDD-Information,  
id-DCH-TDD-Information,  
id-DCH-InformationResponse,  
id-DCH-RearrangeList-Bearer-RearrangeInd,  
id-DSCH-RearrangeList-Bearer-RearrangeInd,  
id-FDD-DCHs-to-Modify,  
id-TDD-DCHs-to-Modify,  
id-DedicatedMeasurementObjectType-DM-Rprt,  
id-DedicatedMeasurementObjectType-DM-Rqst,  
id-DedicatedMeasurementObjectType-DM-Rsp,  
id-DedicatedMeasurementType,  
id-DelayedActivation,  
id-DelayedActivationList-RL-ActivationCmdFDD,  
id-DelayedActivationList-RL-ActivationCmdTDD,  
id-DelayedActivationInformation-RL-ActivationCmdFDD,  
id-DelayedActivationInformation-RL-ActivationCmdTDD,  
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,  
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,  
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,  
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,  
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,  
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,  
id-DL-DPCH-InformationList-RL-SetupRqstTDD,  
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,  
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,  
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,  
id-DL-DPCH-Information-RL-ReconfPrepFDD,  
id-DL-DPCH-Information-RL-ReconfRqstFDD,  
id-DL-DPCH-Information-RL-SetupRqstFDD,  
id-DL-DPCH-TimingAdjustment,  
id-DL-PowerBalancing-Information,  
id-DL-PowerBalancing-ActivationIndicator,  
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,  
id-DL-PowerBalancing-UpdatedIndicator,



id-DLReferencePower,  
id-DLReferencePowerList-DL-PC-Rqst,  
id-DL-TPC-Pattern01Count,  
id-DPC-Mode,  
id-DPCHConstant,  
id-DSCH-AddItem-RL-ReconfPrepFDD,  
id-DSCHs-to-Add-FDD,  
id-DSCH-DeleteItem-RL-ReconfPrepFDD,  
id-DSCH-DeleteList-RL-ReconfPrepFDD,  
id-DSCHs-to-Add-TDD,  
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,  
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,  
id-DSCH-InformationResponse,  
id-DSCH-FDD-Information,  
id-DSCH-FDD-Common-Information,  
id-DSCH-TDD-Information,  
id-DSCH-ModifyItem-RL-ReconfPrepFDD,  
id-DSCH-ModifyList-RL-ReconfPrepFDD,  
id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code,  
id-E-AGCH-FDD-Code-Information,  
id-E-DCH-Capability,  
id-E-DCH-FDD-DL-Control-Channel-Information,  
id-E-DCH-FDD-Information,  
id-E-DCH-FDD-Information-Response,  
id-E-DCH-FDD-Information-to-Modify,  
id-E-DCH-MACdFlows-to-Add,  
id-E-DCH-MACdFlows-to-Delete,  
id-E-DCH-Resources-Information-AuditRsp,  
id-E-DCH-Resources-Information-ResourceStatusInd,  
id-E-DCH-RL-Indication,  
id-E-DCH-RL-Set-ID,  
id-E-DPCH-Information-RL-ReconfPrepFDD,  
id-E-DPCH-Information-RL-SetupRqstFDD,  
id-E-RGCH-E-HICH-FDD-Code-Information,  
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-MeasurementRecoveryBehavior,  
id-MeasurementRecoveryReportingIndicator,  
id-MeasurementRecoverySupportIndicator,  
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,  
id-MICH-CFN,  
id-MICH-Information-AuditRsp,  
id-MICH-Information-ResourceStatusInd,  
id-MICH-Parameters-CTCH-ReconfRqstFDD,  
id-MICH-Parameters-CTCH-ReconfRqstTDD,  
id-MICH-Parameters-CTCH-SetupRqstFDD,  
id-MICH-Parameters-CTCH-SetupRqstTDD,  
id-Modification-Period,  
id-multipleRL-dl-DPCH-InformationList,  
id-multipleRL-dl-DPCH-InformationModifyList,  
id-multiple-RL-Information-RL-ReconfPrepTDD,  
id-multiple-RL-Information-RL-ReconfRqstTDD,  
id-multipleRL-ul-DPCH-InformationList,  
id-multipleRL-ul-DPCH-InformationModifyList,  
id-NCyclesPerSFNperiod,  
id-NeighbouringCellMeasurementInformation,  
id-NI-Information-NotifUpdateCmd,  
id-NodeB-CommunicationContextID,  
id-NRepetitionsPerCyclePeriod,  
id-NumberOfReportedCellPortions,  
id-P-CCPCH-Information,  
id-P-CPICH-Information,  
id-P-SCH-Information,  
id-PCCPCH-Information-Cell-ReconfRqstTDD,  
id-PCCPCH-Information-Cell-SetupRqstTDD,  
id-PCH-Parameters-CTCH-ReconfRqstTDD,  
id-PCH-Parameters-CTCH-SetupRsp,  
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,  
id-PCH-ParametersItem-CTCH-SetupRqstFDD,

id-PCH-ParametersItem-CTCH-SetupRqstTDD,  
id-PCH-Information,  
id-PCPCH-Information,  
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,  
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,  
id-PDSCH-Information-Cell-SetupRqstFDD,  
id-PDSCH-Information-Cell-ReconfRqstFDD,  
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,  
id-PDSCH-RL-ID,  
id-PDSCHSets-AddList-PSCH-ReconfRqst,  
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,  
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,  
id-PICH-Information,  
id-PICH-Parameters-CTCH-ReconfRqstTDD,  
id-PICH-ParametersItem-CTCH-SetupRqstTDD,  
id-PowerAdjustmentType,  
id-Power-Local-Cell-Group-InformationItem-AuditRsp,  
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd,  
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd,  
id-Power-Local-Cell-Group-InformationList-AuditRsp,  
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd,  
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd,  
id-Power-Local-Cell-Group-ID,  
id-PRACH-Information,  
id-PRACHConstant,  
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,  
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,  
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,  
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,  
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,  
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,  
id-Primary-CPICH-Usage-for-Channel-Estimation,  
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-Qth-Parameter,  
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-ID,  
id-RL-InformationItem-DM-Rprt,  
id-RL-InformationItem-DM-Rqst,  
id-RL-InformationItem-DM-Rsp,  
id-RL-InformationItem-RL-AdditionRqstFDD,  
id-RL-informationItem-RL-DeletionRqst,  
id-RL-InformationItem-RL-FailureInd,  
id-RL-InformationItem-RL-PreemptRequiredInd,  
id-RL-InformationItem-RL-ReconfPrepFDD,  
id-RL-InformationItem-RL-ReconfRqstFDD,  
id-RL-InformationItem-RL-RestoreInd,  
id-RL-InformationItem-RL-SetupRqstFDD,  
id-RL-InformationList-RL-AdditionRqstFDD,  
id-RL-informationList-RL-DeletionRqst,  
id-RL-InformationList-RL-PreemptRequiredInd,  
id-RL-InformationList-RL-ReconfPrepFDD,  
id-RL-InformationList-RL-ReconfRqstFDD,  
id-RL-InformationList-RL-SetupRqstFDD,  
id-RL-InformationResponseItem-RL-AdditionRspFDD,  
id-RL-InformationResponseItem-RL-ReconfReady,  
id-RL-InformationResponseItem-RL-ReconfRsp,  
id-RL-InformationResponseItem-RL-SetupRspFDD,  
id-RL-InformationResponseList-RL-AdditionRspFDD,  
id-RL-InformationResponseList-RL-ReconfReady,  
id-RL-InformationResponseList-RL-ReconfRsp,  
id-RL-InformationResponseList-RL-SetupRspFDD,  
id-RL-InformationResponse-RL-AdditionRspTDD,  
id-RL-InformationResponse-RL-SetupRspTDD,  
id-RL-Information-RL-AdditionRqstTDD,  
id-RL-Information-RL-ReconfRqstTDD,  
id-RL-Information-RL-ReconfPrepTDD,  
id-RL-Information-RL-SetupRqstTDD,  
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,  
id-RL-Set-InformationItem-DM-Rprt,  
id-RL-Set-InformationItem-DM-Rsp,  
id-RL-Set-InformationItem-RL-FailureInd,  
id-RL-Set-InformationItem-RL-RestoreInd,  
id-RL-Specific-DCH-Info,  
id-S-CCPCH-Information,  
id-S-CCPCH-InformationListExt-AuditRsp,  
id-S-CCPCH-InformationListExt-ResourceStatusInd,  
id-S-CCPCH-LCR-InformationListExt-AuditRsp,  
id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd,  
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-Secondary-CPICH-Information,  
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,  
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,

id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,  
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,  
id-Secondary-CPICH-Information-Change,  
id-SecondarySCH-Information-Cell-ReconfRqstFDD,  
id-SecondarySCH-Information-Cell-SetupRqstFDD,  
id-SegmentInformationListIE-SystemInfoUpdate,  
[id-Serving-E-DCH-RL-ID](#),  
id-SFN,  
id-SFNReportingIndicator,  
id-ShutdownTimer,  
id-SignallingBearerRequestIndicator,  
id-SSDT-CellIDforEDSCHPC,  
id-Start-Of-Audit-Sequence-Indicator,  
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,  
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,  
id-Synchronisation-Configuration-Cell-ReconfRqst,  
id-Synchronisation-Configuration-Cell-SetupRqst,  
id-SyncCase,  
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,  
id-SyncFrameNumber,  
id-SynchronisationReportType,  
id-SynchronisationReportCharacteristics,  
id-SyncReportType-CellSyncReprtTDD,  
id-T-Cell,  
id-TargetCommunicationControlPortID,  
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,  
id-TFCI2-BearerInformationResponse,  
id-TFCI2BearerRequestIndicator,  
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,  
id-Transmission-Gap-Pattern-Sequence-Information,  
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,  
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,  
id-timeslotInfo-CellSyncInitiationRqstTDD,  
id-TimeslotISCPInfo,  
id-TimingAdvanceApplied,  
id-TnlQos,  
id-TransmissionDiversityApplied,  
id-transportlayeraddress,  
id-Tstd-indicator,  
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-UL-DPCH-Indicator-For-E-DCH-Operation](#),  
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,  
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,  
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,  
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,  
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,  
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,  
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,  
id-USCH-Information-Add,  
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,  
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,  
id-USCH-InformationResponse,  
id-USCH-Information,  
id-USCH-RearrangeList-Bearer-RearrangeInd,  
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,  
id-DwPCH-LCR-Information ,  
id-DwPCH-LCR-InformationList-AuditRsp,  
id-DwPCH-LCR-Information-Cell-SetupRqstTDD,  
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD,  
id-DwPCH-LCR-Information-ResourceStatusInd,  
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD,  
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,  
id-FPACH-LCR-Information,  
id-FPACH-LCR-Information-AuditRsp,  
id-FPACH-LCR-InformationList-AuditRsp,  
id-FPACH-LCR-InformationList-ResourceStatusInd,  
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,  
id-FPACH-LCR-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-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,  
id-RL-InformationResponse-LCR-RL-SetupRspTDD ,  
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,  
id-TimeSlot,  
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,  
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,  
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,  
id-TimeSlotLCR-CM-Rqst ,  
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,  
id-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-InformationModify-AddList-RL-ReconfPrepTDD,  
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,  
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,  
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,  
id-UL-DPCH-LCR-InformationModify-AddList,  
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,  
id-UL-SIRTarget,  
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,  
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,  
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,  
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,  
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,  
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,  
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,  
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,  
id-PUSCH-Info-DM-Rqst,  
id-PUSCH-Info-DM-Rsp,  
id-PUSCH-Info-DM-Rprt,  
id-RL-InformationResponse-LCR-RL-AdditionRspTDD,  
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD,  
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD,  
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst,  
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst,  
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst,  
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst,  
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst,  
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,  
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,  
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,  
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD,  
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD,  
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD,  
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD,  
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD,  
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD,  
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD,  
id-DwPCH-Power,  
id-AccumulatedClockupdate-CellSyncReprtTDD,  
id-HSDPA-Capability,  
id-HSDSCH-FDD-Information,  
id-HSDSCH-FDD-Information-Response,  
id-HSDSCH-Information-to-Modify,  
id-HSDSCH-Information-to-Modify-Unsynchronised,  
id-HSDSCH-MACdFlows-to-Add,  
id-HSDSCH-MACdFlows-to-Delete,  
id-HSDSCH-RearrangeList-Bearer-RearrangeInd,  
id-HSDSCH-Resources-Information-AuditRsp,  
id-HSDSCH-Resources-Information-ResourceStatusInd,  
id-HSDSCH-RNTI,  
id-HSDSCH-TDD-Information,  
id-HSDSCH-TDD-Information-Response,  
id-HSPDSCH-RL-ID,  
id-HSSICH-Info-DM-Rprt,

id-HSSICH-Info-DM-Rqst ,  
id-HSSICH-Info-DM-Rsp ,  
id-PrimCCPCH-RSCP-DL-PC-RqstTDD ,  
id-HSDSCH-FDD-Update-Information ,  
id-HSDSCH-TDD-Update-Information ,  
id-UL-Synchronisation-Parameters-LCR ,  
id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD ,  
id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD ,  
id-CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD ,  
id-CCTrCH-Minimum-DL-Power-RL-SetupRqstTDD ,  
id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD ,  
id-CCTrCH-Minimum-DL-Power-RL-AdditionRqstTDD ,  
id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD ,  
id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD ,  
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD ,  
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD ,  
id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD ,  
id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD ,  
id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD ,  
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD ,  
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD ,  
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD ,  
id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRqstTDD ,  
id-TDD-TPC-DownlinkStepSize-RL-AdditionRqstTDD ,  
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD ,  
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD ,  
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD ,  
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD ,  
id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD ,  
id-TimingAdjustmentValueLCR ,  
id-PrimaryCCPCH-RSCP-Delta ,

maxNrOfCCTrCHs ,  
maxNrOfCellSyncBursts ,  
maxNrOfCodes ,  
maxNrOfCPCHs ,  
maxNrOfDCHs ,  
maxNrOfDLTSSs ,  
maxNrOfDLTSLCRs ,  
maxNrOfDPCHs ,  
maxNrOfDPCHLCRs ,  
maxNrOfDSCHs ,  
maxNrOfFACHs ,  
maxNrOfRLs ,  
maxNrOfRLs-1 ,  
maxNrOfRLs-2 ,  
maxNrOfRLSets ,  
maxNrOfPCPCHs ,  
maxNrOfPDSCHs ,  
maxNrOfPUSCHs ,  
maxNrOfPRACHLCRs ,  
maxNrOfPDSCHSets ,



```
maxNrOfPUSCHSets,  
maxNrOfReceptsPerSyncFrame,  
maxNrOfSCCPCHs,  
maxNrOfSCCPCHsinExt,  
maxNrOfSCCPCHLCRs,  
maxNrOfSCCPCHsLCRinExt,  
maxNrOfULTSs,  
maxNrOfULTSLCRs,  
maxNrOfUSCHs,  
maxAPSigNum,  
maxCPCHCell,  
maxFACHCell,  
maxFPACHCell,  
maxNoofLen,  
maxRACHCell,  
maxPCPCHCell,  
maxPRACHCell,  
maxSCCPCHCell,  
maxSCCPCHCellinExt,  
maxSCCPCHCellinExtLCR,  
maxSCPICHCell,  
maxCellinNodeB,  
maxCCPinNodeB,  
maxCommunicationContext,  
maxLocalCellinNodeB,  
maxNrOfSlotFormatsPRACH,  
maxIB,  
maxIBSEG,  
maxNrOfCellPortionsPerCell,  
maxNrOfHSSCCHs,  
maxNrOfHSSICHs,  
maxNrOfHSPDSCHs,  
maxNrOfSyncFramesLCR,  
maxNrOfReceptionsperSyncFrameLCR,  
maxNrOfSyncDLCodesLCR,  
maxNrOfMACdFlows  
FROM NBAP-Constants;
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- AUDIT RESPONSE
--
-- *****

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

AuditResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-End-Of-Audit-Sequence-Indicator          CRITICALITY ignore TYPE End-Of-Audit-Sequence-Indicator          PRESENCE mandatory } |
    { ID id-Cell-InformationList-AuditRsp           CRITICALITY ignore TYPE Cell-InformationList-AuditRsp           PRESENCE optional } |
    { ID id-CCP-InformationList-AuditRsp            CRITICALITY ignore TYPE CCP-InformationList-AuditRsp            PRESENCE optional } |
    -- CCP (Communication Control Port) --
    { ID id-Local-Cell-InformationList-AuditRsp      CRITICALITY ignore TYPE Local-Cell-InformationList-AuditRsp      PRESENCE optional } |
    { ID id-Local-Cell-Group-InformationList-AuditRsp CRITICALITY ignore TYPE Local-Cell-Group-InformationList-AuditRsp PRESENCE optional } |
    { ID id-CriticalityDiagnostics                  CRITICALITY ignore TYPE CriticalityDiagnostics                  PRESENCE optional } ,
    ...
}

AuditResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Power-Local-Cell-Group-InformationList-AuditRsp CRITICALITY ignore EXTENSION Power-Local-Cell-Group-InformationList-AuditRsp PRESENCE optional } ,
    ...
}

Cell-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-AuditRsp}}

Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-Cell-InformationItem-AuditRsp          CRITICALITY ignore TYPE Cell-InformationItem-AuditRsp          PRESENCE optional }
}

Cell-InformationItem-AuditRsp ::= SEQUENCE {
    c-ID                      C-ID,
    configurationGenerationID ConfigurationGenerationID,
    resourceOperationalState  ResourceOperationalState,
    availabilityStatus        AvailabilityStatus,
    local-Cell-ID             Local-Cell-ID,
    primary-SCH-Information   P-SCH-Information-AuditRsp          OPTIONAL,
    secondary-SCH-Information S-SCH-Information-AuditRsp          OPTIONAL,
    primary-CPICH-Information P-CPICH-Information-AuditRsp        OPTIONAL,
    secondary-CPICH-InformationList S-CPICH-InformationList-AuditRsp  OPTIONAL,
    primary-CCPCH-Information P-CCPCH-Information-AuditRsp        OPTIONAL,
    bCH-Information           BCH-Information-AuditRsp          OPTIONAL,
    secondary-CCPCH-InformationList S-CCPCH-InformationList-AuditRsp  OPTIONAL,
    pCH-Information           PCH-Information-AuditRsp          OPTIONAL,
    pICH-Information          PICH-Information-AuditRsp        OPTIONAL,
    fACH-InformationList      FACH-InformationList-AuditRsp      OPTIONAL,
    PRACH-InformationList     PRACH-InformationList-AuditRsp     OPTIONAL,
    RACH-InformationList      RACH-InformationList-AuditRsp     OPTIONAL,
}

```

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aICH-InformationList          AICH-InformationList-AuditRsp          OPTIONAL,
pCPCH-InformationList        PCPCH-InformationList-AuditRsp          OPTIONAL,
cPCH-InformationList         CPCH-InformationList-AuditRsp          OPTIONAL,
aP-AICH-InformationList      AP-AICH-InformationList-AuditRsp       OPTIONAL,
cDCA-ICH-InformationList     CDCA-ICH-InformationList-AuditRsp      OPTIONAL,
SCH-Information              SCH-Information-AuditRsp               OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { Cell-InformationItem-AuditRsp-ExtIEs } }  OPTIONAL,
...
}

Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-FPACH-LCR-InformationList-AuditRsp          CRITICALITY ignore  EXTENSION FPACH-LCR-InformationList-AuditRsp          PRESENCE optional } |
  -- Applicable to 1.28Mcps TDD only
  { ID id-DwPCH-LCR-InformationList-AuditRsp          CRITICALITY ignore  EXTENSION Common-PhysicalChannel-Status-Information PRESENCE optional } |
  -- Applicable to 1.28Mcps TDD only
  { ID id-HSDSCH-Resources-Information-AuditRsp       CRITICALITY ignore  EXTENSION HS-DSCH-Resources-Information-AuditRsp       PRESENCE optional } |
  { ID id-MICH-Information-AuditRsp                   CRITICALITY ignore  EXTENSION Common-PhysicalChannel-Status-Information PRESENCE optional } |
  { ID id-S-CCPCH-InformationListExt-AuditRsp         CRITICALITY ignore  EXTENSION S-CCPCH-InformationListExt-AuditRsp         PRESENCE optional } |
  -- Applicable to 3.84Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the cell.
  { ID id-S-CCPCH-LCR-InformationListExt-AuditRsp     CRITICALITY ignore  EXTENSION S-CCPCH-LCR-InformationListExt-AuditRsp     PRESENCE optional } |
  -- Applicable to 1.28Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the cell.
  { ID id-E-DCH-Resources-Information-AuditRsp       CRITICALITY ignore  EXTENSION E-DCH-Resources-Information-AuditRsp       PRESENCE optional },
  ...
}

P-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-AuditRsp }}

P-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-AuditRsp }}

S-SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CPICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-AuditRsp }}

P-CPICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-CPICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-AuditRsp }}

S-CPICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CCPCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-AuditRsp }}

P-CCPCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information          CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

```

```

}
BCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ BCH-InformationIE-AuditRsp }}
BCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}
S-CCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp }}
S-CCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}
PCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PCH-InformationIE-AuditRsp }}
PCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}
PICH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ PICH-InformationIE-AuditRsp }}
PICH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}
FACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-AuditRsp }}
FACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}
PRACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-AuditRsp }}
PRACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}
RACH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-AuditRsp }}
RACH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}
AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-AuditRsp }}
AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}
PCPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-AuditRsp }}
PCPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

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```

}

CPCH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-AuditRsp }}

CPCH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CPCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE optional }
}

AP-AICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-AuditRsp }}

AP-AICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-AP-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

CDCA-ICH-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-AuditRsp }}

CDCA-ICH-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CDCA-ICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

SCH-Information-AuditRsp ::= ProtocolIE-Single-Container {{ SCH-InformationIE-AuditRsp }}

SCH-InformationIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

CCP-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-AuditRsp }}

CCP-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-CCP-InformationItem-AuditRsp  CRITICALITY  ignore  TYPE  CCP-InformationItem-AuditRsp  PRESENCE mandatory }
}

CCP-InformationItem-AuditRsp ::= SEQUENCE {
  communicationControlPortID  CommunicationControlPortID,
  resourceOperationalState    ResourceOperationalState,
  availabilityStatus          AvailabilityStatus,
  iE-Extensions               ProtocolExtensionContainer  {{ CCP-InformationItem-AuditRsp-ExtIEs }}  OPTIONAL,
  ...
}

CCP-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

FPACH-LCR-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-AuditRsp }}

FPACH-LCR-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-FPACH-LCR-Information-AuditRsp  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

HS-DSCH-Resources-Information-AuditRsp ::= SEQUENCE {
  resourceOperationalState    ResourceOperationalState,
  availabilityStatus          AvailabilityStatus,
}

```

```

    iE-Extensions          ProtocolExtensionContainer  {{ HS-DSCH-Resources-Information-AuditRsp-ExtIEs }}      OPTIONAL,
    ...
}

HS-DSCH-Resources-Information-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

S-CCPCH-InformationListExt-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCellinExt)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-AuditRsp
}}

S-CCPCH-LCR-InformationListExt-AuditRsp ::= SEQUENCE (SIZE (1..maxSCCPCHCellinExtLCR)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-
AuditRsp }}

E-DCH-Resources-Information-AuditRsp ::= SEQUENCE {
    resourceOperationalState      ResourceOperationalState,
    availabilityStatus             AvailabilityStatus,
    iE-Extensions                  ProtocolExtensionContainer  {{ E-DCH-Resources-Information-AuditRsp-ExtIEs }}      OPTIONAL,
    ...
}

E-DCH-Resources-Information-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Local-Cell-InformationList-AuditRsp ::=SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE-
AuditRsp }}

Local-Cell-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem-AuditRsp      CRITICALITY ignore   TYPE Local-Cell-InformationItem-AuditRsp      PRESENCE mandatory}
}

Local-Cell-InformationItem-AuditRsp ::= SEQUENCE {
    local-Cell-ID                Local-Cell-ID,
    dl-or-global-capacityCredit   DL-or-Global-CapacityCredit,
    ul-capacityCredit              UL-CapacityCredit              OPTIONAL,
    commonChannelsCapacityConsumptionLaw    CommonChannelsCapacityConsumptionLaw,
    dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw,
    maximumDL-PowerCapability          MaximumDL-PowerCapability          OPTIONAL,
    minSpreadingFactor                MinSpreadingFactor                OPTIONAL,
    minimumDL-PowerCapability          MinimumDL-PowerCapability          OPTIONAL,
    local-Cell-Group-ID              Local-Cell-ID                    OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer  {{ Local-Cell-InformationItem-AuditRsp-ExtIEs}}      OPTIONAL,
    ...
}

Local-Cell-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-ReferenceClockAvailability          CRITICALITY ignore   EXTENSION ReferenceClockAvailability          PRESENCE optional }|
    { ID id-Power-Local-Cell-Group-ID          CRITICALITY ignore   EXTENSION Local-Cell-ID                      PRESENCE optional }|
    { ID id-HSDPA-Capability                   CRITICALITY ignore   EXTENSION HSDPA-Capability                   PRESENCE optional }|
    { ID id-E-DCH-Capability                   CRITICALITY ignore   EXTENSION E-DCH-Capability                   PRESENCE optional },
    ...
}

```

```
Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-AuditRsp }}
```

```
Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-Group-InformationItem-AuditRsp CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-AuditRsp PRESENCE mandatory}
}
```

```
Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
  local-Cell-Group-ID Local-Cell-ID,
  dl-or-global-capacityCredit DL-or-Global-CapacityCredit,
  ul-capacityCredit UL-CapacityCredit OPTIONAL,
  commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw,
  dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw,
  iE-Extensions ProtocolExtensionContainer {{ Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}} OPTIONAL,
  ...
}
```

```
Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
Power-Local-Cell-Group-InformationList-AuditRsp ::= SEQUENCE (SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-Group-InformationItemIE-AuditRsp }}
```

```
Power-Local-Cell-Group-InformationItemIE-AuditRsp NBAP-PROTOCOL-IES ::= {
  { ID id-Power-Local-Cell-Group-InformationItem-AuditRsp CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem-AuditRsp PRESENCE mandatory}
}
```

```
Power-Local-Cell-Group-InformationItem-AuditRsp ::= SEQUENCE {
  power-Local-Cell-Group-ID Local-Cell-ID,
  maximumDL-PowerCapability MaximumDL-PowerCapability,
  iE-Extensions ProtocolExtensionContainer {{ Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs}} OPTIONAL,
  ...
}
```

```
Power-Local-Cell-Group-InformationItem-AuditRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RESOURCE STATUS INDICATION
--
-- *****

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

ResourceStatusIndication-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-IndicationType-ResourceStatusInd    CRITICALITY ignore    TYPE IndicationType-ResourceStatusInd    PRESENCE mandatory }|
    { ID id-Cause                                CRITICALITY ignore    TYPE Cause                                PRESENCE optional },
    ...
}

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

IndicationType-ResourceStatusInd ::= CHOICE {
    no-Failure                No-Failure-ResourceStatusInd,
    serviceImpacting          ServiceImpacting-ResourceStatusInd,
    ...
}

No-Failure-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList    Local-Cell-InformationList-ResourceStatusInd,
    local-Cell-Group-InformationList    Local-Cell-Group-InformationList-ResourceStatusInd    OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { No-FailureItem-ResourceStatusInd-ExtIEs} }    OPTIONAL,
    ...
}

No-FailureItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Power-Local-Cell-Group-InformationList-ResourceStatusInd    CRITICALITY ignore    EXTENSION Power-Local-Cell-
Group-InformationList-ResourceStatusInd    PRESENCE optional },
    ...
}

Local-Cell-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-
InformationItemIE-ResourceStatusInd }}

Local-Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem-ResourceStatusInd    CRITICALITY ignore    TYPE Local-Cell-InformationItem-ResourceStatusInd    PRESENCE
mandatory }
}

Local-Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
    local-CellID                Local-Cell-ID,
    addorDeleteIndicator        AddorDeleteIndicator,
    dl-or-global-capacityCredit    DL-or-Global-CapacityCredit    OPTIONAL,
}

```



```

-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
ul-capacityCredit                UL-CapacityCredit                OPTIONAL,
commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw  OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw  OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
maximumDL-PowerCapability            MaximumDL-PowerCapability            OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
minSpreadingFactor                MinSpreadingFactor                OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
minimumDL-PowerCapability            MinimumDL-PowerCapability            OPTIONAL,
-- This IE shall be present if AddorDeleteIndicator IE is set to "add"
local-Cell-Group-ID                Local-Cell-ID                OPTIONAL,
iE-Extensions                ProtocolExtensionContainer { { Local-Cell-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
...
}

Local-Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-ReferenceClockAvailability CRITICALITY ignore ignore EXTENSION ReferenceClockAvailability PRESENCE optional }|
  -- This IE shall be present if AddorDeleteIndicator IE is set to "add" and the Local Cell is related to a TDD cell
  { ID id-Power-Local-Cell-Group-ID CRITICALITY ignore ignore EXTENSION Local-Cell-ID PRESENCE optional }|
  { ID id-HSDPA-Capability CRITICALITY ignore ignore EXTENSION HSDPA-Capability PRESENCE optional }|
  { ID id-E-DCH-Capability CRITICALITY ignore EXTENSION E-DCH-Capability PRESENCE optional },
  ...
}

Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-InformationItemIE-ResourceStatusInd }}

Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-Group-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-Group-InformationItem-ResourceStatusInd PRESENCE mandatory }
}

Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
  local-Cell-Group-ID                Local-Cell-ID,
  dl-or-global-capacityCredit        DL-or-Global-CapacityCredit,
  ul-capacityCredit                UL-CapacityCredit                OPTIONAL,
  commonChannelsCapacityConsumptionLaw  CommonChannelsCapacityConsumptionLaw,
  dedicatedChannelsCapacityConsumptionLaw  DedicatedChannelsCapacityConsumptionLaw,
  iE-Extensions                ProtocolExtensionContainer { { Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
  ...
}

Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Power-Local-Cell-Group-InformationList-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-Cell-Group-InformationItemIE-ResourceStatusInd }}

Power-Local-Cell-Group-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {

```

```

    { ID id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem-ResourceStatusInd PRESENCE mandatory }
}

```

```

Power-Local-Cell-Group-InformationItem-ResourceStatusInd ::= SEQUENCE {
    power-Local-Cell-Group-ID Local-Cell-ID,
    maximumDL-PowerCapability MaximumDL-PowerCapability,
    iE-Extensions ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs } }
    OPTIONAL,
    ...
}

```

```

Power-Local-Cell-Group-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

ServiceImpacting-ResourceStatusInd ::= SEQUENCE {
    local-Cell-InformationList Local-Cell-InformationList2-ResourceStatusInd OPTIONAL,
    local-Cell-Group-InformationList Local-Cell-Group-InformationList2-ResourceStatusInd OPTIONAL,
    cCP-InformationList CCP-InformationList-ResourceStatusInd OPTIONAL,
    cell-InformationList Cell-InformationList-ResourceStatusInd OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { ServiceImpactingItem-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

```

```

ServiceImpactingItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd CRITICALITY ignore EXTENSION Power-Local-Cell-Group-InformationList2-ResourceStatusInd PRESENCE optional },
    ...
}

```

```

Local-Cell-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-InformationItemIE2-ResourceStatusInd }}

```

```

Local-Cell-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-InformationItem2-ResourceStatusInd PRESENCE mandatory }
}

```

```

Local-Cell-InformationItem2-ResourceStatusInd ::= SEQUENCE {
    local-Cell-ID Local-Cell-ID,
    dl-or-global-capacityCredit DL-or-Global-CapacityCredit OPTIONAL,
    ul-capacityCredit UL-CapacityCredit OPTIONAL,
    commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
    dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
    maximum-DL-PowerCapability MaximumDL-PowerCapability OPTIONAL,
    minSpreadingFactor MinSpreadingFactor OPTIONAL,
    minimumDL-PowerCapability MinimumDL-PowerCapability OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs } } OPTIONAL,
    ...
}

```

```

Local-Cell-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

{ ID id-ReferenceClockAvailability CRITICALITY ignore EXTENSION ReferenceClockAvailability PRESENCE optional }|
{ ID id-HSDPA-Capability CRITICALITY ignore EXTENSION HSDPA-Capability PRESENCE optional }|
{ ID id-E-DCH-Capability CRITICALITY ignore EXTENSION E-DCH-Capability PRESENCE optional },
...
}

Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Local-Cell-Group-
InformationItemIE2-ResourceStatusInd }}

Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Local-Cell-Group-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Local-Cell-Group-InformationItem2-ResourceStatusInd
  PRESENCE mandatory }
}

Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
  local-Cell-Group-ID Local-Cell-ID,
  dl-or-global-capacityCredit DL-or-Global-CapacityCredit OPTIONAL,
  ul-capacityCredit UL-CapacityCredit OPTIONAL,
  commonChannelsCapacityConsumptionLaw CommonChannelsCapacityConsumptionLaw OPTIONAL,
  dedicatedChannelsCapacityConsumptionLaw DedicatedChannelsCapacityConsumptionLaw OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs } } OPTIONAL,
  ...
}

Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Power-Local-Cell-Group-InformationList2-ResourceStatusInd ::= SEQUENCE(SIZE (1..maxLocalCellinNodeB)) OF ProtocolIE-Single-Container {{ Power-Local-
Cell-Group-InformationItemIE2-ResourceStatusInd }}

Power-Local-Cell-Group-InformationItemIE2-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd CRITICALITY ignore TYPE Power-Local-Cell-Group-InformationItem2-
ResourceStatusInd PRESENCE mandatory }
}

Power-Local-Cell-Group-InformationItem2-ResourceStatusInd ::= SEQUENCE {
  power-Local-Cell-Group-ID Local-Cell-ID,
  maximumDL-PowerCapability MaximumDL-PowerCapability,
  iE-Extensions ProtocolExtensionContainer { { Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs } }
  OPTIONAL,
  ...
}

Power-Local-Cell-Group-InformationItem2-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CCP-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCCPinNodeB)) OF ProtocolIE-Single-Container {{ CCP-InformationItemIE-ResourceStatusInd
}}

CCP-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CCP-InformationItem-ResourceStatusInd CRITICALITY ignore TYPE CCP-InformationItem-ResourceStatusInd PRESENCE mandatory }
}

```

```

}

CCP-InformationItem-ResourceStatusInd ::= SEQUENCE {
    communicationControlPortID      CommunicationControlPortID,
    resourceOperationalState        ResourceOperationalState,
    availabilityStatus              AvailabilityStatus,
    iE-Extensions                   ProtocolExtensionContainer { { CCP-InformationItem-ResourceStatusInd-ExtIEs} }    OPTIONAL,
    ...
}

CCP-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Cell-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCellinNodeB)) OF ProtocolIE-Single-Container {{ Cell-InformationItemIE-ResourceStatusInd }}

Cell-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
    { ID id-Cell-InformationItem-ResourceStatusInd    CRITICALITY ignore TYPE Cell-InformationItem-ResourceStatusInd    PRESENCE mandatory }
}

Cell-InformationItem-ResourceStatusInd ::= SEQUENCE {
    c-ID                                C-ID,
    resourceOperationalState            ResourceOperationalState                OPTIONAL,
    availabilityStatus                  AvailabilityStatus                OPTIONAL,
    primary-SCH-Information              P-SCH-Information-ResourceStatusInd    OPTIONAL, -- FDD only
    secondary-SCH-Information            S-SCH-Information-ResourceStatusInd    OPTIONAL, -- FDD only
    primary-CPICH-Information            P-CPICH-Information-ResourceStatusInd  OPTIONAL, -- FDD only
    secondary-CPICH-Information          S-CPICH-InformationList-ResourceStatusInd  OPTIONAL, -- FDD only
    primary-CCPCH-Information            P-CCPCH-Information-ResourceStatusInd  OPTIONAL,
    bCH-Information                      BCH-Information-ResourceStatusInd      OPTIONAL,
    secondary-CCPCH-InformationList      S-CCPCH-InformationList-ResourceStatusInd  OPTIONAL,
    pCH-Information                      PCH-Information-ResourceStatusInd      OPTIONAL,
    pICH-Information                      PICH-Information-ResourceStatusInd     OPTIONAL,
    fACH-InformationList                 FACH-InformationList-ResourceStatusInd  OPTIONAL,
    pRACH-InformationList                 PRACH-InformationList-ResourceStatusInd  OPTIONAL,
    rACH-InformationList                 RACH-InformationList-ResourceStatusInd  OPTIONAL,
    aICH-InformationList                 AICH-InformationList-ResourceStatusInd  OPTIONAL, -- FDD only
    pCPCH-InformationList                PCPCH-InformationList-ResourceStatusInd  OPTIONAL, -- FDD only
    cPCH-InformationList                 CPCH-InformationList-ResourceStatusInd  OPTIONAL, -- FDD only
    aP-AICH-InformationList              AP-AICH-InformationList-ResourceStatusInd  OPTIONAL, -- FDD only
    cDCA-ICH-InformationList             CDCA-ICH-InformationList-ResourceStatusInd  OPTIONAL, -- FDD only
    sCH-Information                      SCH-Information-ResourceStatusInd      OPTIONAL, -- Applicable to 3.84Mcps TDD only
    iE-Extensions                       ProtocolExtensionContainer { { Cell-InformationItem-ResourceStatusInd-ExtIEs} } OPTIONAL,
    ...
}

Cell-InformationItem-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-FPACH-LCR-InformationList-ResourceStatusInd    CRITICALITY ignore    EXTENSION FPACH-LCR-InformationList-ResourceStatusInd
    PRESENCE optional_—}| -- Applicable to 1.28Mcps TDD only
    { ID id-DwPCH-LCR-Information-ResourceStatusInd        CRITICALITY ignore    EXTENSION DwPCH-LCR-Information-ResourceStatusInd
    PRESENCE optional_—}| -- Applicable to 1.28Mcps TDD only
}

```

```

    { ID id-HSDSCH-Resources-Information-ResourceStatusInd      CRITICALITY ignore  EXTENSION HS-DSCH-Resources-Information-ResourceStatusInd
    PRESENCE optional }|
    { ID id-MICH-Information-ResourceStatusInd                  CRITICALITY ignore  EXTENSION Common-PhysicalChannel-Status-Information
    PRESENCE optional }|
    { ID id-S-CCPCH-InformationListExt-ResourceStatusInd        CRITICALITY ignore  EXTENSION S-CCPCH-InformationListExt-ResourceStatusInd
    PRESENCE optional }|
    -- Applicable to 3.84Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the message.
    { ID id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd     CRITICALITY ignore  EXTENSION S-CCPCH-LCR-InformationListExt-ResourceStatusInd
    PRESENCE optional }|
    -- Applicable to 1.28Mcps TDD only, used when there are more than maxSCCPCHCell SCCPCHs in the message.
    { ID id-E-DCH-Resources-Information-ResourceStatusInd       CRITICALITY ignore  EXTENSION E-DCH-Resources-Information-ResourceStatusInd
    PRESENCE optional },
    ...
}

P-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-SCH-InformationIE-ResourceStatusInd }}

P-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-SCH-Information      CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ S-SCH-InformationIE-ResourceStatusInd }}

S-SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-SCH-Information      CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CPICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CPICH-InformationIE-ResourceStatusInd }}

P-CPICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CPICH-Information    CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

S-CPICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container {{ S-CPICH-InformationItemIE-ResourceStatusInd }}

S-CPICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CPICH-Information    CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

P-CCPCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ P-CCPCH-InformationIE-ResourceStatusInd }}

P-CCPCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-P-CCPCH-Information    CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

BCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ BCH-InformationIE-ResourceStatusInd }}

BCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-BCH-Information        CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE mandatory }
}

```

```

S-CCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCell)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-ResourceStatusInd }}

S-CCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-S-CCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PCH-InformationIE-ResourceStatusInd }}

PCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PICH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ PICH-InformationIE-ResourceStatusInd }}

PICH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

FACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFACHCell)) OF ProtocolIE-Single-Container {{ FACH-InformationItemIE-ResourceStatusInd }}

FACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-FACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

PRACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ PRACH-InformationItemIE-ResourceStatusInd }}

PRACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PRACH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

RACH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ RACH-InformationItemIE-ResourceStatusInd }}

RACH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-RACH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information  PRESENCE mandatory }
}

AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPRACHCell)) OF ProtocolIE-Single-Container {{ AICH-InformationItemIE-ResourceStatusInd }}

AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE mandatory }
}

PCPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxPCPCHCell)) OF ProtocolIE-Single-Container {{ PCPCH-InformationItemIE-ResourceStatusInd }}

PCPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-PCPCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information  PRESENCE optional }
}

```

```

CPCH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CPCH-InformationItemIE-ResourceStatusInd
}}

CPCH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CPCH-Information  CRITICALITY ignore  TYPE Common-TransportChannel-Status-Information          PRESENCE optional }
}

AP-AICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ AP-AICH-InformationItemIE-
ResourceStatusInd }}

AP-AICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-AP-AICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

CDCA-ICH-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxCPCHCell)) OF ProtocolIE-Single-Container {{ CDCA-ICH-InformationItemIE-
ResourceStatusInd }}

CDCA-ICH-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-CDCA-ICH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE optional }
}

SCH-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ SCH-InformationIE-ResourceStatusInd }}

SCH-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-SCH-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

FPACH-LCR-InformationList-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxFPACHCell)) OF ProtocolIE-Single-Container {{ FPACH-LCR-InformationItemIE-
ResourceStatusInd }}

FPACH-LCR-InformationItemIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-FPACH-LCR-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

DwPCH-LCR-Information-ResourceStatusInd ::= ProtocolIE-Single-Container {{ DwPCH-LCR-InformationIE-ResourceStatusInd }}

DwPCH-LCR-InformationIE-ResourceStatusInd NBAP-PROTOCOL-IES ::= {
  { ID id-DwPCH-LCR-Information  CRITICALITY ignore  TYPE Common-PhysicalChannel-Status-Information          PRESENCE mandatory }
}

HS-DSCH-Resources-Information-ResourceStatusInd ::= SEQUENCE {
  resourceOperationalState      ResourceOperationalState,
  availabilityStatus            AvailabilityStatus,
  iE-Extensions                 ProtocolExtensionContainer  {{ HS-DSCH-Resources-Information-ResourceStatusInd-ExtIEs }}    OPTIONAL,
  ...
}

HS-DSCH-Resources-Information-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

S-CCPCH-InformationListExt-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCellinExt)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-ResourceStatusInd }}

S-CCPCH-LCR-InformationListExt-ResourceStatusInd ::= SEQUENCE (SIZE (1..maxSCCPCHCellinExtLCR)) OF ProtocolIE-Single-Container {{ S-CCPCH-InformationItemIE-ResourceStatusInd }}

E-DCH-Resources-Information-ResourceStatusInd ::= SEQUENCE {  
resourceOperationalState ResourceOperationalState,  
availabilityStatus AvailabilityStatus,  
iE-Extensions ProtocolExtensionContainer {{ E-DCH-Resources-Information-ResourceStatusInd-ExtIEs }} OPTIONAL,  
...  
}

E-DCH-Resources-Information-ResourceStatusInd-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
...  
}

UNCHANGED TEXT IS REMOVED



```

-- *****
--
-- RADIO LINK SETUP REQUEST FDD
--
-- *****

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

RadioLinkSetupRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY reject TYPE CRNC-CommunicationContextID          PRESENCE mandatory }|
    { ID id-UL-DPCH-Information-RL-SetupRqstFDD  CRITICALITY reject TYPE UL-DPCH-Information-RL-SetupRqstFDD  PRESENCE mandatory }|
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD  CRITICALITY reject TYPE DL-DPCH-Information-RL-SetupRqstFDD  PRESENCE mandatory }|
    { ID id-DCH-FDD-Information                  CRITICALITY reject TYPE DCH-FDD-Information                  PRESENCE mandatory }|
    { ID id-DSCH-FDD-Information                 CRITICALITY reject TYPE DSCH-FDD-Information                 PRESENCE optional }|
    { ID id-TFCl2-Bearer-Information-RL-SetupRqstFDD CRITICALITY ignore TYPE TFCl2-Bearer-Information-RL-SetupRqstFDD PRESENCE optional }|
    { ID id-RL-InformationList-RL-SetupRqstFDD   CRITICALITY notify TYPE RL-InformationList-RL-SetupRqstFDD   PRESENCE mandatory }|
    { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE optional }|
    { ID id-Active-Pattern-Sequence-Information  CRITICALITY reject TYPE Active-Pattern-Sequence-Information  PRESENCE optional },
    ...
}

RadioLinkSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DSCH-FDD-Common-Information          CRITICALITY ignore EXTENSION DSCH-FDD-Common-Information          PRESENCE optional }|
    { ID id-DL-PowerBalancing-Information       CRITICALITY ignore EXTENSION DL-PowerBalancing-Information       PRESENCE optional }|
    { ID id-HSDSCH-FDD-Information              CRITICALITY reject EXTENSION HSDSCH-FDD-Information              PRESENCE optional }|
    { ID id-HSDSCH-RNTI                        CRITICALITY reject EXTENSION HSDSCH-RNTI                        PRESENCE conditional }|
    -- The IE shall be present if HS-DSCH Information IE is present
    { ID id-HSPDSCH-RL-ID                      CRITICALITY reject EXTENSION RL-ID                      PRESENCE conditional }|7
    -- The IE shall be present if HS-DSCH Information IE is present
    { ID id-E-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject EXTENSION E-DPCH-Information-RL-SetupRqstFDD PRESENCE optional }|
    { ID id-E-DCH-FDD-Information              CRITICALITY reject EXTENSION E-DCH-FDD-Information              PRESENCE conditional }|
    -- The IE shall be present if E-DPCH Information IE is present
    { ID id-Serving-E-DCH-RL-ID                CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID                PRESENCE conditional },
    -- The IE shall be present if E-DPCH Information IE is present
    ...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode          UL-ScramblingCode,
    minUL-ChannelisationCodeLength MinUL-ChannelisationCodeLength,
    maxNrOfUL-DPDCHs          MaxNrOfUL-DPDCHs          OPTIONAL,
    -- This IE shall be present if Min UL Channelisation Code length IE is set to 4 --
    ul-PunctureLimit          PunctureLimit,
    tFCS                      TFCS,
    ul-DPCCH-SlotFormat        UL-DPCCH-SlotFormat,
    ul-SIR-Target              UL-SIR,
    diversityMode              DiversityMode,
    sSDT-CellID-Length         SSDT-CellID-Length      OPTIONAL,
}

```

```

s-FieldLength          S-FieldLength          OPTIONAL,
iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
...
}

UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DPC-Mode          CRITICALITY reject EXTENSION DPC-Mode PRESENCE optional
  }17
  { ID id-UL-DPCH-Indicator-For-E-DCH-Operation CRITICALITY reject EXTENSION UL-DPCH-Indicator-For-E-DCH-Operation PRESENCE conditional },
  -- The IE shall be present if E-DPCH Information IE is present
  ...
}

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
  tFCS          TFCS,
  dl-DPCH-SlotFormat DL-DPCH-SlotFormat,
  tFCI-SignallingMode TFCI-SignallingMode,
  tFCI-Presence          TFCI-Presence OPTIONAL,
  -- this IE shall be present if the DL DPCH slot format IE is set to any of the values from 12 to 16 --
  multiplexingPosition MultiplexingPosition,
  pDSCH-RL-ID          RL-ID          OPTIONAL,
  -- This IE shall be present if the DSCH Information IE is present --
  pDSCH-CodeMapping          PDSCH-CodeMapping          OPTIONAL,
  -- This IE shall be present if the DSCH Information IE is present --
  powerOffsetInformation          PowerOffsetInformation-RL-SetupRqstFDD,
  fdd-TPC-DownlinkStepSize          FDD-TPC-DownlinkStepSize,
  limitedPowerIncrease          LimitedPowerIncrease,
  innerLoopDLPCStatus          InnerLoopDLPCStatus,
  iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
  pO1-ForTFCI-Bits          PowerOffset,
  pO2-ForTPC-Bits          PowerOffset,
  pO3-ForPilotBits          PowerOffset,
  iE-Extensions          ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCI2-Bearer-Information-RL-SetupRqstFDD ::= SEQUENCE {
  toAWS          ToAWS,
  toAWE          ToAWE,
  iE-Extensions          ProtocolExtensionContainer { { TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
  ...
}

```

```

}

TFICI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID          CRITICALITY ignore  EXTENSION  BindingID          PRESENCE  optional }|
  { ID id-transportlayeraddress  CRITICALITY ignore  EXTENSION  TransportLayerAddress  PRESENCE  optional },
  ...
}

RL-InformationList-RL-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF
  ProtocolIE-Single-Container{{ RL-InformationItemIE-RL-SetupRqstFDD }}

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

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
  rL-ID          RL-ID,
  c-ID          C-ID,
  firstRLS-indicator  FirstRLS-Indicator,
  frameOffset  FrameOffset,
  chipOffset  ChipOffset,
  propagationDelay  PropagationDelay          OPTIONAL,
  diversityControlField  DiversityControlField  OPTIONAL,
  -- This IE shall be present if the RL is not the first one in the RL Information IE
  dl-CodeInformation  FDD-DL-CodeInformation,
  initialDL-transmissionPower  DL-Power,
  maximumDL-power  DL-Power,
  minimumDL-power  DL-Power,
  sSDT-Cell-Identity  SSdT-Cell-Identity          OPTIONAL,
  transmitDiversityIndicator  TransmitDiversityIndicator  OPTIONAL,
  -- This IE shall be present if Diversity Mode IE in UL DPCCH Information group is not set to "none"
  iE-Extensions  ProtocolExtensionContainer { { RL-InformationItem-RL-SetupRqstFDD-ExtIEs } }  OPTIONAL,
  ...
}

RL-InformationItem-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-SSDT-CellIDforEDSCHPC          CRITICALITY ignore  EXTENSION  SSDT-Cell-Identity          PRESENCE conditional }|
  -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
  { ID id-RL-Specific-DCH-Info          CRITICALITY ignore  EXTENSION  RL-Specific-DCH-Info          PRESENCE optional }|
  { ID id-DelayedActivation          CRITICALITY reject  EXTENSION  DelayedActivation          PRESENCE optional }|
  { ID id-Qth-Parameter          CRITICALITY ignore  EXTENSION  Qth-Parameter          PRESENCE optional }|
  { ID id-Primary-CPICH-Usage-for-Channel-Estimation  CRITICALITY ignore  EXTENSION  Primary-CPICH-Usage-for-Channel-Estimation  PRESENCE optional }|
  { ID id-Secondary-CPICH-Information  CRITICALITY ignore  EXTENSION  CommonPhysicalChannelID  PRESENCE optional }|
  { ID id-E-DCH-RL-Indication          CRITICALITY reject  EXTENSION  E-DCH-RL-Indication          PRESENCE optional },
  ...
}

E-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
  minUL-ChannelisationCodeLengthforE-DCH-FDD  MinUL-ChannelisationCodeLengthforE-DCH-FDD,
  maxNrOfUL-E-DPDCHs          MaxNrOfUL-E-DPDCHs          OPTIONAL,
  -- The IE shall be present if Min UL Channelisation Code Length For E-DCH FDD IE equals 2
  ul-PunctureLimit          PunctureLimit,

```

```
e-TFCS E-TFCS,  
e-TTI E-TTI,  
iE-Extensions ProtocolExtensionContainer { { E-DPCH-Information-RL-SetupRgstFDD-ExtIEs } } OPTIONAL,  
...  
}  
E-DPCH-Information-RL-SetupRgstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
...  
}
```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK SETUP RESPONSE FDD
--
-- *****

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

RadioLinkSetupResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID          PRESENCE mandatory_ }|
    { ID id-NodeB-CommunicationContextID         CRITICALITY ignore TYPE NodeB-CommunicationContextID        PRESENCE mandatory_ }|
    { ID id-CommunicationControlPortID          CRITICALITY ignore TYPE CommunicationControlPortID        PRESENCE mandatory_ }|
    { ID id-RL-InformationResponseList-RL-SetupRspFDD CRITICALITY ignore TYPE RL-InformationResponseList-RL-SetupRspFDD PRESENCE mandatory_ }|
    { ID id-TFCI2-BearerInformationResponse      CRITICALITY ignore TYPE TFCI2-BearerInformationResponse      PRESENCE optional_ }|
    { ID id-CriticalityDiagnostics               CRITICALITY ignore TYPE CriticalityDiagnostics               PRESENCE optional_ },
    ...
}

RadioLinkSetupResponseFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-FDD-Information-Response      CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response      PRESENCE optional_ }|7
    { ID id-E-DCH-FDD-Information-Response      CRITICALITY ignore EXTENSION E-DCH-FDD-Information-Response      PRESENCE optional_ },
    ...
}

RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container{{ RL-InformationResponseItemIE-RL-SetupRspFDD }}

RL-InformationResponseItemIE-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-SetupRspFDD          CRITICALITY ignore TYPE          RL-InformationResponseItem-RL-SetupRspFDD          PRESENCE mandatory }
}

RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID              RL-ID,
    rL-Set-ID          RL-Set-ID,
    received-total-wide-band-power Received-total-wide-band-power-Value,
    diversityIndication DiversityIndication-RL-SetupRspFDD,
    dSCH-InformationResponseList DSCH-InformationResponseList-RL-SetupRspFDD          OPTIONAL,
    sSDT-SupportIndicator SSDT-SupportIndicator,
    iE-Extensions     ProtocolExtensionContainer { { RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs } }          OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-ActivationIndicator          CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator          PRESENCE optional }|7
    { ID id-E-DCH-RL-Set-ID          CRITICALITY ignore EXTENSION RL-Set-ID          PRESENCE optional }|7
    { ID id-E-DCH-FDD-DL-Control-Channel-Information CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional },
    ...
}

```

```

}

DiversityIndication-RL-SetupRspFDD ::= CHOICE {
    combining                Combining-RL-SetupRspFDD,
    nonCombiningOrFirstRL    NonCombiningOrFirstRL-RL-SetupRspFDD
}

Combining-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID                    RL-ID,
    iE-Extensions            ProtocolExtensionContainer { { Combining-RL-SetupRspFDD-ExtIEs } }    OPTIONAL,
    ...
}

Combining-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE {
    dCH-InformationResponse  DCH-InformationResponse,
    iE-Extensions            ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs } }    OPTIONAL,
    ...
}

NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationResponseList-RL-SetupRspFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-SetupRspFDD }}

DSCH-InformationResponseListIEs-RL-SetupRspFDD NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse    CRITICALITY ignore    TYPE DSCH-InformationResponse    PRESENCE mandatory }
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK SETUP FAILURE FDD
--
-- *****

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

RadioLinkSetupFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID      CRITICALITY ignore  TYPE CRNC-CommunicationContextID      PRESENCE mandatory }|
    { ID id-NodeB-CommunicationContextID     CRITICALITY ignore  TYPE NodeB-CommunicationContextID     PRESENCE conditional }|
    -- This IE shall be present if at least one of the radio links has been successfully set up
    { ID id-CommunicationControlPortID      CRITICALITY ignore  TYPE CommunicationControlPortID      PRESENCE optional }|
    { ID id-CauseLevel-RL-SetupFailureFDD   CRITICALITY ignore  TYPE CauseLevel-RL-SetupFailureFDD   PRESENCE mandatory }|
    { ID id-CriticalityDiagnostics          CRITICALITY ignore  TYPE CriticalityDiagnostics           PRESENCE optional },
    ...
}

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

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
    generalCause          GeneralCauseList-RL-SetupFailureFDD,
    rLSpecificCause      RLSpecificCauseList-RL-SetupFailureFDD,
    ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    cause                Cause,
    iE-Extensions        ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs } }    OPTIONAL,
    ...
}

GeneralCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-SetupFailureFDD      Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD,
    successful-RL-InformationRespList-RL-SetupFailureFDD         Successful-RL-InformationRespList-RL-SetupFailureFDD    OPTIONAL,
    iE-Extensions        ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs } }    OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDSCH-FDD-Information-Response  CRITICALITY ignore  EXTENSION HSDSCH-FDD-Information-Response  PRESENCE optional }|
    { ID id-E-DCH-FDD-Information-Response   CRITICALITY ignore  EXTENSION E-DCH-FDD-Information-Response   PRESENCE optional },
    ...
}

```

```

}

Unsuccessful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Unsuccessful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD CRITICALITY ignore TYPE Unsuccessful-RL-
InformationRespItem-RL-SetupFailureFDD PRESENCE mandatory}
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  cause Cause,
  iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
  OPTIONAL,
  ...
}

Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Successful-RL-InformationRespList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1.. maxNrOfRLs)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-SetupFailureFDD }}

Successful-RL-InformationRespItemIE-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID id-Successful-RL-InformationRespItem-RL-SetupFailureFDD CRITICALITY ignore TYPE Successful-RL-
InformationRespItem-RL-SetupFailureFDD PRESENCE mandatory}
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  rL-Set-ID RL-Set-ID,
  received-total-wide-band-power Received-total-wide-band-power-Value,
  diversityIndication DiversityIndication-RL-SetupFailureFDD,
  dSCH-InformationResponseList DSCH-InformationRespList-RL-SetupFailureFDD OPTIONAL,
  tFCI2-BearerInformationResponse TFCI2-BearerInformationResponse OPTIONAL,
  -- There shall be only one TFCI2 bearer per Node B Communication Context.
  sSDT-SupportIndicator SSDT-SupportIndicator,
  iE-Extensions ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs} }
  OPTIONAL,
  ...
}

Successful-RL-InformationRespItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE optional }
}
|_
|_ { ID id-E-DCH-RL-Set-ID CRITICALITY ignore EXTENSION RL-Set-ID PRESENCE optional }|
|_ { ID id-E-DCH-FDD-DL-Control-Channel-Information CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional },
  ...
}

DiversityIndication-RL-SetupFailureFDD ::= CHOICE {

```



```

    combining
    nonCombiningOrFirstRL
}
Combining-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID
    iE-Extensions
    ...
}
CombiningItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
    dCH-InformationResponse
    iE-Extensions
    OPTIONAL,
    ...
}
NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
DSCH-InformationRespList-RL-SetupFailureFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationRespListIEs-RL-SetupFailureFDD }}
DSCH-InformationRespListIEs-RL-SetupFailureFDD NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse PRESENCE mandatory }
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK ADDITION REQUEST FDD
--
-- *****

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

RadioLinkAdditionRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject   TYPE NodeB-CommunicationContextID          PRESENCE mandatory } |
    { ID id-Compressed-Mode-Deactivation-Flag     CRITICALITY reject   TYPE Compressed-Mode-Deactivation-Flag     PRESENCE optional } |
    { ID id-RL-InformationList-RL-AdditionRqstFDD CRITICALITY notify   TYPE RL-InformationList-RL-AdditionRqstFDD PRESENCE mandatory },
    ...
}

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

RL-InformationList-RL-AdditionRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-AdditionRqstFDD}}

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

RL-InformationItem-RL-AdditionRqstFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    c-ID                 C-ID,
    frameOffset          FrameOffset,
    chipOffset           ChipOffset,
    diversityControlField DiversityControlField,
    dl-CodeInformation   FDD-DL-CodeInformation,
    initialDL-TransmissionPower DL-Power          OPTIONAL,
    maximumDL-Power     DL-Power          OPTIONAL,
    minimumDL-Power     DL-Power          OPTIONAL,
    sSDT-CellIdentity   SSdT-Cell-Identity OPTIONAL,
    transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { { RL-InformationItem-RL-AdditionRqstFDD-ExtIEs } }      OPTIONAL,
    ...
}

RL-InformationItem-RL-AdditionRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DLReferencePower          CRITICALITY ignore   EXTENSION DL-Power          PRESENCE optional } |
    { ID id-RL-Specific-DCH-Info     CRITICALITY ignore   EXTENSION RL-Specific-DCH-Info PRESENCE optional } |
    { ID id-DelayedActivation         CRITICALITY reject   EXTENSION DelayedActivation PRESENCE optional } |
    { ID id-Qth-Parameter             CRITICALITY ignore   EXTENSION Qth-Parameter     PRESENCE optional } |
    { ID id-Primary-CPICH-Usage-for-Channel-Estimation CRITICALITY ignore   EXTENSION Primary-CPICH-Usage-for-Channel-Estimation PRESENCE optional } |
}

```

```

| { ID id-E-DCH-RL-Indication CRITICALITY reject EXTENSION E-DCH-RL-Indication PRESENCE optional },
| ...
| }

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK ADDITION RESPONSE FDD
--
-- *****

```

```

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

```

```

RadioLinkAdditionResponseFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID CRITICALITY ignore TYPE CRNC-
CommunicationContextID PRESENCE mandatory } |
    { ID id-RL-InformationResponseList-RL-AdditionRspFDD CRITICALITY ignore TYPE RL-
InformationResponseList-RL-AdditionRspFDD PRESENCE mandatory } |
    { ID id-CriticalityDiagnostics CRITICALITY ignore TYPE CriticalityDiagnostics
PRESENCE optional },
    ...
}

```

```

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

```

```

RL-InformationResponseList-RL-AdditionRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-
AdditionRspFDD }}

```

```

RL-InformationResponseItemIE-RL-AdditionRspFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-AdditionRspFDD CRITICALITY ignore TYPE RL-
InformationResponseItem-RL-AdditionRspFDD PRESENCE mandatory }
}

```

```

RL-InformationResponseItem-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID RL-ID,
    rL-Set-ID RL-Set-ID,
    received-total-wide-band-power Received-total-wide-band-power-Value,
    diversityIndication DiversityIndication-RL-AdditionRspFDD,
    sSDT-SupportIndicator SSDT-SupportIndicator,
    iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs} }
    OPTIONAL,
    ...
}

```

```

RL-InformationResponseItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE
optional_ }|7
    { ID id-E-DCH-RL-Set-ID CRITICALITY ignore EXTENSION RL-Set-ID PRESENCE optional }|
    { ID id-E-DCH-FDD-DL-Control-Channel-Information CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional },
    ...
}

DiversityIndication-RL-AdditionRspFDD ::= CHOICE {
    combining Combining-RL-AdditionRspFDD,
    non-combining Non-Combining-RL-AdditionRspFDD
}

Combining-RL-AdditionRspFDD ::= SEQUENCE {
    rL-ID RL-ID,
    iE-Extensions ProtocolExtensionContainer { { CombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}

CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Non-Combining-RL-AdditionRspFDD ::= SEQUENCE {
    dCH-InformationResponse DCH-InformationResponse,
    iE-Extensions ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionRspFDD-ExtIEs } } OPTIONAL,
    ...
}

Non-CombiningItem-RL-AdditionRspFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK ADDITION FAILURE FDD
--
-- *****

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

RadioLinkAdditionFailureFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID_ id-CRNC-CommunicationContextID          CRITICALITY_ ignore          TYPE_ CRNC-CommunicationContextID          PRESENCE
mandatory_ }|
    { ID_ id-CauseLevel-RL-AdditionFailureFDD     CRITICALITY_ ignore          TYPE_ CauseLevel-RL-AdditionFailureFDD     PRESENCE
mandatory_ }|
    { ID_ id-CriticalityDiagnostics              CRITICALITY_ ignore          TYPE_ CriticalityDiagnostics              PRESENCE optional
mandatory_ },
    ...
}

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

CauseLevel-RL-AdditionFailureFDD ::= CHOICE {
    generalCause          GeneralCauseList-RL-AdditionFailureFDD,
    rLSpecificCause      RLSpecificCauseList-RL-AdditionFailureFDD,
    ...
}

GeneralCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    cause                  Cause,
    iE-Extensions          ProtocolExtensionContainer { { GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs} }          OPTIONAL,
    ...
}

GeneralCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RLSpecificCauseList-RL-AdditionFailureFDD ::= SEQUENCE {
    unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD,
    successful-RL-InformationRespList-RL-AdditionFailureFDD   Successful-RL-InformationRespList-RL-AdditionFailureFDD          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs} }          OPTIONAL,
    ...
}

RLSpecificCauseItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

Unsuccessful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-1)) OF ProtocolIE-Single-Container {{ Unsuccessful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}

```

```

Unsuccessful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Unsuccessful-RL-
InformationRespItem-RL-AdditionFailureFDD PRESENCE mandatory}
}

```

```

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  cause Cause,
  iE-Extensions ProtocolExtensionContainer { { Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
  OPTIONAL,
  ...
}

```

```

Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

Successful-RL-InformationRespList-RL-AdditionFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs-2)) OF ProtocolIE-Single-Container {{ Successful-RL-
InformationRespItemIE-RL-AdditionFailureFDD }}

```

```

Successful-RL-InformationRespItemIE-RL-AdditionFailureFDD NBAP-PROTOCOL-IES ::= {
  { ID id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD CRITICALITY ignore TYPE Successful-RL-
InformationRespItem-RL-AdditionFailureFDD PRESENCE mandatory}
}

```

```

Successful-RL-InformationRespItem-RL-AdditionFailureFDD ::= SEQUENCE {
  rL-ID RL-ID,
  rL-Set-ID RL-Set-ID,
  received-total-wide-band-power Received-total-wide-band-power-Value,
  diversityIndication DiversityIndication-RL-AdditionFailureFDD,
  sSDT-SupportIndicator SSDT-SupportIndicator,
  iE-Extensions ProtocolExtensionContainer { { Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs} }
  OPTIONAL,
  ...
}

```

```

Successful-RL-InformationRespItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-PowerBalancing-ActivationIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator PRESENCE
optional }|7
  { ID id-E-DCH-RL-Set-ID CRITICALITY ignore EXTENSION RL-Set-ID PRESENCE optional }|
  { ID id-E-DCH-FDD-DL-Control-Channel-Information CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional },
  ...
}

```

```

DiversityIndication-RL-AdditionFailureFDD ::= CHOICE {
  combining Combining-RL-AdditionFailureFDD,
  non-Combining Non-Combining-RL-AdditionFailureFDD
}

```

```

Combining-RL-AdditionFailureFDD ::= SEQUENCE {

```

```
    rL-ID
    iE-Extensions
    ...
  }

CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Non-Combining-RL-AdditionFailureFDD ::= SEQUENCE {
  dCH-InformationResponse      DCH-InformationResponse,
  iE-Extensions                ProtocolExtensionContainer { { Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs } } OPTIONAL,
  ...
}

Non-CombiningItem-RL-AdditionFailureFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- RADIO LINK RECONFIGURATION PREPARE FDD
--
-- *****
```

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

```
RadioLinkReconfigurationPrepareFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject TYPE NodeB-CommunicationContextID          PRESENCE mandatory }-|
    { ID id-UL-DPCH-Information-RL-ReconfPrepFDD  CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfPrepFDD  PRESENCE optional }-|
    { ID id-DL-DPCH-Information-RL-ReconfPrepFDD  CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfPrepFDD  PRESENCE optional }-|
    { ID id-FDD-DCHs-to-Modify                    CRITICALITY reject TYPE FDD-DCHs-to-Modify                    PRESENCE optional }-|
    { ID id-DCHs-to-Add-FDD                       CRITICALITY reject TYPE DCH-FDD-Information                       PRESENCE optional }-|
    { ID id-DCH-DeleteList-RL-ReconfPrepFDD       CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfPrepFDD       PRESENCE optional }-|
    { ID id-DSCH-ModifyList-RL-ReconfPrepFDD      CRITICALITY reject TYPE DSCH-ModifyList-RL-ReconfPrepFDD      PRESENCE optional }-|
    { ID id-DSCHs-to-Add-FDD                      CRITICALITY reject TYPE DSCH-FDD-Information                      PRESENCE optional }-|
    { ID id-DSCH-DeleteList-RL-ReconfPrepFDD      CRITICALITY reject TYPE DSCH-DeleteList-RL-ReconfPrepFDD      PRESENCE optional }-|
    { ID id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD  CRITICALITY reject TYPE TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD  PRESENCE optional }-|
    { ID id-RL-InformationList-RL-ReconfPrepFDD   CRITICALITY reject TYPE RL-InformationList-RL-ReconfPrepFDD   PRESENCE optional }-|
    { ID id-Transmission-Gap-Pattern-Sequence-Information  CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information  PRESENCE optional },
    ...
}
```

```
RadioLinkReconfigurationPrepareFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DSCH-FDD-Common-Information           CRITICALITY ignore EXTENSION DSCH-FDD-Common-Information           PRESENCE optional }-|
    { ID id-SignallingBearerRequestIndicator      CRITICALITY reject EXTENSION SignallingBearerRequestIndicator      PRESENCE optional }-|
    { ID id-HSDSCH-FDD-Information                CRITICALITY reject EXTENSION HSDSCH-FDD-Information                PRESENCE optional }-|
    { ID id-HSDSCH-Information-to-Modify         CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify         PRESENCE optional }-|
    { ID id-HSDSCH-MACdFlows-to-Add              CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information         PRESENCE optional }-|
    { ID id-HSDSCH-MACdFlows-to-Delete          CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete          PRESENCE optional }-|
    { ID id-HSDSCH-RNTI                         CRITICALITY reject EXTENSION HSDSCH-RNTI                         PRESENCE conditional }-|
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
    { ID id-HSPDSCH-RL-ID                        CRITICALITY reject EXTENSION RL-ID                        PRESENCE optional }-|
    { ID id-E-DPCH-Information-RL-ReconfPrepFDD  CRITICALITY reject EXTENSION E-DPCH-Information-RL-ReconfPrepFDD  PRESENCE optional }-|
    { ID id-E-DCH-FDD-Information                CRITICALITY reject EXTENSION E-DCH-FDD-Information                PRESENCE optional }-|
    { ID id-E-DCH-FDD-Information-to-Modify      CRITICALITY reject EXTENSION E-DCH-FDD-Information-to-Modify      PRESENCE optional }-|
    { ID id-E-DCH-MACdFlows-to-Add              CRITICALITY reject EXTENSION E-DCH-MACdFlows-Information         PRESENCE optional }-|
    { ID id-E-DCH-MACdFlows-to-Delete          CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-Delete          PRESENCE optional }-|
    { ID id-Serving-E-DCH-RL-ID                 CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID                 PRESENCE optional },
    ...
}
```



```

UL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    ul-ScramblingCode                UL-ScramblingCode                OPTIONAL,
    ul-SIR-Target                    UL-SIR                        OPTIONAL,
    minUL-ChannelisationCodeLength    MinUL-ChannelisationCodeLength  OPTIONAL,
    maxNrOfUL-DPDCHs                 MaxNrOfUL-DPDCHs              OPTIONAL,
    -- This IE shall be present if minUL-ChannelisationCodeLength Ie is set to 4
    ul-PunctureLimit                 PunctureLimit                 OPTIONAL,
    tFCS                             TFCS                          OPTIONAL,
    ul-DPCCH-SlotFormat              UL-DPCCH-SlotFormat           OPTIONAL,
    diversityMode                    DiversityMode                   OPTIONAL,
    sSDT-CellIDLength                SSDT-CellID-Length            OPTIONAL,
    s-FieldLength                    S-FieldLength                 OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
    ...
}

UL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPDCH-Indicator-For-E-DCH-Operation CRITICALITY reject EXTENSION UL-DPDCH-Indicator-For-E-DCH-Operation PRESENCE conditional },
    -- The IE shall be present if E-DPCH Information IE is present
    ...
}

DL-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
    tFCS                             TFCS                          OPTIONAL,
    dl-DPCH-SlotFormat              DL-DPCH-SlotFormat           OPTIONAL,
    tFCI-SignallingMode             TFCI-SignallingMode          OPTIONAL,
    tFCI-Presence                   TFCI-Presence                OPTIONAL,
    -- This IE shall be present if the DL DPCH Slot Format IE is set to any of the values from 12 to 16
    multiplexingPosition            MultiplexingPosition          OPTIONAL,
    pDSCH-CodeMapping              PDSCH-CodeMapping            OPTIONAL,
    pDSCH-RL-ID                    RL-ID                         OPTIONAL,
    limitedPowerIncrease            LimitedPowerIncrease          OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

DSCH-ModifyList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-ModifyItemIE-RL-ReconfPrepFDD }}

```

```

DSCH-ModifyItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-DSCH-ModifyItem-RL-ReconfPrepFDD      CRITICALITY reject      TYPE      DSCH-ModifyItem-RL-ReconfPrepFDD      PRESENCE mandatory}
}

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

DSCH-ModifyItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID      id-bindingID                CRITICALITY ignore      EXTENSION  BindingID                PRESENCE  optional }|
  { ID      id-transportlayeraddress     CRITICALITY ignore      EXTENSION  TransportLayerAddress     PRESENCE  optional },
  ...
}

DSCH-DeleteList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF ProtocolIE-Single-Container {{DSCH-DeleteItemIE-RL-ReconfPrepFDD }}

DSCH-DeleteItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
  { ID      id-DSCH-DeleteItem-RL-ReconfPrepFDD      CRITICALITY reject      TYPE      DSCH-DeleteItem-RL-ReconfPrepFDD      PRESENCE mandatory}
}

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

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

TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD ::= CHOICE {
  addOrModify          AddOrModify-TFCI2-RL-ReconfPrepFDD,
  delete               NULL
}

AddOrModify-TFCI2-RL-ReconfPrepFDD ::= SEQUENCE {
  toAWS                ToAWS,
  toAWE                ToAWE,
  iE-Extensions        ProtocolExtensionContainer { { AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs} }  OPTIONAL,
  ...
}

AddOrModify-TFCI2-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TFCI2BearerRequestIndicator      CRITICALITY reject      EXTENSION  TFCI2BearerRequestIndicator      PRESENCE optional }|

```

```

    { ID id-bindingID                CRITICALITY ignore      EXTENSION BindingID                PRESENCE optional }|
    { ID id-transportlayeraddress     CRITICALITY ignore      EXTENSION TransportLayerAddress    PRESENCE optional },
    ...
}

RL-InformationList-RL-ReconfPrepFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfPrepFDD }}

RL-InformationItemIE-RL-ReconfPrepFDD NBAP-PROTOCOL-IES ::= {
  { ID id-RL-InformationItem-RL-ReconfPrepFDD          CRITICALITY reject      TYPE                                RL-InformationItem-RL-ReconfPrepFDD
    PRESENCE mandatory}
}

RL-InformationItem-RL-ReconfPrepFDD ::= SEQUENCE {
  rL-ID                                RL-ID,
  dl-CodeInformation                   FDD-DL-CodeInformation  OPTIONAL,
  maxDL-Power                          DL-Power                OPTIONAL,
  minDL-Power                          DL-Power                OPTIONAL,
  sSDT-Indication                      SSDT-Indication        OPTIONAL,
  sSDT-Cell-Identity                  SSDT-Cell-Identity     OPTIONAL,
  -- The IE shall be present if the SSDT Indication IE is set to "SSDT Active in the UE"
  transmitDiversityIndicator          TransmitDiversityIndicator OPTIONAL,
  -- This IE shall be present if Diversity Mode IE is present in UL DPCH Information IE and it is not set to "none"
  iE-Extensions                        ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
  ...
}

RL-InformationItem-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-SSDT-CellIDforEDSCHPC          CRITICALITY ignore      EXTENSION SSDT-Cell-Identity          PRESENCE conditional }|
  -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
  { ID id-DLReferencePower                CRITICALITY ignore      EXTENSION DL-Power                    PRESENCE optional }|
  { ID id-RL-Specific-DCH-Info            CRITICALITY ignore      EXTENSION RL-Specific-DCH-Info        PRESENCE optional }|
  { ID id-DL-DPCH-TimingAdjustment        CRITICALITY reject      EXTENSION DL-DPCH-TimingAdjustment    PRESENCE optional }|
  { ID id-Qth-Parameter                  CRITICALITY ignore      EXTENSION Qth-Parameter                PRESENCE optional }|
  { ID id-Primary-CPICH-Usage-for-Channel-Estimation CRITICALITY ignore      EXTENSION Primary-CPICH-Usage-for-Channel-Estimation PRESENCE optional }|
  { ID id-Secondary-CPICH-Information-Change CRITICALITY ignore      EXTENSION Secondary-CPICH-Information-Change PRESENCE optional }|
  { ID id-E-DCH-RL-Indication              CRITICALITY reject      EXTENSION E-DCH-RL-Indication          PRESENCE optional },
  ...
}

E-DPCH-Information-RL-ReconfPrepFDD ::= SEQUENCE {
  minUL-ChannelisationCodeLengthforE-DCH-FDD MinUL-ChannelisationCodeLengthforE-DCH-FDD OPTIONAL,
  maxNrOfUL-E-DPDCHs                       MaxNrOfUL-E-DPDCHs      OPTIONAL,
  -- The IE shall be present if Min UL Channelisation Code Length For E-DCH FDD IE equals 2
  ul-PunctureLimit                          PunctureLimit           OPTIONAL,
  e-TFCS                                    E-TFCS                  OPTIONAL,
  e-TTI                                     E-TTI                   OPTIONAL,
  iE-Extensions                            ProtocolExtensionContainer { { E-DPCH-Information-RL-ReconfPrepFDD-ExtIEs} } OPTIONAL,
  ...
}

E-DPCH-Information-RL-ReconfPrepFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

| ]

## UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- RADIO LINK RECONFIGURATION READY
--
-- *****
```

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

```
RadioLinkReconfigurationReady-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore    TYPE CRNC-CommunicationContextID          PRESENCE mandatory } |
    { ID id-RL-InformationResponseList-RL-ReconfReady  CRITICALITY ignore    TYPE RL-InformationResponseList-RL-ReconfReady  PRESENCE optional } |
    { ID id-CriticalityDiagnostics                CRITICALITY ignore    TYPE CriticalityDiagnostics                    PRESENCE optional } ,
    ...
}
```

```
RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TargetCommunicationControlPortID          CRITICALITY ignore    EXTENSION _CommunicationControlPortID          PRESENCE optional_ } |
    { ID id-HSDSCH-FDD-Information-Response           CRITICALITY ignore    EXTENSION HSDSCH-FDD-Information-Response     PRESENCE optional_ } |
    -- FDD only
    { ID id-HSDSCH-TDD-Information-Response           CRITICALITY ignore    EXTENSION HSDSCH-TDD-Information-Response     PRESENCE optional_ } |
    -- TDD only
    { ID id-E-DCH-FDD-Information-Response           CRITICALITY ignore    EXTENSION E-DCH-FDD-Information-Response     PRESENCE optional_ } ,
    ...
}
```

```
RL-InformationResponseList-RL-ReconfReady ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationResponseItemIE-RL-ReconfReady}}
```

```
RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfReady  CRITICALITY ignore    TYPE RL-InformationResponseItem-RL-ReconfReady  PRESENCE mandatory }
}
```

```
RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
    rL-ID                    RL-ID,
    dCH-InformationResponseList-RL-ReconfReady        DCH-InformationResponseList-RL-ReconfReady  OPTIONAL,
    dSCH-InformationResponseList-RL-ReconfReady        DSCH-InformationResponseList-RL-ReconfReady  OPTIONAL,
    uSCH-InformationResponseList-RL-ReconfReady        USCH-InformationResponseList-RL-ReconfReady  OPTIONAL, -- TDD only
    tFCI2-BearerInformationResponse                    TFCI2-BearerInformationResponse            OPTIONAL,
    -- FDD only. There shall be only one TFCI2 bearer per Node B Communication Context.
    iE-Extensions                    ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs} }          OPTIONAL,
    ...
}
```

```
RL-InformationResponseItem-RL-ReconfReady-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```

    { ID id-DL-PowerBalancing-UpdatedIndicator _____ CRITICALITY ignore _____ EXTENSION _____ DL-PowerBalancing-UpdatedIndicator _____ PRESENCE
optional_ }|7
    { ID id-E-DCH-RL-Set-ID _____ CRITICALITY ignore EXTENSION RL-Set-ID _____ PRESENCE optional }|
    { ID id-E-DCH-FDD-DL-Control-Channel-Information _____ CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information _____ PRESENCE optional },
    ...
}

DCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfReady }}

DCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory }
}

DSCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseListIEs-RL-ReconfReady }}

DSCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-DSCH-InformationResponse CRITICALITY ignore TYPE DSCH-InformationResponse PRESENCE mandatory }
}

USCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-ReconfReady }}

USCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
  { ID id-USCH-InformationResponse CRITICALITY ignore TYPE USCH-InformationResponse PRESENCE mandatory }
}

```

UNCHANGED TEXT IS REMOVED

```

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST FDD
--
-- *****

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

RadioLinkReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID          CRITICALITY reject TYPE NodeB-CommunicationContextID          PRESENCE mandatory }|
    { ID id-UL-DPCH-Information-RL-ReconfRqstFDD  CRITICALITY reject TYPE UL-DPCH-Information-RL-ReconfRqstFDD  PRESENCE optional }|
    { ID id-DL-DPCH-Information-RL-ReconfRqstFDD  CRITICALITY reject TYPE DL-DPCH-Information-RL-ReconfRqstFDD  PRESENCE optional }|
    { ID id-FDD-DCHs-to-Modify                    CRITICALITY reject TYPE FDD-DCHs-to-Modify                    PRESENCE optional }|
    { ID id-DCHs-to-Add-FDD                       CRITICALITY reject TYPE DCH-FDD-Information                    PRESENCE optional }|
    { ID id-DCH-DeleteList-RL-ReconfRqstFDD      CRITICALITY reject TYPE DCH-DeleteList-RL-ReconfRqstFDD      PRESENCE optional }|
    { ID id-RL-InformationList-RL-ReconfRqstFDD  CRITICALITY reject TYPE RL-InformationList-RL-ReconfRqstFDD  PRESENCE optional }|
    { ID id-Transmission-Gap-Pattern-Sequence-Information CRITICALITY reject TYPE Transmission-Gap-Pattern-Sequence-Information PRESENCE optional }|
},
...
}

RadioLinkReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SignallingBearerRequestIndicator      CRITICALITY reject EXTENSION SignallingBearerRequestIndicator      PRESENCE optional }|
    { ID id-HSDSCH-FDD-Information                CRITICALITY reject EXTENSION HSDSCH-FDD-Information                PRESENCE optional }|
    { ID id-HSDSCH-Information-to-Modify-Unsynchronised CRITICALITY reject EXTENSION HSDSCH-Information-to-Modify-Unsynchronised PRESENCE optional }|
}|
    { ID id-HSDSCH-MACdFlows-to-Add              CRITICALITY reject EXTENSION HSDSCH-MACdFlows-Information              PRESENCE optional }|
    { ID id-HSDSCH-MACdFlows-to-Delete           CRITICALITY reject EXTENSION HSDSCH-MACdFlows-to-Delete           PRESENCE optional }|
    { ID id-HSDSCH-RNTI                          CRITICALITY reject EXTENSION HSDSCH-RNTI                          PRESENCE conditional }|
    -- The IE shall be present if HS-PDSCH RL ID IE is present.
    { ID id-HSPDSCH-RL-ID                        CRITICALITY reject EXTENSION RL-ID                        PRESENCE optional }|
    { ID id-E-DPCH-Information-RL-ReconfRqstFDD  CRITICALITY reject EXTENSION E-DPCH-Information-RL-ReconfRqstFDD  PRESENCE optional }|
    { ID id-E-DCH-FDD-Information                 CRITICALITY reject EXTENSION E-DCH-FDD-Information                 PRESENCE optional }|
    { ID id-E-DCH-FDD-Information-to-Modify       CRITICALITY reject EXTENSION E-DCH-FDD-Information-to-Modify       PRESENCE optional }|
    { ID id-E-DCH-MACdFlows-to-Add               CRITICALITY reject EXTENSION E-DCH-MACdFlows-Information               PRESENCE optional }|
    { ID id-E-DCH-MACdFlows-to-Delete            CRITICALITY reject EXTENSION E-DCH-MACdFlows-to-Delete            PRESENCE optional }|
    { ID id-Serving-E-DCH-RL-ID                  CRITICALITY reject EXTENSION Serving-E-DCH-RL-ID                  PRESENCE optional }|
},
...
}

UL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    ul-TFCS          TFCS          OPTIONAL,
    iE-Extensions    ProtocolExtensionContainer { { UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } }  OPTIONAL,
    ...
}

UL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-Indicator-For-E-DCH-Operation CRITICALITY reject EXTENSION UL-DPCH-Indicator-For-E-DCH-Operation PRESENCE conditional }|

```

```

-- The IE shall be present if E-DPCH Information IE is present
}
...
DL-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {
    dl-TFCS                                TFCS                                OPTIONAL,
    tFCI-SignallingMode                    TFCI-SignallingMode                OPTIONAL,
    limitedPowerIncrease                    LimitedPowerIncrease                OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

DL-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

RL-InformationList-RL-ReconfRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{ RL-InformationItemIE-RL-ReconfRqstFDD}}

RL-InformationItemIE-RL-ReconfRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-ReconfRqstFDD          CRITICALITY reject          TYPE          RL-InformationItem-RL-ReconfRqstFDD
      PRESENCE mandatory}
}

RL-InformationItem-RL-ReconfRqstFDD ::= SEQUENCE {
    rL-ID                                  RL-ID,
    maxDL-Power                            DL-Power          OPTIONAL,
    minDL-Power                            DL-Power          OPTIONAL,
    dl-CodeInformation                      FDD-DL-CodeInformation OPTIONAL,
    -- The IE shall be present if the Transmission Gap Pattern Sequence Information IE is included and the indicated Downlink Compressed Mode method for
    at least one of the included Transmission Gap Pattern Sequence is set to "SF/2".
    iE-Extensions                          ProtocolExtensionContainer { { RL-InformationItem-RL-ReconfRqstFDD-ExtIEs } } OPTIONAL,
    ...
}

RL-InformationItem-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DLReferencePower          CRITICALITY ignore  EXTENSION DL-Power          PRESENCE optional }|
    { ID id-RL-Specific-DCH-Info      CRITICALITY ignore  EXTENSION RL-Specific-DCH-Info  PRESENCE optional }|
    { ID id-E-DCH-RL-Indication       CRITICALITY reject  EXTENSION E-DCH-RL-Indication  PRESENCE optional },
    ...
}

```

```
E-DPCH-Information-RL-ReconfRqstFDD ::= SEQUENCE {  
    e-TFCS E-TFCS OPTIONAL,  
    iE-Extensions ProtocolExtensionContainer { { E-DPCH-Information-RL-ReconfRqstFDD-ExtIEs } } OPTIONAL,  
    ...  
}  
  
E-DPCH-Information-RL-ReconfRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

UNCHANGED TEXT IS REMOVED



```

-- *****
--
-- RADIO LINK RECONFIGURATION RESPONSE
--
-- *****

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

RadioLinkReconfigurationResponse-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore          TYPE          CRNC-CommunicationContextID          PRESENCE
    mandatory } |
    { ID id-RL-InformationResponseList-RL-ReconfRsp          CRITICALITY ignore          TYPE          RL-InformationResponseList-RL-ReconfRsp          PRESENCE
    optional } |
    { ID id-CriticalityDiagnostics          CRITICALITY ignore          TYPE          CriticalityDiagnostics          PRESENCE optional
    },
    ...
}

RadioLinkReconfigurationResponse-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TargetCommunicationControlPortID          CRITICALITY ignore          EXTENSION CommunicationControlPortID          PRESENCE optional } |
    { ID id-HSDSCH-FDD-Information-Response          CRITICALITY ignore          EXTENSION HSDSCH-FDD-Information-Response          PRESENCE optional } |
    -- FDD only
    { ID id-HSDSCH-TDD-Information-Response          CRITICALITY ignore          EXTENSION HSDSCH-TDD-Information-Response          PRESENCE optional } |
    -- TDD only
    { ID id-E-DCH-FDD-Information-Response          CRITICALITY ignore          EXTENSION E-DCH-FDD-Information-Response          PRESENCE optional },
    ...
}

RL-InformationResponseList-RL-ReconfRsp ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container {{RL-InformationResponseItemIE-RL-ReconfRsp}}

RL-InformationResponseItemIE-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfRsp          CRITICALITY          ignore          TYPE          RL-InformationResponseItem-RL-
ReconfRsp          PRESENCE          mandatory}
}

RL-InformationResponseItem-RL-ReconfRsp ::= SEQUENCE {
    rL-ID          RL-ID,
    dCH-InformationResponseList-RL-ReconfRsp          —DCH-InformationResponseList-RL-ReconfRsp          OPTIONAL,
    iE-Extensions          ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfRsp-ExtIEs } }          OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfRsp-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-UpdatedIndicator          —CRITICALITY ignore          —EXTENSION DL-PowerBalancing-UpdatedIndicator          PRESENCE optional
    —} |
    -- FDD only
    { ID id-E-DCH-RL-Set-ID          CRITICALITY ignore          EXTENSION RL-Set-ID          PRESENCE optional } |

```

```
| { ID id-E-DCH-FDD-DL-Control-Channel-Information CRITICALITY ignore EXTENSION E-DCH-FDD-DL-Control-Channel-Information PRESENCE optional },  
| ...  
| }
```

```
DCH-InformationResponseList-RL-ReconfRsp ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfRsp }}
```

```
DCH-InformationResponseListIEs-RL-ReconfRsp NBAP-PROTOCOL-IES ::= {  
  { ID id-DCH-InformationResponse CRITICALITY ignore TYPE DCH-InformationResponse PRESENCE mandatory }  
}
```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST FDD
--
-- *****
```

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

```
PhysicalSharedChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
| { ID id-C-ID          CRITICALITY reject TYPE C-ID          PRESENCE mandatory }|
}|
| { ID id-ConfigurationGenerationID          CRITICALITY reject TYPE ConfigurationGenerationID          PRESENCE mandatory }|
| { ID id-SFN          CRITICALITY reject TYPE SFN          PRESENCE optional }|
| { ID id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst          CRITICALITY reject TYPE MaximumTransmissionPower          PRESENCE optional }|
| { ID id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst          CRITICALITY reject TYPE DL-ScramblingCode          PRESENCE optional }|
| { ID id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst          CRITICALITY reject TYPE HS-PDSCH-FDD-Code-Information          PRESENCE optional }|
| { ID id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst CRITICALITY reject TYPE HS-SCCH-FDD-Code-Information          PRESENCE optional }|
| ...
}
```

```
PhysicalSharedChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
| { ID id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code          CRITICALITY reject EXTENSION DL-ScramblingCode          PRESENCE optional }|
| { ID id-E-AGCH-FDD-Code-Information          CRITICALITY reject EXTENSION E-AGCH-FDD-Code-Information          PRESENCE optional }|
| { ID id-E-RGCH-E-HICH-FDD-Code-Information          CRITICALITY reject EXTENSION E-RGCH-E-HICH-FDD-Code-Information          PRESENCE optional }|
| ...
}
```

UNCHANGED TEXT IS REMOVED

## 9.3.4 Information Elements Definitions

```

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

```

```

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

```

```

DEFINITIONS AUTOMATIC TAGS ::=
BEGIN

```

```

IMPORTS
    maxNrOfRLs ,
    maxNrOfTFCS ,
    maxNrOfErrors ,
    maxCTFC ,
    maxNrOfTFs ,
    maxTTL-count ,
    maxRateMatching ,
    maxCodeNrComp-1 ,
    maxHS-PDSCHCodeNrComp-1 ,
    maxHS-SCCHCodeNrComp-1 ,
    maxNrOfCellSyncBursts ,
    maxNrOfCodeGroups ,
    maxNrOfMeasNCell ,
    maxNrOfMeasNCell-1 ,
    maxNrOfReceiptsPerSyncFrame ,
    maxNrOfTFCIGroups ,
    maxNrOfTFCI1Combs ,
    maxNrOfTFCI2Combs ,
    maxNrOfTFCI2Combs-1 ,
    maxNrOfSF ,
    maxTGPS ,
    maxNrOfUSCHs ,
    maxNrOfULTSs ,
    maxNrOfULTSLCRs ,
    maxNrOfDPCHs ,
    maxNrOfDPCHLCRs ,
    maxNrOfCodes ,
    maxNrOfDSCHs ,
    maxNrOfDLTSs ,
    maxNrOfDLTSLCRs ,
    maxNrOfDCHs ,
    maxNrOfLevels ,
    maxNoGPSItems ,
    maxNoSat ,
    maxNrOfCellPortionsPerCell ,
    maxNrOfCellPortionsPerCell-1 ,

```

```

maxNrOfHSSCCHs,
maxNrOfHSSCCHCodes,
maxNrOfMACdFlows,
maxNrOfMACdFlows-1,
maxNrOfMACdPDUIndexes,
maxNrOfMACdPDUIndexes-1,
maxNrOfNIs,
maxNrOfPriorityQueues,
maxNrOfPriorityQueues-1,
maxNrOfHARQProcesses,
maxNrOfSyncDLCodesLCR,
maxNrOfSyncFramesLCR,
maxNrOfContextsOnUeList,
maxNrOfPriorityClasses,
maxNrOfSatAlmanac-maxNoSat,
maxE-AGCH-CodeNrComp-1,
maxE-RGCH-E-HICH-CodeNrComp-1,
maxNrOfDDIs,
maxNrOfE-AGCHs,
maxNrOfEDCHMACdFlows,
maxNrOfEDCHMACdFlows-1,
maxNrOfE-RGCHs-E-HICHs,
maxNrOfSigSeqRGHI-1,

```

UNCHANGED TEXT IS REMOVED

```

-- =====
-- D
-- =====

```

Data-Description-Indicator ::= SEQUENCE (SIZE (1..maxNrOfDDIs)) OF Data-Description-Indicator-Item

```

Data-Description-Indicator-Item ::= SEQUENCE {
  e-DCH-DDI-Value          E-DCH-DDI-Value,
  Associated-E-DCH-MACdFlow-ID  E-DCH-MACdFlow-ID,
  macdPDU-Size            MACdPDU-Size,
  schedulingPriorityIndicator  SchedulingPriorityIndicator,
  mACesGuaranteedBitRate    MACesGuaranteedBitRate OPTIONAL,
  iE-Extensions           ProtocolExtensionContainer { { Data-Description-Indicator-Item-ExtIEs } } OPTIONAL,
  ...
}

```

Data-Description-Indicator-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

  ...
}

```

DATA-ID ::= INTEGER (0..3)

UNCHANGED TEXT IS REMOVED

```

-- =====
-- E
-- =====

```

```

E-AGCH-FDD-Code-Information ::= CHOICE {
  replace E-AGCH-FDD-Code-List,
  remove NULL,
  ...
}

```

```

E-AGCH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfE-AGCHs)) OF E-AGCH-FDD-Code-Information-Item

```

```

E-AGCH-FDD-Code-Information-Item ::= INTEGER (0..maxE-AGCH-CodeNrComp-1)

```

```

E-DCH-Capability ::= ENUMERATED {
  e-DCH-capable,
  e-DCH-non-capable
}

```

```

E-DCH-DDI-Value ::= INTEGER (0..63)

```

```

E-DCH-FDD-DL-Control-Channel-Information ::= SEQUENCE {
  e-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code DL-ScramblingCode OPTIONAL,
  e-AGCH-Channelisation-Code FDD-DL-ChannelisationCodeNumber OPTIONAL,
  e-RNTI E-RNTI OPTIONAL,
  e-RGCH-E-HICH-Channelisation-Code FDD-DL-ChannelisationCodeNumber,
  e-RGCH-Sequence-Number E-RGCH-Sequence-Number,
  e-HICH-Sequence-Number E-HICH-Sequence-Number,
  iE-Extensions ProtocolExtensionContainer { { E-DCH-FDD-DL-Control-Channel-Information-ExtIEs} } OPTIONAL,
  ...
}

```

```

E-DCH-FDD-DL-Control-Channel-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

E-DCH-FDD-Information ::= SEQUENCE {
  e-DCH-MACdFlows-Information E-DCH-MACdFlows-Information,
  ue-E-DCH-Capability-Info UE-E-DCH-Capability-Information,
  iE-Extensions ProtocolExtensionContainer { { E-DCH-FDD-Information-ExtIEs} } OPTIONAL,
  ...
}

```

```

E-DCH-FDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

E-DCH-FDD-Information-Response ::= SEQUENCE {
  e-DCH-MACdFlow-Specific-InformationResp E-DCH-MACdFlow-Specific-InformationResp OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { E-DCH-FDD-Information-Response-ExtIEs} } OPTIONAL,
  ...
}

```

```

E-DCH-FDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

E-DCH-FDD-Information-to-Modify ::= SEQUENCE {
    e-DCH-MACdFlow-Specific-Info-to-Modify          E-DCH-MACdFlow-Specific-InfoList-to-Modify          OPTIONAL,
    data-Description-Indicator                      Data-Description-Indicator                          OPTIONAL,
    iE-Extensions                                  ProtocolExtensionContainer { { E-DCH-FDD-Information-to-Modify-ExtIEs } }  OPTIONAL,
    ...
}

E-DCH-FDD-Information-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

E-DCH-MACdFlow-ID ::= INTEGER (0..maxNrOfEDCHMACdFlows-1)

E-DCH-MACdFlows-Information ::= SEQUENCE {
    e-DCH-MACdFlow-Specific-Info                    E-DCH-MACdFlow-Specific-InfoList,
    data-Description-Indicator                      Data-Description-Indicator,
    iE-Extensions                                  ProtocolExtensionContainer { { E-DCH-MACdFlows-Information-ExtIEs } }      OPTIONAL,
    ...
}

E-DCH-MACdFlows-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

E-DCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InfoItem

E-DCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
    e-DCH-MACdFlow-ID                               E-DCH-MACdFlow-ID,
    bindingID                                       BindingID                                             OPTIONAL,
    transportLayerAddress                          TransportLayerAddress                                OPTIONAL,
    allocationRetentionPriority                    AllocationRetentionPriority,
    tnlQos                                         TnlQos                                              OPTIONAL,
    payloadCRC-PresenceIndicator                  PayloadCRC-PresenceIndicator,
    maximum-Number-of-Transmissions-For-E-DCH     Maximum-Number-of-Transmissions-For-E-DCH,
    iE-Extensions                                  ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InfoItem-ExtIEs } }  OPTIONAL,
    ...
}

E-DCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

E-DCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InformationResp-Item

E-DCH-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID                               E-DCH-MACdFlow-ID,
    bindingID                                       BindingID                                             OPTIONAL,
    transportLayerAddress                          TransportLayerAddress                                OPTIONAL,
    iE-Extensions                                  ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InformationResp-Item-ExtIEs } }  OPTIONAL,

```

```

    ...
}
E-DCH-MACdFlow-Specific-InformationResp-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
E-DCH-MACdFlow-Specific-InfoList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-Specific-InfoItem-to-Modify
E-DCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    e-DCH-MACdFlow-ID E-DCH-MACdFlow-ID,
    allocationRetentionPriority AllocationRetentionPriority OPTIONAL,
    transportBearerRequestIndicator TransportBearerRequestIndicator,
    bindingID BindingID OPTIONAL,
    transportLayerAddress TransportLayerAddress OPTIONAL,
    tnlQos TnlQos OPTIONAL,
    maximum-Number-of-Transmissions-For-E-DCH Maximum-Number-of-Transmissions-For-E-DCH OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { E-DCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs} } OPTIONAL,
    ...
}
E-DCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
E-DCH-MACdFlows-to-Delete ::= SEQUENCE (SIZE (1..maxNrOfEDCHMACdFlows)) OF E-DCH-MACdFlow-to-Delete-Item
E-DCH-MACdFlow-to-Delete-Item ::= SEQUENCE {
    e-DCH-MACdFlow-ID E-DCH-MACdFlow-ID,
    iE-Extensions ProtocolExtensionContainer { { E-DCH-MACdFlow-to-Delete-Item-ExtIEs} } OPTIONAL,
    ...
}
E-DCH-MACdFlow-to-Delete-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
E-DCH-Physical-Layer-Category ::= INTEGER (0)
-- FFS.
E-DCH-RL-Indication ::= ENUMERATED {
    e-DCH,
    non-e-DCH
}
E-HICH-Signature-Sequence ::= INTEGER (0..maxNrofSigSeqRGHI-1)
End-Of-Audit-Sequence-Indicator ::= ENUMERATED {
    end-of-audit-sequence,
    not-end-of-audit-sequence
}
EnhancedDSCHPC ::= SEQUENCE {

```



```

    enhancedDSCHPCWnd    EnhancedDSCHPCWnd,
    enhancedDSCHPCCounter EnhancedDSCHPCCounter,
    enhancedDSCHPowerOffset EnhancedDSCHPowerOffset,
    ...
}

```

```
EnhancedDSCHPCCounter ::= INTEGER (1..50)
```

```
EnhancedDSCHPCIndicator ::= ENUMERATED {
    enhancedDSCHPCActiveInTheUE,
    enhancedDSCHPCNotActiveInTheUE
}

```

```
EnhancedDSCHPCWnd ::= INTEGER (1..10)
```

```
EnhancedDSCHPowerOffset ::= INTEGER (-15..0)
```

```

E-RGCH-E-HICH-FDD-Code-Information ::= CHOICE {
    replace          E-RGCH-E-HICH-FDD-Code-List,
    remove          NULL,
    ...
}

```

```
E-RGCH-E-HICH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfE-RGCHs-E-HICHs)) OF E-RGCH-E-HICH-FDD-Code-Information-Item
```

```
E-RGCH-E-HICH-FDD-Code-Information-Item ::= INTEGER (0..maxE-RGCH-E-HICH-CodeNrComp-1)
```

```
E-RGCH-Signature-Sequence ::= INTEGER (0..maxNrofSigSeqRGHI-1)
```

```
E-RNTI ::= INTEGER (0..65535)
```

```

E-TFCS ::= SEQUENCE {
    -- Coding is FFS
    iE-Extensions
    ProtocolExtensionContainer { {E-TFCS-ExtIEs} } OPTIONAL,
    ...
}

```

```
E-TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```

    ...
}

```

```
E-TTI ::= ENUMERATED {
```

```

    e-TTI-2ms,
    e-TTI-10ms
}

```

UNCHANGED TEXT IS REMOVED

```
-- =====
-- M
-- =====
```

UNCHANGED TEXT IS REMOVED

```
MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
    sID                SID,
    macdPDU-Size      MACdPDU-Size,
    iE-Extensions     ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs} }    OPTIONAL,
    ...
}
```

```
MACdPDU-Size-IndexItem-to-Modify-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

MACesGuaranteedBitRate ::= INTEGER (0..16777215,...)

MACHsGuaranteedBitRate ::= INTEGER (0..16777215,...)

MACHsReorderingBufferSize-for-RLC-UM ::= INTEGER (0..300,...)  
 -- Unit kBytes

MAC-hsWindowSize ::= ENUMERATED {v4, v6, v8, v12, v16, v24, v32,...}

MaximumDL-PowerCapability ::= INTEGER(0..500)  
 -- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB

Maximum-Number-of-Retransmissions-For-E-DCH ::= INTEGER (0..15)

```
Maximum-PDSCH-Power ::= SEQUENCE {
    maximum-PDSCH-Power-SF4      DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF8      DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF16     DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF32     DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF64     DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF128    DL-Power      OPTIONAL,
    maximum-PDSCH-Power-SF256    DL-Power      OPTIONAL,
    iE-Extensions                ProtocolExtensionContainer { { Maximum-PDSCH-Power-ExtIEs} }    OPTIONAL,
    ...
}
```

```
Maximum-PDSCH-Power-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

MaximumTransmissionPower ::= INTEGER(0..500)  
 -- Unit dBm, Range 0dBm .. 50dBm, Step +0.1dB

MaxNrOfUL-DPDCHs ::= INTEGER (1..6)

```
MaxNrOfUL-E-DPDCHs ::= ENUMERATED {  
    max-1,  
    max-2,  
    max-4,  
    ...  
}
```

```
Max-Number-of-PCPCHes ::= INTEGER (1..64,...)
```

UNCHANGED TEXT IS REMOVED

```
MinUL-ChannelisationCodeLength ::= ENUMERATED {  
    v4,  
    v8,  
    v16,  
    v32,  
    v64,  
    v128,  
    v256,  
    ...  
}
```

```
MinUL-ChannelisationCodeLengthforE-DCH-FDD ::= ENUMERATED {  
    v2,  
    v4,  
    v8,  
    v16,  
    v32,  
    v64,  
    ...  
}
```

```
MultiplexingPosition ::= ENUMERATED {  
    fixed,  
    flexible  
}
```

UNCHANGED TEXT IS REMOVED

```
-- =====
-- S
-- =====
```

UNCHANGED TEXT IS REMOVED

```
Segment-Type ::= ENUMERATED {
    first-segment,
    first-segment-short,
    subsequent-segment,
    last-segment,
    last-segment-short,
    complete-SIB,
    complete-SIB-short,
    ...
}
```

```
Serving-E-DCH-RL-ID ::= CHOICE {
    serving-E-DCH-RL-in-this-NodeB          Serving-E-DCH-RL-in-this-NodeB,
    serving-E-DCH-RL-not-in-this-NodeB     NULL,
    ...
}
```

```
Serving-E-DCH-RL-in-this-NodeB ::= SEQUENCE {
    rL-ID                                RL-ID,
    iE-Extensions                        ProtocolExtensionContainer { { Serving-E-DCH-RL-in-this-NodeB-ExtIEs} } OPTIONAL,
    ...
}
```

```
Serving-E-DCH-RL-in-this-NodeB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
S-FieldLength ::= ENUMERATED {
    v1,
    v2,
    ...
}
```

UNCHANGED TEXT IS REMOVED

```
-- =====
-- U
-- =====
```

UNCHANGED TEXT IS REMOVED

```
UE-Capability-Information ::= SEQUENCE {
  hSDSCH-Physical-Layer-Category INTEGER (1..64,...),
  iE-Extensions ProtocolExtensionContainer { { UE-Capability-Information-ExtIEs } } OPTIONAL,
  ...
}
```

```
UE-Capability-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
UE-E-DCH-Capability-Information ::= SEQUENCE {
  e-DCH-Physical-Layer-Category E-DCH-Physical-Layer-Category,
  iE-Extensions ProtocolExtensionContainer { { UE-E-DCH-Capability-Information-ExtIEs } } OPTIONAL,
  ...
}
```

```
UE-E-DCH-Capability-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
UL-CapacityCredit ::= INTEGER (0..65535)
```

```
UL-DL-mode ::= ENUMERATED {
  ul-only,
  dl-only,
  both-ul-and-dl
}
```

```
UL-DPDCH-Indicator-For-E-DCH-Operation ::= ENUMERATED {
  ul-DPDCH-present,
  ul-DPDCH-not-present
}
```

UNCHANGED TEXT IS REMOVED

## 9.3.6 Constant Definitions

```

-- *****
--
-- Constant definitions
--
-- *****

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

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

UNCHANGED TEXT IS REMOVED

-- *****
--
-- Lists
--
-- *****

UNCHANGED TEXT IS REMOVED

maxNrOfHSSCCHCodes          INTEGER ::= 4
maxNrOfMACdFlows            INTEGER ::= 8
maxNrOfMACdFlows-1         INTEGER ::= 7  -- maxNrOfMACdFlows - 1
maxNrOfMACdPDUIndexes       INTEGER ::= 8
maxNrOfMACdPDUIndexes-1    INTEGER ::= 7  -- maxNoOfMACdPDUIndexes - 1
maxNrOfNIs                  INTEGER ::= 256
maxNrOfPriorityQueues        INTEGER ::= 8
maxNrOfPriorityQueues-1     INTEGER ::= 7  -- maxNoOfPriorityQueues - 1
maxNrOfHARQProcesses        INTEGER ::= 8
maxNrOfContextsOnUeList     INTEGER ::= 16
maxNrOfCellPortionsPerCell  INTEGER ::= 64
maxNrOfCellPortionsPerCell-1 INTEGER ::= 63
maxNrOfPriorityClasses       INTEGER ::= 16
maxNrOfSatAlmanac-maxNoSat  INTEGER ::= 16 -- maxNrofSatAlmanac - maxNoSat
maxE-AGCH-CodeNrComp-1      INTEGER ::= 1  -- FFS
maxE-RGCH-E-HICH-CodeNrComp-1 INTEGER ::= 1  -- FFS
maxNrOfDDIs                 INTEGER ::= 1  -- FFS
maxNrOfE-AGCHs              INTEGER ::= 1  -- FFS
maxNrOfEDCHMACdFlows        INTEGER ::= 8  -- FFS
maxNrOfEDCHMACdFlows-1     INTEGER ::= 7  -- FFS
maxNrOfE-RGCHs-E-HICHs      INTEGER ::= 1  -- FFS
maxNrofSigSeqRGHI-1        INTEGER ::= 39

```

UNCHANGED TEXT IS REMOVED

```
-- *****
--
-- IEs
--
-- *****
```

**UNCHANGED TEXT IS REMOVED**

id-Secondary-CPICH-Information	ProtocolIE-ID ::= 600
id-Received-total-wide-band-power-For-CellPortion	ProtocolIE-ID ::= 601
id-Unidirectional-DCH-Indicator	ProtocolIE-ID ::= 602
id-TimingAdjustmentValueLCR	ProtocolIE-ID ::= 603
id-multipleRL-dl-DPCH-InformationList	ProtocolIE-ID ::= 604
id-multipleRL-dl-DPCH-InformationModifyList	ProtocolIE-ID ::= 605
id-multipleRL-ul-DPCH-InformationList	ProtocolIE-ID ::= 606
id-multipleRL-ul-DPCH-InformationModifyList	ProtocolIE-ID ::= 607
id-RL-ID	ProtocolIE-ID ::= 608
id-SAT-Info-Almanac-ExtItem	ProtocolIE-ID ::= 609
id-HSDPA-Capability	ProtocolIE-ID ::= 610
id-HSDSCH-Resources-Information-AuditRsp	ProtocolIE-ID ::= 611
id-HSDSCH-Resources-Information-ResourceStatusInd	ProtocolIE-ID ::= 612
id-HSDSCH-MACdFlows-to-Add	ProtocolIE-ID ::= 613
id-HSDSCH-MACdFlows-to-Delete	ProtocolIE-ID ::= 614
id-HSDSCH-Information-to-Modify-Unsynchronised	ProtocolIE-ID ::= 615
id-TnIQos	ProtocolIE-ID ::= 616
id-Received-total-wide-band-power-For-CellPortion-Value	ProtocolIE-ID ::= 617
id-Transmitted-Carrier-Power-For-CellPortion	ProtocolIE-ID ::= 618
id-Transmitted-Carrier-Power-For-CellPortion-Value	ProtocolIE-ID ::= 619
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortion	ProtocolIE-ID ::= 620
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue	ProtocolIE-ID ::= 621
id-UpPTSInterferenceValue	ProtocolIE-ID ::= 622
id-PrimaryCCPCH-RSCP-Delta	ProtocolIE-ID ::= 623
id-MeasurementRecoveryBehavior	ProtocolIE-ID ::= 624
id-MeasurementRecoveryReportingIndicator	ProtocolIE-ID ::= 625
id-MeasurementRecoverySupportIndicator	ProtocolIE-ID ::= 626
id-Tstd-indicator	ProtocolIE-ID ::= 627
id-multiple-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 628
id-multiple-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 629
id-Additional-S-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 633
id-Additional-S-CCPCH-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 634
id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 635
id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 636
id-MICH-CFN	ProtocolIE-ID ::= 637
id-MICH-Information-AuditRsp	ProtocolIE-ID ::= 638
id-MICH-Information-ResourceStatusInd	ProtocolIE-ID ::= 639
id-MICH-Parameters-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 640
id-MICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 641
id-MICH-Parameters-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 642
id-MICH-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 643
id-Modification-Period	ProtocolIE-ID ::= 644
id-NI-Information-NotifUpdateCmd	ProtocolIE-ID ::= 645
id-S-CCPCH-InformationListExt-AuditRsp	ProtocolIE-ID ::= 646
id-S-CCPCH-InformationListExt-ResourceStatusInd	ProtocolIE-ID ::= 647

<u>id-S-CCPCH-LCR-InformationListExt-AuditRsp</u>	ProtocolIE-ID ::= 648
<u>id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd</u>	ProtocolIE-ID ::= 649
<u>id-HARQ-Preamble-Mode</u>	ProtocolIE-ID ::= 650
<u>id-E-AGCH-And-E-RGCH-E-HICH-FDD-Scrambling-Code</u>	ProtocolIE-ID ::= 663
<u>id-E-AGCH-FDD-Code-Information</u>	ProtocolIE-ID ::= 664
<u>id-E-DCH-Capability</u>	ProtocolIE-ID ::= 665
<u>id-E-DCH-FDD-DL-Control-Channel-Information</u>	ProtocolIE-ID ::= 666
<u>id-E-DCH-FDD-Information</u>	ProtocolIE-ID ::= 667
<u>id-E-DCH-FDD-Information-Response</u>	ProtocolIE-ID ::= 668
<u>id-E-DCH-FDD-Information-to-Modify</u>	ProtocolIE-ID ::= 669
<u>id-E-DCH-MACdFlows-to-Add</u>	ProtocolIE-ID ::= 670
<u>id-E-DCH-MACdFlows-to-Delete</u>	ProtocolIE-ID ::= 671
<u>id-E-DCH-Resources-Information-AuditRsp</u>	ProtocolIE-ID ::= 672
<u>id-E-DCH-Resources-Information-ResourceStatusInd</u>	ProtocolIE-ID ::= 673
<u>id-E-DCH-RL-Indication</u>	ProtocolIE-ID ::= 674
<u>id-E-DCH-RL-Set-ID</u>	ProtocolIE-ID ::= 675
<u>id-E-DPCH-Information-RL-ReconfPrepFDD</u>	ProtocolIE-ID ::= 676
<u>id-E-DPCH-Information-RL-SetupRgstFDD</u>	ProtocolIE-ID ::= 677
<u>id-E-RGCH-E-HICH-FDD-Code-Information</u>	ProtocolIE-ID ::= 678
<u>id-Serving-E-DCH-RL-ID</u>	ProtocolIE-ID ::= 679
<u>id-UL-DPCH-Indicator-For-E-DCH-Operation</u>	ProtocolIE-ID ::= 680

END