**TSG RAN Meeting #22**                                                    **RP-030694**
**Maui, USA, 9 - 12 December 2003**


**Title**                          CRs (Rel-5 only) to TS 25.423 and TS 25.433 on TNL QoS for uplink IP traffic
**Source**                         TSG RAN WG3
**Agenda Item**                    7.4.6

| RAN3 Tdoc | Spec | curr. Vers. | new Vers. | REL | CR | Rev | Cat | Title | Work item |
|---|---|---|---|---|---|---|---|---|---|
| R3-031855 | 25.423 | 5.7.0 | 5.8.0 | REL-5 | 890 | 2 | F | TNL QoS for uplink IP traffic | ETRAN-IPtrans |
| R3-031856 | 25.433 | 5.6.0 | 5.7.0 | REL-5 | 940 | 2 | F | TNL QoS for uplink IP traffic | ETRAN-IPtrans |

*CR-Form-v7*

# CHANGE REQUEST

| ⌘ | **25.423** CR **890** | ⌘**rev** **2** ⌘ | Current version: | **5.7.0** ⌘ |
|---|---|---|---|---|

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

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

| | | | |
|---|---|---|---|
| ***Title:*** ⌘ | TNL QoS for uplink IP traffic | | |
| ***Source:*** ⌘ | RAN3 | | |
| ***Work item code:***⌘ | ETRAN-IPtrans | ***Date:*** ⌘ | 21/11/2003 |
| ***Category:*** ⌘ **F** | | ***Release:*** ⌘ | Rel-5 |

| | |
|---|---|
| *Use one of the following categories:*<br>***F*** *(correction)*<br>***A*** *(corresponds to a correction in an earlier release)*<br>***B*** *(addition of feature),*<br>***C*** *(functional modification of feature)*<br>***D*** *(editorial modification)*<br>Detailed explanations of the above categories can<br>be found in 3GPP TR 21.900. | *Use one of the following releases:*<br>*2        (GSM Phase 2)*<br>*R96    (Release 1996)*<br>*R97    (Release 1997)*<br>*R98    (Release 1998)*<br>*R99    (Release 1999)*<br>*Rel-4   (Release 4)*<br>*Rel-5   (Release 5)*<br>*Rel-6   (Release 6)* |

| | |
|---|---|
| ***Reason for change:*** ⌘ | In case of IP transport, the current RNSAP specification does not allow the DRNS to determine the characteristics it must assign to the Iur transport bearer for the uplink data traffic to experience the same characteristics as the downlink.<br><br>Text related to the use of *Traffic Class* IE by the DRNS is not aligned: it specifies "may be used" in some places and "should be used" in other places. |
| ***Summary of change:***⌘ | Rev2: *TNL QoS IE* is moved from *DCH Specific Info* IE level to the level above because there is one TNL QoS for a set of coordinated DCHs. Procedural text is updated accordingly.<br>+ ASN1 corrected.<br><br>Rev1:<br>A new optional parameter *TNL QoS* IE is added to *DCH FDD Information* IE, *DCH TDD Information* IE, *DCHs FDD To Modify* IE, *DCHs TDD To Modify* IE, *USCH Information* IE, and *USCHs to Modify* IE.<br>This new parameter concerns the following messages:<br>-    RADIO LINK SETUP,<br>-    RADIO LINK RECONFIGURATION PREPARE,<br>-    RADIO LINK RECONFIGURATION REQUEST.<br><br>Text related to the use of *Traffic Class* IE by the DRNS is changed to "may be used" instead of "should be used" for alignment.<br><br><br>Rev0 not submitted<br><br>Impact Analysis |

| | | This CR has isolated impact on the previous version of the specification (same release) because only one function is impacted. |
| | | This CR has an impact under the functional and protocol point of view. |
| | | The impact can be considered as isolated as it affects only one function, namely Radio Link Setup and Reconfiguration procedures. |
| **Consequences if not approved:** | ⌘ | The DRNS may be unable to determine the characteristics it must assign to the transport bearer for UL traffic, in case of IP transport to experience the same characteristics as the downlink. |

| **Clauses affected:** | ⌘ | 2, 8.3.1.2, 8.3.4.2, 8.3.7.2, 9.1.11.2, 9.2.2.4A, 9.2.2.13C, 9.2.3.2A, 9.2.3.8B, 9.2.3.15, 9.2.1.x (new), 9.3.3, 9.3.4, 9.3.6 |

| | | **Y** | **N** | | | |
|---|---|---|---|---|---|---|
| **Other specs affected:** | ⌘ | X | | Other core specifications | ⌘ | TS 25.433 CR940rev2 Rel-5 |
| | | | X | Test specifications | | |
| | | | X | O&M Specifications | | |

| **Other comments:** | ⌘ | - |

## How to create CRs using this form:

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

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

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

# 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 (12/97): "Information technology - Abstract Syntax Notation One (ASN.1): Specification of basic notation".

[19]       ITU-T Recommendation X.681 (12/97): "Information technology - Abstract Syntax Notation One (ASN.1): Information object specification".

[20]       ITU-T Recommendation X.691 (12/97): "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".

[x1]        IETF RFC 2474 "Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers".

[x2]        IETF RFC 2475 "An Architecture for Differentiated Services".

<<<<<<<<<<<<< next change >>>>>>>>>>>>>>

# 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

SRNC                                                                                    DRNC

RADIO LINK SETUP REQUEST →
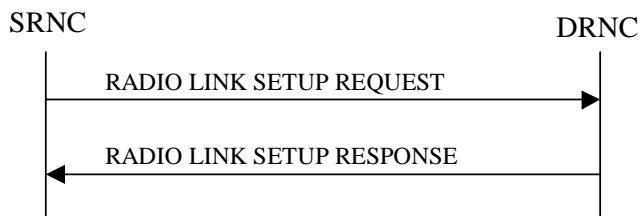
RADIO LINK SETUP RESPONSE ←

**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 Start Point 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 End Point 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 should 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.

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 *USCH Information Response* 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(s):**

If the RADIO LINK SETUP REQUEST message includes *HS-DSCH Information* IE and if the *HS-PDSCH RL ID* IE indicates a radio link in the DRNS, then the DRNS shall use this information to configure the indicated HS-DSCH resources on this radio link. If the *HS-PDSCH RL ID* IE does not indicate a radio link in the DRNS, then the DRNS shall store the configuration of the HS-DSCH according to the received *HS-DSCH Information* IE. The DRNS shall store the latest HS-DSCH configuration until the UE context is deleted.

In addition, if the *HS-PDSCH RL ID* IE indicates a radio link in the DRNS, then 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.

If the *HS-PDSCH RL ID* IE indicates a radio link in the DRNS, then the DRNS shall also include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for establishment of transport bearer(s) for the HS-DSCH MAC-d flows on this radio link.

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, 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.

If the *HS-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 MAC-d flows.

[FDD - If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information* 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.]

The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK SETUP RESPONSE message for each MAC-d flow, 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 RADIO LINK SETUP REQUEST message includes the *HS-DSCH Information* IE and the *PDSCH RL ID* IE indicates a Radio Link in the DRNS, then the DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE message.]

If the RADIO LINK SETUP REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information* IE, the DRNS shall use this information to optimise MAC-hs scheduling decisions.

If the RADIO LINK SETUP 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.

**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.]

**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 Ty*pe 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.]

**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 - 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 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 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 the *Primary CCPCH RSCP* IE [3.84Mcps TDD -and/or the *DL Time Slot ISCP Info* IE] [1.28Mcps TDD - and/or the *DL Time Slot ISCP Info LCR* IE] are present, the DRNC should use the indicated values 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.]

[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 life time of the RL. If the *DPC Mode* IE is not present in the RADIO LINK SETUP REQUEST message, DPC mode 0 shall be applied (see ref. [10]).]

[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

- [FDD- The DRNC shall include the *Flexible Hard Split Support Indicator* IE if the DRNC is aware that the neighbouring cell supports *Flexible Hard Split* mode.]

- 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 functionalities 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 StateIindicator* IE may be absent. The DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Restriction StateIindicator* 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.]

**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 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 Innformation 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* IEsof 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 - 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 oout-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_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:**

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].]

<<<<<<<<<<<< next change >>>>>>>>>>>>>

## 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

```
   SRNC                                              DRNC
     |   RADIO LINK RECONFIGURATION PREPARE   |
     | -------------------------------------->|
     |    RADIO LINK RECONFIGURATION READY    |
     | <------------------------------------- |
```
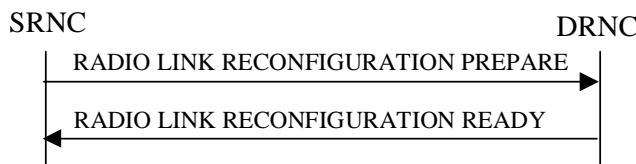
**Figure 10: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation**

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 ~~should~~ 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.

- 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 *DCH s 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.

- [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 should 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 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 Start Point 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 End Point 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 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* IEset 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 Ty*pe 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. 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].

**[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 CCTrCH 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 CCTrCH To Modify* IEs includes any *TPC CCTrCH ID* IEs, the DRNS shall apply these as the new values, otherwise the previous values specified for this CCTrCH are still applicable.]

- [1.28Mcps TDD - If the *UL CCTrCH 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 CCTrCH 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 CCTrCH Addition]**

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH To Add* IEs or *DL CCTrCH To Add* IEs, the DRNS shall include this CCTrCH 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 CCTrCH To Add* IE, the DRNS shall set the TPC step size of that CCTrCH to that value, otherwise the DRNS shall use the same value as the lowest numbered DL CCTrCH in the current configuration.]

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

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

[1.28Mcps TDD - If the *UL CCTrCH 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 CCTrCH Deletion]**

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH To Delete* IEs *or DL CCTrCH To Delete* IEs, the DRNS shall remove this CCTrCH 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 DNRS 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 DNRS 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 Information Addition/Modification/Deletion:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH Information To Modify*, *HS-DSCH Information To Add* or *HS-DSCH Information to Delete* IEs and if the *HS-PDSCH RL ID* IE indicates a radio link in the DRNS, then the DRNS shall use this information to add/modify/delete the indicated HS-DSCH resources to/from this radio link If the *HS-PDSCH RL ID* IE does not indicate a radio link in the DRNS, then the DRNS shall update the configuration of the HS-DSCH according to the received *HS-DSCH Information To Modify*, *HS-DSCH Information To Add* or *HS-DSCH Information to Delete* IEs. The DRNS shall store the latest HS-DSCH configuration until the UE context is deleted.

[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*] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR*] IEs in the RADIO LINK RECONFIGURATION READY message.]

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH Information to Delete* IE requesting the deletion of all HS-DSCH resources for the UE Context, then the DRNC shall release the HS-DSCH-RNTI allocated to the UE Context, if there was one.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL ID* IE and there is a HS-DSCH existing in the UE Context after reconfiguration, then:

-   If the indicated HS-PDSCH RL ID is in the DRNS and there was no HS-DSCH-RNTI allocated to the UE Context, 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.

-   If the indicated HS-PDSCH RL ID is in the DRNS and there was an HS-DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a new HS-DSCH-RNTI to the UE Context, release the old HS-DSCH-RNTI and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.

-   If the indicated HS-PDSCH RL ID is not in the DRNS and there was an HS-DSCH-RNTI allocated to the UE Context, the DRNC shall release this HS-DSCH-RNTI.

-   If a reset of the MAC-hs is not required the DRNC shall include the *MAC-hs Reset Indicator* IE  in the RADIO LINK RECONFIGURATION READY message.

-   [FDD - If the indicated HS-PDSCH RL ID is in the DRNS and is different from previous one, then the DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH Information To Add* IE or *HS-DSCH Information To Modify* 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 MAC-d flows.

[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 Add* IE or *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.]

If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Window Size*  IE in the *HS-DSCH Information To Modify* IE, then the DRNS shall use the indicated MAC-hs window size value in the new configuration.

The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for each MAC-d flow, 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 Information To Add* IE or *HS-DSCH Information To Modify* IE, the DRNS shall use this information to optimise MAC-hs scheduling decisions.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *T1* IE in the *HS-DSCH Information To Modify* IE, then the DRNS shall use the indicated T1 value in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE in the *HS-DSCH Information To Modify* IE or the *HS-DSCH Information To Add* IE, then the DRNS shall use the indicated Discard Timer value in the new configuration.

**[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 a 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 To Modify* IE, *HS-DSCH Information To Add* IE 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 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.

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 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. 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* 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 *Primary CCPCH RSCP* IE and/or the [3.84Mcps TDD - *DL Time Slot ISCP Info* IE][1.28Mcps TDD - *DL Time Slot ISCP Info LCR* IE] are present, the DRNC should use the indicated values when deciding the Initial DL TX Power.]

<<<<<<<<<<<< next change >>>>>>>>>>>>>>>

# 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
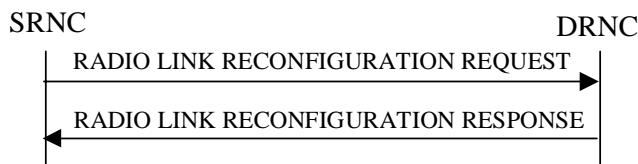


**Figure 14: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation**

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 ~~should~~ 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.

- 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.

- [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 ~~should~~ 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.

- 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 Start Point 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 End Point 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 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.]

**[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.]

**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, 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 being added, or any Transport Channel 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 *DCH Information Response* IE for any Transport Channel being added, or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in [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 includethe *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.* 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* 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.]

<<<<<<<<<<<< next change >>>>>>>>>>>>>>>

## 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 |
| **UL DPCH Information** | | *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 | | – | |
| **DL DPCH Information** | | *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 |
| **DCHs to Delete** | | *0..<maxnoof DCHs>* | | | GLOBAL | reject |
| >DCH ID | M | | 9.2.1.16 | | – | |
| **DSCHs To Modify** | | 0..1 | | | YES | reject |
| **>DSCH Info** | | *0..<maxnoof DSCHs>* | | | – | |
| >>DSCH ID | M | | 9.2.1.26A | | – | |
| >>TrCH Source Statistics Descriptor | O | | 9.2.1.65 | | – | |
| >>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 | | – | |

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| >>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-EDSCHPCOn | | 9.2.2.13D | | YES | ignore |
| DSCHs To Add | O | | DSCH FDD Information 9.2.2.13A | | YES | reject |
| **DSCHs to Delete** | | 0..1 | | | YES | reject |
| **>DSCH Info** | | *1..<maxnoof DSCHs>* | | | – | |
| >>DSCH ID | M | | 9.2.1.26A | | – | |
| **RL Information** | | *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 |
| Transmission Gap Pattern Sequence Information | O | | 9.2.2.47A | | YES | reject |
| HS-DSCH Information To Modify | O | | 9.2.1.30Q | | YES | reject |
| HS-DSCH Information To Add | O | | HS-DSCH FDD Information 9.2.2.19a | | YES | reject |
| **HS-DSCH Information To Delete** | | *0..<maxnoof MACdFlows>* | | | GLOBAL | reject |

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| >HS-DSCH MAC-d Flow ID | M | | 9.2.1.30O | | – | |
| 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 |

| Condition | Explanation |
|---|---|
| SSDTIndON | The IE shall be present if the *SSDT Indication* IE is set to "SSDT Active in the UE". |
| CodeLen | The IE shall be present only if the *Min UL Channelisation Code length* IE equals to 4. |
| SlotFormat | The IE shall only be present if the *DL DPCH Slot Format* IE is equal to any of the values from 12 to 16. |
| Diversity mode | The IE shall be present if *Diversity Mode* IE is present in the *UL DPCH Information* IE and is not equal to "none". |
| EDSCHPCOn | The IE shall be present if the *Enhanced DSCH PC Indicator* IE is set to "Enhanced DSCH PC Active in the UE". |
| EDSCHPC | The IE shall be present if *Enhanced DSCH PC* IE is present in either the *DSCHs To Modify* IE or the *DSCHs To Add* IE. |

| Range bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for a UE. |
| *maxnoofDSCHs* | Maximum number of DSCHs for one UE. |
| *maxnoofRLs* | Maximum number of RLs for a UE. |
| *maxnoofMACdFlows* | Maximum number of HS-DSCH MAC-d flows |

## 9.1.11.2 TDD 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 |
| **UL CCTrCH To Add** | | 0..<maxnoofCCTrCHs> | | For DCH and USCH | EACH | notify |
| >CCTrCH ID | M | | 9.2.3.2 | | – | |
| >TFCS | M | | 9.2.1.63 | For the UL. | – | |
| >TFCI Coding | M | | 9.2.3.11 | | – | |
| >Puncture Limit | M | | 9.2.1.46 | | – | |
| >UL SIR Target | O | | Uplink SIR 9.2.1.69 | Mandatory for 1.28Mcps TDD; not applicable to 3.84Mcps TDD | YES | reject |
| >TDD TPC Uplink Step Size | O | | 9.2.3.10a | Mandatory for 1.28Mcps TDD, not applicable to 3.84Mcps TDD | YES | reject |
| **UL CCTrCH To Modify** | | 0..<maxnoofCCTrCHs> | | | EACH | notify |
| >CCTrCH ID | M | | 9.2.3.2 | | – | |
| >TFCS | O | | 9.2.1.63 | For the UL. | – | |
| >TFCI Coding | O | | 9.2.3.11 | | – | |
| >Puncture Limit | O | | 9.2.1.46 | | – | |
| >UL SIR Target | O | | Uplink SIR 9.2.1.69 | Applicable to 1.28Mcps TDD only | YES | reject |
| >TDD TPC Uplink Step Size | O | | 9.2.3.10a | Applicable to 1.28Mcps TDD only | YES | reject |
| **UL CCTrCH to Delete** | | 0..<maxnoofCCTrCHs> | | | EACH | notify |
| >CCTrCH ID | M | | 9.2.3.2 | | – | |
| **DL CCTrCH To Add** | | 0..<maxnoofCCTrCHs> | | For DCH and DSCH | EACH | notify |
| >CCTrCH ID | M | | 9.2.3.2 | | – | |
| >TFCS | M | | 9.2.1.63 | For the DL. | – | |
| >TFCI Coding | M | | 9.2.3.11 | | – | |
| >Puncture Limit | M | | 9.2.1.46 | | – | |
| **>TPC CCTrCH List** | | 0..<maxnoCCTrCHs> | | List of uplink CCTrCH which provide TPC | – | |
| >>TPC CCTrCH ID | M | | CCTrCH ID 9.2.3.2 | | – | |
| >TDD TPC Downlink Step Size | O | | 9.2.3.10 | | YES | reject |
| **DL CCTrCH To Modify** | | 0..<maxnoofCCTrCHs> | | | EACH | notify |
| >CCTrCH ID | M | | 9.2.3.2 | | – | |
| >TFCS | O | | 9.2.1.63 | For the DL. | – | |
| >TFCI Coding | O | | 9.2.3.11 | | – | |

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| >Puncture Limit | O | | 9.2.1.46 | | – | |
| **>TPC CCTrCH List** | | 0..<maxnoCCTrCHs> | | List of uplink CCTrCH which provide TPC | – | |
| >>TPC CCTrCH ID | M | | CCTrCH ID 9.2.3.2 | | – | |
| >TDD TPC Downlink Step Size | O | | 9.2.3.10 | | YES | reject |
| **DL CCTrCH to Delete** | | 0..<maxnoofCCTrCHs> | | | EACH | notify |
| >CCTrCH ID | M | | 9.2.3.2 | | – | |
| DCHs To Modify | O | | TDD DCHs To Modify 9.2.3.8B | | YES | reject |
| DCHs To Add | O | | DCH TDD Information 9.2.3.2A | | YES | reject |
| **DCHs to Delete** | | 0..<maxnoofDCHs> | | | GLOBAL | reject |
| >DCH ID | M | | 9.2.1.16 | | – | |
| **DSCHs To Modify** | | 0..<maxnoofDSCHs> | | | GLOBAL | reject |
| >DSCH ID | M | | 9.2.1.26A | | – | |
| >CCTrCH ID | O | | 9.2.3.2 | DL CCTrCH in which the DSCH is mapped. | – | |
| >TrCH Source Statistics Descriptor | O | | 9.2.1.65 | | – | |
| >Transport Format Set | O | | 9.2.1.64 | | – | |
| >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 |
| DSCHs To Add | O | | DSCH TDD Information 9.2.3.3a | | YES | reject |
| **DSCHs to Delete** | | 0..<maxnoofDSCHs> | | | GLOBAL | reject |
| >DSCH ID | M | | 9.2.1.26A | | – | |
| **USCHs To Modify** | | 0..<maxnoofUSCHs> | | | GLOBAL | reject |
| >USCH ID | M | | 9.2.3.14 | | – | |

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| >CCTrCH ID | O | | 9.2.3.2 | UL CCTrCH in which the USCH is mapped. | – | |
| >TrCH Source Statistics Descriptor | O | | 9.2.1.65 | | – | |
| >Transport Format Set | O | | 9.2.1.64 | | – | |
| >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 | | – | |
| >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 |
| >TNL QoS | O | | 9.2.1.x | | YES | ignore |
| **>RB Info** | | *0..<maxnoofRB>* | | All Radio Bearers using this USCH | – | |
| >>RB Identity | M | | 9.2.3.5B | | – | |
| >Traffic class | O | | 9.2.1.58A | | YES | ignore |
| USCHs To Add | O | | USCH Information 9.2.3.15 | | YES | reject |
| **USCHs to Delete** | | *0..<maxnoofUSCHs>* | | | GLOBAL | reject |
| >USCH ID | M | | 9.2.3.14 | | – | |
| **RL Information** | | *0..1* | | | YES | ignore |
| >RL ID | M | | 9.2.1.49 | | – | |
| >RL Specific DCH Information | O | | 9.2.1.49A | | – | |
| Primary CCPCH RSCP | O | | 9.2.3.5 | | YES | ignore |
| DL Time Slot ISCP Info | O | | 9.2.3.2D | Applicable to 3.84Mcps TDD only | YES | ignore |
| DL Time Slot ISCP Info LCR | O | | 9.2.3.2F | Applicable to 1.28Mcps TDD only | YES | ignore |
| HS-DSCH Information To Modify | O | | 9.2.1.30Q | | YES | reject |
| HS-DSCH Information To Add | O | | HS-DSCH TDD Information 9.2.3.3aa | | YES | reject |
| **HS-DSCH Information To Delete** | | *0..<maxnoofMACdFlows>* | | | GLOBAL | reject |
| >HS-DSCH MAC-d Flow ID | M | | 9.2.1.30O | | – | |
| HS-PDSCH RL ID | O | | RL ID 9.2.1.49 | | YES | reject |

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| PDSCH-RL-ID | O | | RL ID 9.2.1.49 | | YES | ignore |
| **>UL Synchronisation Parameters LCR** | | *0..1* | | Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD. | YES | ignore |
| >Uplink Synchronisation Step Size | M | | 9.2.3.13J | | – | |
| >Uplink Synchronisation Frequency | M | | 9.2.3.13I | | – | |

| Range bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for a UE. |
| *maxnoofCCTrCHs* | Maximum number of CCTrCHs for a UE. |
| *maxnoofDSCHs* | Maximum number of DSCHs for one UE. |
| *maxnoofUSCHs* | Maximum number of USCHs for one UE. |
| *maxnoofMACdFlows* | Maximum number of HS-DSCH MAC-d flows |

<<<<<<<<<<<< next change >>>>>>>>>>>>>>

## 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 |
|---|---|---|---|---|---|---|
| **DCH FDD Information** | | *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 | | – | |
| **>DCH Specific Info** | | *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 | ignore |
| >TNL QoS | O | | 9.2.1.x | | YES | ignore |

| Range bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for one UE. |

<<<<<<<<<<<< next change >>>>>>>>>>>>>>>

## 9.2.2.13C    FDD DCHs To Modify

The *FDD DCHs To Modify* IE provides information for DCHs to be modified.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| **FDD DCHs To Modify** | | *1..<maxno ofDCHs>* | | | – | |
| >UL FP Mode | O | | 9.2.1.67 | | – | |
| >ToAWS | O | | 9.2.1.58 | | – | |
| >ToAWE | O | | 9.2.1.57 | | – | |
| >Transport Bearer Request Indicator | M | | 9.2.1.61 | | – | |
| **>DCH Specific Info** | | *1..<maxno ofDCHs>* | | | – | |
| >>DCH ID | M | | 9.2.1.16 | | – | |
| >>Transport Format Set | O | | 9.2.1.64 | For the UL. | – | |
| >>Transport Format Set | O | | 9.2.1.64 | For the DL. | – | |
| >>Allocation/Retention Priority | O | | 9.2.1.1 | | – | |
| >>Frame Handling Priority | O | | 9.2.1.29 | | – | |
| >>DRAC Control | O | | 9.2.2.13 | | – | |
| >>Guaranteed Rate Information | O | | 9.2.1.30M | | YES | ignore |
| >>Traffic Class | O | | 9.2.1.58A | | YES | ignore |
| >TNL QoS | O | | 9.2.1.x | | YES | ignore |

| Range bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for one UE. |

<<<<<<<<<<<<< next change >>>>>>>>>>>>>>>

## 9.2.3.2A DCH TDD Information

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

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| **DCH Information** | | *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 | | – | |
| **>DCH Specific Info** | | *1..<maxno ofDCHs>* | | | – | |
| >>DCH ID | M | | 9.2.1.16 | | – | |
| >>CCTrCH ID | M | | 9.2.3.2 | UL CCTrCH in which the DCH is mapped | – | |
| >>CCTrCH ID | M | | 9.2.3.2 | DL CCTrCH in which the DCH is mapped | – | |
| >>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 | C-CoorDCH | | 9.2.1.46A | | – | |
| >>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 | ignore |
| >TNL QoS | O | | 9.2.1.x | | YES | ignore |

| Condition | Explanation |
|---|---|
| CoorDCH | The IE shall be present if this DCH is part of a set of coordinated DCHs (number of instances of the *DCH Specific Info* IE is greater than 1). |

| Range bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for one UE. |

<<<<<<<<<<<< next change >>>>>>>>>>>>>>

## 9.2.3.8B    TDD DCHs To Modify

The *TDD DCHs To Modify* IE provides information for DCHs to be modified.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| **TDD DCHs To Modify** | | *1..<maxno ofDCHs>* | | | – | |
| >UL FP Mode | O | | 9.2.1.67 | | – | |
| >ToAWS | O | | 9.2.1.58 | | – | |
| >ToAWE | O | | 9.2.1.57 | | – | |
| >Transport Bearer Request Indicator | M | | 9.2.1.61 | | – | |
| **>DCH Specific Info** | | *1..<maxno ofDCHs>* | | | – | |
| >>DCH ID | M | | 9.2.1.16 | | – | |
| >>CCTrCH ID | O | | 9.2.3.2 | UL CCTrCH in which the DCH is mapped. | – | |
| >>CCTrCH ID | O | | 9.2.3.2 | DL CCTrCH in which the DCH is mapped | – | |
| >>Transport Format Set | O | | 9.2.1.64 | For the UL. | – | |
| >>Transport Format Set | O | | 9.2.1.64 | For the DL. | – | |
| >>Allocation/Retention Priority | O | | 9.2.1.1 | | – | |
| >>Frame Handling Priority | O | | 9.2.1.29 | | – | |
| >>Traffic Class | O | | 9.2.1.58A | | YES | ignore |
| >>Guaranteed Rate Information | O | | 9.2.1.30M | | YES | ignore |
| >TNL QoS | O | | 9.2.1.x | | YES | ignore |

| Range bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for one UE. |

### 9.2.3.15 USCH Information

The *USCH Information* IE provides information for USCHs to be established.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| **USCH Information** | | 1 to <maxnoofUSCHs> | | | – | |
| >USCH ID | M | | 9.2.3.14 | | – | |
| >CCTrCH ID | M | | 9.2.3.2 | UL CCTrCH in which the USCH is mapped | – | |
| >TrCH Source Statistics Descriptor | M | | 9.2.1.65 | | – | |
| >Transport Format Set | M | | 9.2.1.64 | For USCH | – | |
| >Allocation/Retention Priority | M | | 9.2.1.1 | | – | |
| >Scheduling Priority Indicator | M | | 9.2.1.51A | | – | |
| >BLER | M | | 9.2.1.4 | | | |
| **>RB Info** | | 1..<maxnoofRB> | | All Radio Bearers using this USCH | – | |
| >>RB Identity | M | | 9.2.3.5B | | – | |
| >Traffic class | M | | 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 |
| >TNL QoS | O | | 9.2.1.x | | YES | Ignore |

| Range bound | Explanation |
|---|---|
| *maxnoofUSCHs* | Maximum number of USCHs for one UE. |
| *maxnoofRBs* | Maximum number of Radio Bearers for one UE. |

<<<<<<<<<<<< next change >>>>>>>>>>>>>>

## 9.2.1.x TNL QoS

This IE indicates the TNL QoS characteristics of the transport bearer for the uplink data traffic.

When the *DS field* IE is used, the value of this IE is configurable by the operator.

When the G*eneric Traffic Category* IE is used, generic traffic categories are implementation-specific (e.g. they may be determined by the sender from the application parameters). The value assigned to each of these categories and sent in the *Generic Traffic Category* IE is configurable by the operator, as well as  the mapping of this value to DS field [x1] at the DRNS side.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description |
|---|---|---|---|---|
| CHOICE *TNL QoS type* | M | | | |
| >*DS Field* | | | | |
| >>DS field | M | | BIT STRING (8) | DS field as defined in [x1]. Typically used when the DRNS and its SRNC are in the same DS domain as defined in [x2]. |
| >*Generic Traffic Category* | | | | |
| >>Generic Traffic Category | M | | BIT STRING (8) | |

<<<<<<<<<<<< next change >>>>>>>>>>>>>>

# 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,
    AllocationRetentionPriority,
    AllowedQueuingTime,
    Allowed-Rate-Information,
    AlphaValue,
    AntennaColocationIndicator,
    BLER,
    SCTD-Indicator,
    BindingID,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CFN,
    ClosedLoopMode1-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    Closedlooptimingadjustmentmode,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    CNDomainType,
    Cause,
    CellCapabilityContainer-FDD,
    CellCapabilityContainer-TDD,
    CellCapabilityContainer-TDD-LCR,
    CellParameterID,
    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,
        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-MACdFlow-ID,
        HSDSCH-RNTI,
        HSDSCH-TDD-Information,
        HSDSCH-TDD-Information-Response,
        HS-SICH-ID,
        IMSI,
        InformationExchangeID,
        InformationReportCharacteristics,
        InformationType,
        InnerLoopDLPCStatus,
        L3-Information,
        SplitType,
        LengthOfTFCI2,
        LimitedPowerIncrease,
        MaximumAllowedULTxPower,
        MaxNrDLPhysicalchannels,
        MaxNrDLPhysicalchannelsTS,
        MaxNrOfUL-DPCHs,
        MaxNrTimeslots,
        MaxNrULPhysicalchannels,
        MeasurementFilterCoefficient,
        MeasurementID,
        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,
        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-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,
        TnlQos,
```

```
    ToAWE,
    ToAWS,
    TrafficClass,
    TransmitDiversityIndicator,
    TransportBearerID,
    TransportBearerRequestIndicator,
    TFCS,
    Transmission-Gap-Pattern-Sequence-Information,
    TransportFormatManagement,
    TransportFormatSet,
    TransportLayerAddress,
    TrCH-SrcStatisticsDescr,
    TSTD-Indicator,
    TSTD-Support-Indicator,
    UARFCN,
    UC-ID,
    UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation,
    UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH,
    UL-DPCCH-SlotFormat,
    UL-SIR,
    UL-FP-Mode,
    UL-PhysCH-SF-Variation,
    UL-ScramblingCode,
    UL-Timeslot-Information,
    UL-TimeslotLCR-Information,
    UL-TimeSlot-ISCP-Info,
    UL-TimeSlot-ISCP-LCR-Info,
    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
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,
    maxNrOfRLs,
    maxNrOfRLSets,
    maxNrOfRLSets-1,
    maxNrOfRLs-1,
    maxNrOfRLs-2,
    maxNrOfULTs,
    maxNrOfDLTs,
    maxResetContext,
    maxResetContextGroup,
    maxNoOfDSCHsLCR,
    maxNoOfUSCHsLCR,
    maxNrOfCCTrCHsLCR,
    maxNrOfTsLCR,
    maxNrOfDLTsLCR,
    maxNrOfULTsLCR,
    maxNrOfDPCHsLCR,
    maxNrOfLCRTDDNeighboursPerRNC,
    maxNrOfMeasNCell,
    maxNrOfMACdFlows,
    maxNrOfHSSICHs,
```

```
id-Active-Pattern-Sequence-Information,
id-AdjustmentRatio,
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-ClosedLoopMode1-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-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-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-HCS-Prio,
        id-HSDSCH-FDD-Information,
        id-HSDSCH-FDD-Information-Response,
        id-HSDSCH-FDD-Information-to-Add,
        id-HSDSCH-FDD-Information-to-Delete,
        id-HSDSCH-FDD-Update-Information,
        id-HSDSCH-TDD-Update-Information,
        id-HSDSCH-Information-to-Modify,
        id-HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd,
        id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd,
        id-HSDSCH-RNTI,
        id-HSDSCH-TDD-Information,
        id-HSDSCH-TDD-Information-Response,
        id-HSDSCH-TDD-Information-Response-LCR,
        id-HSDSCH-TDD-Information-to-Add,
        id-HSDSCH-TDD-Information-to-Delete,
        id-HSPDSCH-RL-ID,
        id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD,
        id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD,
        id-HSSICH-Info-DM-Rprt,
        id-HSSICH-Info-DM-Rqst,
        id-HSSICH-Info-DM-Rsp,
        id-IMSI,
        id-InformationExchangeID,
        id-InformationExchangeObjectType-InfEx-Rprt,
        id-InformationExchangeObjectType-InfEx-Rqst,
        id-InformationExchangeObjectType-InfEx-Rsp,
        id-InformationReportCharacteristics,
        id-InformationType,
        id-InnerLoopDLPCStatus,
        id-SplitType,
        id-LengthOfTFCI2,
        id-L3-Information,
        id-AdjustmentPeriod,
        id-MaxAdjustmentStep,
        id-MeasurementFilterCoefficient,
        id-MeasurementID,
```

```
        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-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-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-ReconfigurationReadyTDD-RL-Information,
        id-RL-ReconfigurationRequestFDD-RL-InformationList,
        id-RL-ReconfigurationRequestFDD-RL-Information-IEs,
        id-RL-ReconfigurationRequestTDD-RL-Information,
        id-RL-Specific-DCH-Info,
        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-Reporing-Object-RL-RestoreInd,
        id-RNC-ID,
        id-RxTimingDeviationForTA,
        id-S-RNTI,
        id-SAI,
        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-TnlQos,
        id-TransportBearerID,
        id-TransportBearerRequestIndicator,
        id-TransportLayerAddress,
        id-UC-ID,
        id-ContextInfoItem-Reset,
        id-ContextGroupInfoItem-Reset,
        id-Transmission-Gap-Pattern-Sequence-Information,
        id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation,
        id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH,
        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-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-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,
        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


FROM RNSAP-Constants;


/* partly omitted */

-- **************************************************************
--
-- 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 {
        cCTrCH-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 {
        cCTrCH-ID                        CCTrCH-ID,
        tFCS                             TFCS         OPTIONAL,
        tFCI-Coding                      TFCI-Coding             OPTIONAL,
        punctureLimit                    PunctureLimit           OPTIONAL,
        cCTrCH-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 {
```

```
        cCTrCH-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                      CCTrCH-ID                      OPTIONAL,
    trChSourceStatisticsDescriptor   TrCH-SrcStatisticsDescr 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-Information-to-Modify         CRITICALITY reject    EXTENSION HSDSCH-
Information-to-Modify     PRESENCE optional}|
    { ID id-HSDSCH-TDD-Information-to-Add        CRITICALITY reject    EXTENSION HSDSCH-TDD-
Information         PRESENCE optional}|
    { ID id-HSDSCH-TDD-Information-to-Delete     CRITICALITY reject    EXTENSION HSDSCH-
DeleteList-RL-ReconfPrepTDD PRESENCE optional}|
    { ID id-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
    ...
}
```

```
HSDSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-DeleteItem-
RL-ReconfPrepTDD

HSDSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    hSDSCH-MACdFlow-ID                              HSDSCH-MACdFlow-ID,
    iE-Extensions                                   ProtocolExtensionContainer { { HSDSCH-
DeleteItem-RL-ReconfPrepTDD-ExtIEs} }         OPTIONAL,
    ...
}

HSDSCH-DeleteItem-RL-ReconfPrepTDD-ExtIEs  RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

==/* partly omitted */==

## 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,
    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,
    maxNrOfPDUIndexes,
    maxNrOfPDUIndexes-1,
    maxNrOfPrioQueues,
    maxNrOfPrioQueues-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-SFNSFNMeasurementThresholdInformation,
    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

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

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, ...

AllowedQueuingTime         ::= 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-temporaily-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-alocated,
    ...,
    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
}

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,...)

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))

ClosedLoopMode1-SupportIndicator    ::= ENUMERATED {
    closedLoop-Mode1-Supported,
    closedLoop-Mode1-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
}
-- 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,
    ...,
    rTLoadValue                         RTLoadValue,
    nRTLoadInformationValue             NRTLoadInformationValue
}
-- 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)

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 ignore  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 ignore  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,v200
0,v2500,v3000,v3500,v4000,v4500,v5000,v7500.
 ...
}

DiversityControlField        ::= ENUMERATED {
    may,
    must,
    must-not
}

DiversityMode                ::= ENUMERATED {
    none,
    sTTD,
    closedLoopMode1,
    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-PC-Rqst     DL-ReferencePowerInformationList         OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Individual'
    maxAdjustmentStep                   MaxAdjustmentStep       OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    adjustmentPeriod                    AdjustmentPeriod        OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    adjustmentRatio                     ScaledAdjustmentRatio   OPTIONAL,
    -- This IE shall be present if Power Adjustment Type IE equals to 'Common' or 'Individual'
    iE-Extensions                       ProtocolExtensionContainer { { DL-PowerBalancing-
Information-ExtIEs } } OPTIONAL,
    ...
}

DL-PowerBalancing-Information-ExtIEs 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
    -- Applicable to 1.28Mcps TDD only
    { ID id-Minimum-DL-Power-TimeslotLCR-InformationItem    CRITICALITY ignore    EXTENSION DL-Power
    -- Applicable to 1.28Mcps TDD only
    ...
}

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-SrcStatisticsDescr,
    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))


/* Partly omitted*/


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 },
    ...
}
```

/* Partly omitted*/

```
-- 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) --

GenericTrafficCategory  ::= BIT STRING (SIZE (8))


/* Partly omitted*/
```

```
-- 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-TnlQos                   CRITICALITY   ignore    EXTENSION  TnlQos  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
}
```

```
TnlQoS ::= CHOICE {
    dsField                    DsField,
    genericTrafficCategory     GenericTrafficCategory,
    ...
}

ToAWE                   ::= INTEGER (0..2559)

ToAWS                   ::= INTEGER (0..1279)

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 ::= {
    ...
}

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 {
    tUTRANGPSChangeLimit                    TUTRANGPSChangeLimit                    OPTIONAL,
    predictedTUTRANGPSDeviationLimit        PredictedTUTRANGPSDeviationLimit        OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {
TUTRANGPSMeasurementThresholdInformation-ExtIEs} }      OPTIONAL,
    ...
}

TUTRANGPSMeasurementThresholdInformation-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
        tUTRANGPS                       TUTRANGPS,
        tUTRANGPSQuality                TUTRANGPSQuality                OPTIONAL,
        tUTRANGPSDriftRate              TUTRANGPSDriftRate,
        tUTRANGPSDriftRateQuality       TUTRANGPSDriftRateQuality       OPTIONAL,
        iEe-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-MapingOnDSCHList,
                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-MapingOnDSCHList ::= SEQUENCE (SIZE (1..maxNoTFCIGroups)) OF
    SEQUENCE {
        maxTFCI-field2-Value        TFCS-MaxTFCI-field2-Value,
        cTFC-DSCH                   TFCS-CTFC,
        iE-Extensions               ProtocolExtensionContainer { { TFCS-MapingOnDSCHList-ExtIEs} }
        OPTIONAL,
        ...
}

TFCS-MapingOnDSCHList-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 25.215/25.225

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' --,
    rateMatcingAttribute    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 25.101, 25.105
```

```
UDRE ::= ENUMERATED {
    lessThan1,
    between1-and-4,
    between4-and-8,
    over8,
    ...
}

UE-Capabilities-Info ::= SEQUENCE {
    hSDSCH-Physical-Layer-Category      INTEGER (1..64,...),
    mAChs-Reordering-Buffer-Size        MAChsReorderingBufferSize,
    iE-Extensions                       ProtocolExtensionContainer { { UE-Capabilities-Info-ExtIEs }
}          OPTIONAL,
    ...
}

UE-Capabilities-Info-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-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 } }      OPTIONAL,
    ...
}

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]

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    }|
    -- 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.
    ...
}

-- V
-- W
-- X
-- Y
-- Z
```

<<<<<<<<<<<<< next change >>>>>>>>>>>>>>

## 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

-- ***************************************************************
--
-- Lists
--
-- ***************************************************************

maxCodeNumComp-1                      INTEGER ::= 255
maxRateMatching                       INTEGER ::= 256
```

```
maxNoCodeGroups                            INTEGER ::= 256
maxNoOfDSCHs                               INTEGER ::= 10
maxNoOfDSCHsLCR                            INTEGER ::= 10
maxNoOfRB                                  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
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
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 ::= 65535


-- ************************************************************
--
-- 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-Reporing-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-ClosedLoopMode1-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
```

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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-SFNSFNMeasurementThresholdInformation                            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-ReconfigurationReadyTDD-RL-Information                        ProtocolIE-ID ::= 320
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-Information-to-Add                                    ProtocolIE-ID ::= 454
id-HSDSCH-FDD-Information-to-Delete                                 ProtocolIE-ID ::= 455
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
```

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id-HSDSCH-RNTI                                                           ProtocolIE-ID ::= 457
id-HSDSCH-TDD-Information                                                ProtocolIE-ID ::= 458
id-HSDSCH-TDD-Information-Response                                       ProtocolIE-ID ::= 459
id-HSDSCH-TDD-Information-Response-LCR                                   ProtocolIE-ID ::= 460
id-HSDSCH-TDD-Information-to-Add                                         ProtocolIE-ID ::= 461
id-HSDSCH-TDD-Information-to-Delete                                      ProtocolIE-ID ::= 462
id-HSDSCH-TDD-Update-Information                                         ProtocolIE-ID ::= 467
id-HSPDSCH-RL-ID                                                        ProtocolIE-ID ::= 463
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-Rsp                                                   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-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-TnlQos                                                             ProtocolIE-ID ::= 534

END
```

CR-Form-v7

# CHANGE REQUEST

⌘ **25.433 CR 940** ⌘rev **2** ⌘ Current version: **5.6.0** ⌘

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

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

| | | | |
|---|---|---|---|
| ***Title:*** ⌘ | TNL QoS for uplink IP traffic | | |
| ***Source:*** ⌘ | RAN3 | | |
| ***Work item code:*** ⌘ | ETRAN-IPtrans | ***Date:*** ⌘ | 21/11/2003 |
| ***Category:*** ⌘ **F** | | ***Release:*** ⌘ | Rel-5 |

*Use one of the following categories:*
*F (correction)*
*A (corresponds to a correction in an earlier release)*
*B (addition of feature),*
*C (functional modification of feature)*
*D (editorial modification)*
Detailed explanations of the above categories can
be found in 3GPP TR 21.900.

*Use one of the following releases:*
*2      (GSM Phase 2)*
*R96   (Release 1996)*
*R97   (Release 1997)*
*R98   (Release 1998)*
*R99   (Release 1999)*
*Rel-4  (Release 4)*
*Rel-5  (Release 5)*
*Rel-6  (Release 6)*

| | |
|---|---|
| ***Reason for change:*** ⌘ | In case of IP transport, the current NBAP specification does not allow the Node B to determine the characteristics it must assign to the Iub transport bearer for the uplink data traffic. |
| ***Summary of change:*** ⌘ | A new optional parameter *TNL QoS* IE is added to *DCH FDD Information* IE, *DCH TDD Information* IE, *DCHs FDD To Modify* IE, *DCHs TDD To Modify* IE, *USCH Information* IE, and *USCHs to Modify* IE. This new parameter concerns the following messages: <br> - RADIO LINK SETUP, <br> - RADIO LINK RECONFIGURATION PREPARE, <br> - RADIO LINK RECONFIGURATION REQUEST. <br><br> Rev1: re-wording + addition of missing change in 8.3.2.2 + addition of ASN.1 <br><br> Rev2: *TNL QoS* IE is moved from *DCH Specific Info* IE level to the level above because there is one TNL QoS for a set of coordinated DCHs. Procedural text is updated accordingly. <br><br> Impact Analysis <br> This CR has isolated impact on the previous version of the specification (same release) because only one function is impacted. <br> This CR has an impact under the functional and protocol point of view. <br> The impact can be considered as isolated as it affects only one function, namely Radio Link Setup and Reconfiguration procedures. |
| ***Consequences if not approved:*** ⌘ | The Node B may be unable to determine the characteristics it must assign to the Iub transport bearer for UL traffic, in case of IP transport. This may lead to poor bandwidth usage of the Iub. |

| Clauses affected: | ⌘ | 2, 8.2.17, 8.3.2, 8.3.5, 9.1.42.2, 9.2.2.4D, 9.2.2.4E, 9.2.3.4C, 9.2.3.4D, 9.2.3.28, 9.2.1.x (new), 9.3.3, 9.3.4, 9.3.6 | | |
|---|---|---|---|---|

| | | Y | N | | | |
|---|---|---|---|---|---|---|
| **Other specs affected:** | ⌘ | X | | Other core specifications | ⌘ | TS 25.423 CR890rev2 Rel-5 |
| | | | X | Test specifications | | |
| | | | X | O&M Specifications | | |

| **Other comments:** | ⌘ | - | |
|---|---|---|---|

## How to create CRs using this form:

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

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

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

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

# 2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document.*

[1]        3GPP TS 25.401: "UTRAN Overall Description".

[2]        3GPP TS 25.426: "UTRAN Iur and Iub Interface Data Transport & Transport Signalling for DCH Data Streams".

[3]        CCITT Recommendation X.731 (01/92): "Information Technology – Open Systems Interconnection – Systems Management: State Management function".

[4]        3GPP TS 25.215: "Physical layer – Measurements (FDD)".

[5]        3GPP TS 25.225: "Physical layer – Measurements (TDD)".

[6]        3GPP TS 25.430: "UTRAN Iub General Aspect and Principle".

[7]        3GPP TS 25.211: "Physical channels and mapping of transport channels onto physical channels (FDD)".

[8]        3GPP TS 25.212: "Multiplexing and channel coding (FDD)".

[9]        3GPP TS 25.213: "Spreading and modulation (FDD)".

[10]       3GPP TS 25.214: "Physical layer procedures (FDD)".

[11]       ITU-T Recommendation X.691, (12/97) "Information technology - ASN.1 encoding rules - Specification of Packed Encoding Rules (PER)".

[12]       ITU-T Recommendation X.680, (12/97) "Information Technology - Abstract Syntax Notation One (ASN.1):Specification of basic notation".

[13]       ITU-T Recommendation X.681, (12/97) "Information Technology - Abstract Syntax Notation One (ASN.1): Information object specification".

[14]       3GPP TS 25.104: "UTRA (BS) FDD; Radio Transmission and Reception".

[15]       3GPP TS 25.105: "UTRA (BS) TDD; Radio Transmission and Reception".

[16]       3GPP TS 25.427: "UTRAN Iur/Iub Interface User Plane Protocol for DCH Data Stream".

[17]       3GPP TS 25.402: "Synchronisation in UTRAN Stage2".

[18]       3GPP TS 25.331: "RRC Protocol Specification".

[19]       3GPP TS25.221: "Physical channels and mapping of transport channels onto physical channels[TDD]".

[20]       3GPP TS 25.223: "Spreading and modulation (TDD)".

[21]       3GPP TS 25.224: "Physical Layer Procedures (TDD)".

[22]       3GPP TS 25.133: "Requirements for support of Radio Resource management (FDD)".

[23]          3GPP TS 25.123: "Requirements for support of Radio Resource management (TDD)".

[24]          3GPP TS 25.435: "UTRAN Iub Interface: User Plane Protocols for Common Transport Channel Data Streams".

[25]          3GPP TS 25.302: "Services Provided by the Physical Layer".

[26]          3GPP TR 25.921: "Guidelines and Principles for Protocol Description and Error Handling".

[27          ICD-GPS-200: "Navstar GPS Space Segment/Navigation User Interface".

[28]          RTCM-SC104: "RTCM Recommended Standards for Differential GNSS Service (v.2.2)".

[29]          IETF RFC 2460 "Internet Protocol, Version 6 (IPv6) Specification".

[30]          IETF RFC 768 "User Datagram Protocol", (8/1980)

[31]          3GPP TS 25.434: "UTRAN Iub Interface Data Transport & Transport Signalling for Common Transport Channel Data Streams ".

[32]          3GPP TS 25.321: "MAC protocol specification".

[33]          3GPP TS 25.306: "UE Radio Access capabilities".

[x1]          IETF RFC 2474 "Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers".

[x2]          IETF RFC 2475 "An Architecture for Differentiated Services".

<<<<<<<<<<<<< next change >>>>>>>>>>>>>>>

## 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.]

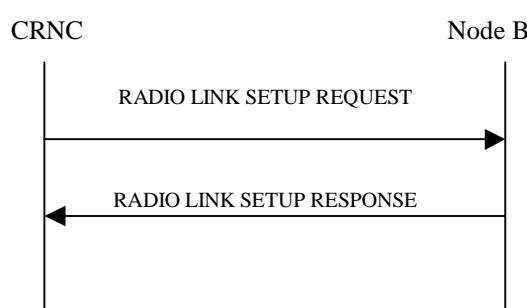### 8.2.17.2    Successful Operation



**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 Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

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

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

> 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.

Diversity combining is applied to Dedicated Transport Channels (DCH), i.e. it is not applied to the DSCHs. When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with.]

[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(s):**

[FDD - If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information* 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.]

If the RADIO LINK SETUP REQUEST message includes a *HS-DSCH Information* IE and if the *HS-PDSCH RL ID* IE indicates a radio link in the Node B, then the Node B shall use this information to configure the indicated HS-DSCH channel on this radio link. If the *HS-PDSCH RL ID* IE does not indicate a radio link in the Node B , the Node B shall store the configuration of the HS-DSCH according to the received *HS-DSCH Information* IE. The Node B shall store the latest HS-DSCH configuration until the Node B Communication Context is deleted.

If the *HS-PDSCH RL ID* IE indicates a radio link in the Node B Communication Context, then the Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearers to be established for the HS-DSCH MAC-d flows of this RL.

If the 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, 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 *HS-DSCH-RNTI* IE is present and the *HS-PDSCH RL ID* IE refers to a radio link in the Node B Communication Context, then the Node B shall use the HS-DSCH RNTI value for HS-DSCH processing for the respective Node B Communication Context.

The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK SETUP RESPONSE message for each MAC-d flow, if the Node B allows the CRNC to start transmission of the 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 *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.]

If the RADIO LINK SETUP REQUEST message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions.

If the RADIO LINK SETUP REQUEST message includes the *Discard Timer* IE in the *HS-DSCH Information* IE, then the Node B shall use this information to discard the out-of-dated MAC-hs SDUs.

**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.]

**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.]

**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 life time of the RL. If the *DPC Mode* IE is not present in the RADIO LINK SETUP REQUEST message, DPC mode 0 shall be applied (see ref. [10]).]

[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 CCTrCH using the initial CCTrCH DL power, as determined above, on each DL DPCH and on each Time Slot of the CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[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 CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included for that CCTrCH, 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 CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included for that CCTrCH, 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 - The initial power, maximum power, and minimum power for DSCH type CCTrCH shall be determined as follows:

- If the DSCH type CCTrCH is paired with an uplink CCTrCH(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 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 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 CCTrCH 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 CCTrCH using the initial DL power, as determined above, on each DL DPCH 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 DCH type CCTrCH 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 CCTrCH 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.]

[1.28Mcps TDD – The Node B shall determine the initial power for each timeslot within the DSCH type CCTrCH by the following rule: If both the *CCTrCH Initial DL Transmission Power* IE, included in the *DL CCTrCH 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].]

<<<<<<<<<<<<< next change >>>>>>>>>>>>>>

## 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

CRNC                                                                     Node B

RADIO LINK RECONFIGURATION PREPARE

RADIO LINK RECONFIGURATION READY
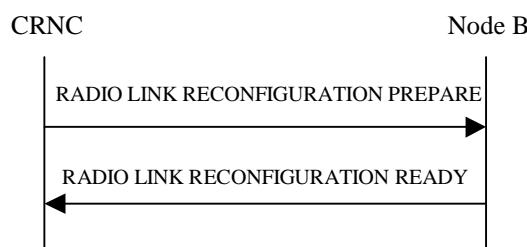
**Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation**

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.

- [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 Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

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

- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]

- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

**DCH Deletion:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* 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. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

**[TDD – UL/DL CCTrCH Modification]**

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* 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 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 CCTrCH 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 CCTrCH 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 CCTrCH Addition]**

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

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

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

[1.28Mcps TDD - If the *UL CCTrCH 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 CCTrCH To Add* IE as the UL SIR value for the inner loop power control for this CCTrCH according [19] and [21] in the new configuration.]

**[TDD – UL/DL CCTrCH Deletion]**

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

**DL Power Control:**

- [FDD - If the *RL Information* IE includes the *DL Reference Power* IEs and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported, at the CFN in the RADIO LINK RECONFIGURATION COMMIT message, according to subclause 8.3.7, using the *DL Reference Power* IE. If the CFN modulo the value of the *Adjustment Period* IE is not equal to 0, the power balancing continues with the old reference power until the end of the current adjustment period, and the updated reference power shall be used from the next adjustment period.]

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE 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, if supported, establish a new transport bearer replacing the existing transport bearer on which the DSCH TFCI Signaling control frames shall be received. The *Binding ID* IE and *Transport Layer Address* IE of a new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message.]

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

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

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

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

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

- [FDD - If the *Enhanced DSCH PC Indicator* IE is included and set to "Enhanced DSCH PC Active in the UE ", the Node B shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:]

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

  - [FDD - the *SSDT Cell Identity* IE in the *RL Information* IE, if both the *SSDT Cell Identity* IE and the *SSDT Cell Identity for EDSCHPC* IE are included in the *RL Information* IE.]

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

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

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

**[TDD – USCH Addition/Modification/Deletion]:**

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

- [TDD – 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 CCTrCH To Add* IE is included, the Node B shall determine the maximum CCTrCH DL power for the DCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the maximum CCTrCH DL power, otherwise the maximum CCTrCH DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. If no *Maximum Downlink Power* IE is included (even if *CCTrCH Maximum DL Transmission Power* IEs are included), any maximum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]

- [3.84 Mcps TDD - If the *DL CCTrCH To Add* IE is included, the Node B shall determine the minimum CCTrCH DL power for the DCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the minimum CCTrCH DL power, otherwise the minimum CCTrCH DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. If no *Minimum Downlink Power* IE is included (even if *CCTrCH Minimum DL Transmission Power* IEs are included), any minimum DL power stored for already existing DCH type CCTrCHs for this Node B Communication Context shall be applied.]

- [3.84 Mcps TDD - If the *DL CCTrCH To Modify* IE is included and *Maximum CCTrCH DL Power to Modify* IE and/or *Minimum CCTrCH DL Power to Modify* 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 for all other DCH type CCTrCHs of the radio link.]

- [1.28 Mcps TDD - If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DCH type CCTrCH 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 CCTrCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DCH type CCTrCH 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 CCTrCH 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 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 apply the determined initial CCTrCH DL power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCHs when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4).]

- [3.84Mcps TDD - The initial power, maximum power, and minimum power for a DSCH type CCTrCH to be added or 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, maximum and initial 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 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 CCTrCH 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 CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. 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 CCTrCH by the following rule: If both the *CCTrCH 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 CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing RL/timeslots when starting transmission for a new CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]

- [1.28 Mcps TDD - If the *DL CCTrCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH 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 CCTrCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DSCH type CCTrCH by the following rule: If the *CCTrCH 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 CCTrCH To Modify* IE is included and the *Maximum CCTrCH DL Power to Modify* IE and/or the *Minimum CCTrCH DL Power to Modify* 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 *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, if supported , allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION READY message.

**HS-DSCH Addition/Modification/Deletion:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH Information To Add* IE or *HS-DSCH Information To Modify* IE or *HS-DSCH Information To Delete* IE and if the *HS-PDSCH RL ID* IE indicates a radio link in the Node B, then the Node B shall use this information to add/modify/delete the indicated HS-DSCH channel to/from this radio link. If the *HS-PDSCH RL ID* IE does not indicate a radio link in the Node B, the Node B shall update the configuration of the HS-DSCH according to the received *HS-DSCH Information To Modify*, *HS-DSCH Information To Add* or *HS-DSCH Information to Delete* IEs. Node B shall store the latest HS-DSCH configuration until the Node B Communication Context is deleted.

[FDD - If the *HS-DSCH 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 *HS-SCCH Specific Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

[TDD - If the *HS-DSCH To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH parameters codes 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 *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To Add* IE or *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 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.]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TDD ACK NACK Power Offset* IE in the *HS-DSCH To Modify* IE, the DRNS shall use the indicated power offset in the new configuration.]

If the RADIO LINK RECONFIGURATION PREPARE message includes a *HS-PDSCH RL ID* IE and if the *HS-PDSCH RL ID* IE refers to a radio link in the Node B Communication Context, then the Node B shall configure the HS-

PDSCH in the radio link indicated by this IE. Any existing HS-PDSCH resources from radio links associated with the Node B Communication Context and not referenced by *HS-PDSCH RL ID* IE shall be removed.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH-RNTI* IE, then the Node B shall use the HS-DSCH-RNTI for the Node B Communication Context.

If the new configuration does not include a HS-DSCH, the HS-DSCH-RNTI, if existing in the Node B Communication Context, shall be deleted from the Node B Communication Context.

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH Information To Delet*e IE requesting the deletion of certain HS-DSCH resources for the Node B Communication Context, the Node B shall remove the indicated HS-DSCH in the new configuration.

The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for each MAC-d flow, 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 Window Size* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated MAC-hs window size value in the new configuration.

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes *Measurement Power Offset* IE in the *HS-DSCH Information To Add* 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.]

If the RADIO LINK RECONFIGURATION PREPARE message includes the *MAC-hs Guaranteed Bit Rate* IE in the *HS-DSCH Information To Add* IE or *HS-DSCH Information To Modify* IE, the Node B shall use this information to optimise MAC-hs scheduling decisions.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *T1* IE in the *HS-DSCH Information To Modify* IE, then the Node B shall use the indicated T1 value in the new configuration.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Discard Timer* IE in the *HS-DSCH Information To Modify* IE or the *HS-DSCH Information To Add* IE, then the Node B shall use the indicated Discard Timer value in the new configuration.

**[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 information 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 information 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 To Modify*, *HS-DSCH Information 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 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.

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 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.

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.

<<<<<<<<<<<< next change >>>>>>>>>>>>>

# 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
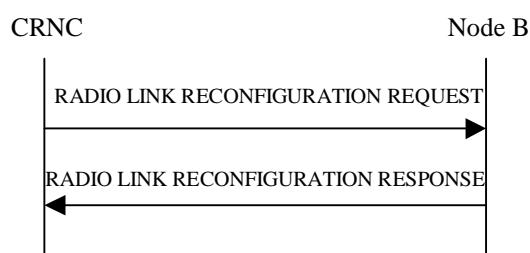


**Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation**

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.

- [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 DCHas 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 Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.

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

- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be added, 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. This new Compressed Mode Configuration shall be valid in the Node B until the next Compressed Mode Configuration is configured in the Node B or Node B Communication Context is deleted.]

**[TDD – UL/DL CCTrCH Modification]**

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

[TDD – If the *UL/DL CCTrCH To Modify* IE includes *TFCS* IE and/or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]

[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, if supported, allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

**General**

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Specific DCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel being added or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

If the requested modifications are allowed by the Node B, the Node B has successfully allocated the required resources, and changed to the new configuration, it shall respond to the CRNC with the RADIO LINK RECONFIGURATION RESPONSE message.

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 being added or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1.

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

In the case of a Radio Link being combined with another Radio Link within the Node B, the *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.

<<<<<<<<<<<< next change >>>>>>>>>>>>>>

# 9.1.42   RADIO LINK RECONFIGURATION PREPARE

<<<<<<<<<<<< partly ommited >>>>>>>>>>>>>>

## 9.1.42.2    TDD Message

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| Message Discriminator | M | | 9.2.1.45 | | – | |
| Message Type | M | | 9.2.1.46 | | YES | reject |
| Transaction ID | M | | 9.2.1.62 | | – | |
| Node B Communication Context ID | M | | 9.2.1.48 | The reserved value "All NBCC" shall not be used. | YES | reject |
| **UL CCTrCH To Add** | | 0..<maxno ofCCTrCH s> | | | GLOBAL | reject |
| >CCTrCH ID | M | | 9.2.3.3 | | – | |
| >TFCS | M | | 9.2.1.58 | | – | |
| >TFCI Coding | M | | 9.2.3.22 | | – | |
| >Puncture Limit | M | | 9.2.1.50 | | – | |
| **>UL DPCH Information** | | 0..1 | | Applicable to 3.84Mcps TDD only | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD DPCH Offset | M | | 9.2.3.19A | | – | |
| >>UL Timeslot Information | M | | 9.2.3.26C | | – | |
| **>UL DPCH Information LCR** | | 0..1 | | Applicable to 1.28Mcps TDD only | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD DPCH Offset | M | | 9.2.3.19A | | – | |
| >>UL Timeslot Information LCR | M | | 9.2.3.26E | | – | |
| >UL SIR Target | O | | UL SIR 9.2.1.67A | Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD | YES | reject |
| >TDD TPC UL Step Size | O | | 9.2.3.21a | Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD. | YES | reject |
| **UL CCTrCH To Modify** | | 0..<maxno ofCCTrCH s> | | | GLOBAL | reject |
| >CCTrCH ID | M | | 9.2.3.3 | | – | |
| >TFCS | O | | 9.2.1.58 | | – | |
| >TFCI Coding | O | | 9.2.3.22 | | – | |
| >Puncture Limit | O | | 9.2.1.50 | | – | |
| >UL SIR Target | O | | UL SIR 9.2.1.67A | Applicable to 1.28Mcps TDD only | YES | reject |
| **>UL DPCH To Add** | | 0..1 | | Applicable to 3.84Mcps TDD only | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD DPCH Offset | M | | 9.2.3.19A | | – | |
| >>UL Timeslot | M | | 9.2.3.26C | | – | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Information | | | | | | |
| **>UL DPCH To Modify** | | *0..1* | | | YES | reject |
| >>Repetition Period | O | | 9.2.3.16 | | – | |
| >>Repetition Length | O | | 9.2.3.15 | | – | |
| >>TDD DPCH Offset | O | | 9.2.3.19A | | – | |
| **>>UL Timeslot Information** | | *0..<maxnoofULts>* | | Applicable to 3.84Mcps TDD only | – | |
| >>>Time Slot | M | | 9.2.3.23 | | – | |
| >>>Midamble Shift And Burst Type | O | | 9.2.3.7 | | – | |
| >>>TFCI Presence | O | | 9.2.1.57 | | – | |
| **>>>UL Code Information** | | *0..<maxnoofDPCHs>* | | | – | |
| >>>>DPCH ID | M | | 9.2.3.5 | | – | |
| >>>>TDD Channelisation Code | O | | 9.2.3.19 | | – | |
| **>>UL Timeslot Information LCR** | | *0..<maxnoofULtsLCR>* | | Applicable to 1.28Mcps TDD only | GLOBAL | reject |
| >>>Time Slot LCR | M | | 9.2.3.24A | | – | |
| >>>Midamble Shift LCR | O | | 9.2.3.7A | | | |
| >>>TFCI Presence | O | | 9.2.1.57 | | – | |
| **>>>UL Code Information LCR** | | *0..<maxnoOfDPCHLCR>* | | | – | |
| >>>>DPCH ID | M | | 9.2.3.5 | | – | |
| >>>>TDD Channelisation Code LCR | O | | 9.2.3.19a | | – | |
| >>>> TDD UL DPCH Time Slot Format LCR | O | | 9.2.3.21C | | YES | reject |
| **>UL DPCH To Delete** | | *0..<maxnoofDPCHs>* | | | GLOBAL | reject |
| >>DPCH ID | M | | 9.2.3.5 | | – | |
| **>UL DPCH To Add LCR** | | *0..1* | | Applicable to 1.28Mcps TDD only | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD DPCH Offset | M | | 9.2.3.19A | | – | |
| >>UL Timeslot Information LCR | M | | 9.2.3.26E | | – | |
| >TDD TPC UL Step Size | O | | 9.2.3.21a | Applicable to 1.28Mcps TDD only | YES | reject |
| **UL CCTrCH To Delete** | | *0..<maxnoofCCTrCHs>* | | | GLOBAL | reject |
| >CCTrCH ID | M | | 9.2.3.3 | | – | |
| **DL CCTrCH To Add** | | *0..<maxnoofCCTrCHs>* | | | GLOBAL | reject |
| >CCTrCH ID | M | | 9.2.3.3 | | – | |
| >TFCS | M | | 9.2.1.58 | | – | |
| >TFCI Coding | M | | 9.2.3.22 | | – | |
| >Puncture Limit | M | | 9.2.1.50 | | – | |
| **>TPC CCTrCH List** | | *0..<maxnoofCCTrCHs>* | | List of uplink CCTrCH which provide TPC | – | |
| >>TPC CCTrCH ID | M | | CCTrCH ID | | – | |

| | | | 9.2.3.3 | | | |
|---|---|---|---|---|---|---|
| **>DL DPCH Information** | | *0..1* | | Applicable to 3.84Mcps TDD only | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD DPCH Offset | M | | 9.2.3.19A | | – | |
| >>DL Timeslot Information | M | | 9.2.3.4E | | – | |
| **>DL DPCH Information LCR** | | *0..1* | | Applicable to 1.28Mcps TDD only | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD DPCH Offset | M | | 9.2.3.19A | | – | |
| >>DL Timeslot Information LCR | M | | 9.2.3.4O | | – | |
| >CCTrCH Initial DL Transmission Power | O | | DL Power 9.2.1.21 | | YES | ignore |
| >TDD TPC DL Step Size | O | | 9.2.3.21 | | YES | reject |

| | | | | | | |
|---|---|---|---|---|---|---|
| >CCTrCH Maximum DL Transmission Power | O | | DL Power 9.2.1.21 | | YES | ignore |
| >CCTrCH Minimum DL Transmission Power | O | | DL Power 9.2.1.21 | | YES | ignore |
| **DL CCTrCH To Modify** | | *0..<maxno ofCCTrCH s>* | | | GLOBAL | reject |
| >CCTrCH ID | M | | 9.2.3.3. | | – | |
| >TFCS | O | | 9.2.1.58 | | – | |
| >TFCI Coding | O | | 9.2.3.22 | | – | |
| >Puncture Limit | O | | 9.2.1.50 | | – | |
| **>TPC CCTrCH List** | | *0..<maxno ofCCTrCH s>* | | List of uplink CCTrCH which provide TPC | **–** | |
| >>TPC CCTrCH ID | M | | CCTrCH ID 9.2.3.3 | | – | |
| **>DL DPCH To Add** | | *0..1* | | Applicable to 3.84Mcps TDD only | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD DPCH Offset | M | | 9.2.3.19A | | – | |
| >>DL Timeslot Information | M | | 9.2.3.4E | | – | |
| **>DL DPCH To Modify** | | *0..1* | | | YES | reject |
| >>Repetition Period | O | | 9.2.3.16 | | – | |
| >>Repetition Length | O | | 9.2.3.15 | | – | |
| >>TDD DPCH Offset | O | | 9.2.3.19A | | – | |
| **>>DL Timeslot Information** | | *0..<maxno ofDLts>* | | Applicable to 3.84Mcps TDD only | – | |
| >>>Time Slot | M | | 9.2.3.23 | | – | |
| >>>Midamble Shift And Burst Type | O | | 9.2.3.7 | | – | |
| >>>TFCI Presence | O | | 9.2.1.57 | | – | |
| **>>>DL Code Information** | | *0..<maxno ofDPCHs>* | | | – | |
| >>>>DPCH ID | M | | 9.2.3.5 | | – | |
| >>>>TDD Channelisation Code | O | | 9.2.3.19 | | – | |
| **>>DL Timeslot Information LCR** | | *0..<maxno ofDLtsLCR >* | | Applicable to 1.28Mcps TDD only | GLOBAL | reject |
| >>>Time Slot LCR | M | | 9.2.3.24A | | – | |
| >>>Midamble Shift LCR | O | | 9.2.3.7A | | – | |
| >>>TFCI Presence | O | | 9.2.1.57 | | – | |
| **>>>DL Code Information LCR** | | *0..<maxno ofDPCHsL CR>* | | | – | |
| >>>>DPCH ID | M | | 9.2.3.5 | | – | |
| >>>>TDD Channelisation Code LCR | O | | 9.2.3.19a | | – | |
| >>>>TDD DL DPCH Time Slot Format LCR | O | | 9.2.3.19D | | YES | reject |
| >>>Maximum DL Power to Modify LCR | O | | DL Power 9.2.1.21 | Maximum allowed power on DPCH | YES | ignore |
| >>>Minimum DL Power to Modify LCR | O | | DL Power 9.2.1.21 | Minimum allowed power on DPCH | YES | ignore |

| | | | | | | |
|---|---|---|---|---|---|---|
| **>DL DPCH To Delete** | | *0..<maxno ofDPCHs>* | | | GLOBAL | reject |
| >>DPCH ID | M | | 9.2.3.5 | | – | |
| **>DL DPCH To Add LCR** | | *0..1* | | Applicable to 1.28Mcps TDD only | YES | reject |
| >>Repetition Period | M | | 9.2.3.16 | | – | |
| >>Repetition Length | M | | 9.2.3.15 | | – | |
| >>TDD DPCH Offset | M | | 9.2.3.19A | | – | |
| >>DL Timeslot Information LCR | M | | 9.2.3.4O | | – | |
| >TDD TPC DL Step Size | O | | 9.2.3.21 | | YES | reject |
| >Maximum CCTrCH DL Power to Modify | O | | DL Power 9.2.1.21 | | YES | ignore |
| >Minimum CCTrCH DL Power to Modify | O | | DL Power 9.2.1.21 | | YES | ignore |
| **DL CCTrCH To Delete** | | *0..<maxno ofCCTrCH s>* | | | GLOBAL | reject |
| >CCTrCH ID | M | | 9.2.3.3 | | – | |
| DCHs To Modify | O | | DCHs TDD To Modify 9.2.3.4D | | YES | reject |
| DCHs To Add | O | | DCH TDD Information 9.2.3.4C | | YES | reject |
| **DCHs To Delete** | | *0..<maxno ofDCHs>* | | | GLOBAL | reject |
| >DCH ID | M | | 9.2.1.20 | | – | |
| **DSCH To Modify** | | *0..<maxno ofDSCHs>* | | | GLOBAL | reject |
| >DSCH ID | M | | 9.2.1.27 | | – | |
| >CCTrCH ID | O | | 9.2.3.3 | DL CCTrCH in which the DSCH is mapped | – | |
| >Transport Format Set | O | | 9.2.1.59 | | – | |
| >Allocation/Retention Priority | O | | 9.2.1.1A | | – | |
| >Frame Handling Priority | O | | 9.2.1.30 | | – | |
| >ToAWS | O | | 9.2.1.61 | | – | |
| >ToAWE | O | | 9.2.1.60 | | – | |
| >Transport Bearer Request Indicator | M | | 9.2.1.62A | | – | |
| >Binding ID | O | | 9.2.1.4 | Shall be ignored if bearer establishment with ALCAP. | YES | ignore |
| >Transport Layer Address | O | | 9.2.1.63 | Shall be ignored if bearer establishment with ALCAP. | YES | ignore |
| DSCH To Add | O | | DSCH TDD Information 9.2.3.5A | | YES | reject |
| **DSCH To Delete** | | *0..<maxno ofDSCHs>* | | | GLOBAL | reject |
| >DSCH ID | M | | 9.2.1.27 | | – | |
| **USCH To Modify** | | *0..<maxno ofUSCHs>* | | | GLOBAL | reject |
| >USCH ID | M | | 9.2.3.27 | | – | |

| | | | | | | |
|---|---|---|---|---|---|---|
| >Transport Format Set | O | | 9.2.1.59 | | – | |
| >Allocation/Retention Priority | O | | 9.2.1.1A | | – | |
| >CCTrCH ID | O | | 9.2.3.2 | UL CCTrCH in which the USCH is mapped | – | |
| >Transport Bearer Request Indicator | M | | 9.2.1.62A | | – | |
| >Binding ID | O | | 9.2.1.4 | Shall be ignored if bearer establishment with ALCAP. | YES | ignore |
| >Transport Layer Address | O | | 9.2.1.63 | Shall be ignored if bearer establishment with ALCAP. | YES | ignore |
| >TNL QoS | O | | 9.2.1.x | | YES | ignore |
| USCH To Add | O | | USCH Information 9.2.3.28 | | YES | reject |
| **USCH To Delete** | | *0..<maxno ofUSCHs>* | | | GLOBAL | reject |
| >USCH ID | M | | 9.2.3.27 | | – | |
| **RL Information** | | *0..1* | | | YES | reject |
| >RL ID | M | | 9.2.1.53 | | – | |
| >Maximum Downlink Power | O | | DL Power 9.2.1.21 | | – | |
| >Minimum Downlink Power | O | | DL Power 9.2.1.21 | | – | |
| >Initial DL Transmission Power | O | | DL Power 9.2.1.21 | | YES | ignore |
| >RL Specific DCH Information | O | | 9.2.1.53G | | YES | ignore |
| **>UL Synchronisation Parameters LCR** | | *0..1* | | Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD. | YES | ignore |
| >>Uplink Synchronisation Step Size | M | | 9.2.3.26H | | – | |
| >>Uplink Synchronisation Frequency | M | | 9.2.3.26G | | – | |
| >DL Time Slot ISCP Info LCR | O | | 9.2.3.4P | Applicable to 1.28Mcps TDD only | YES | ignore |
| Signalling Bearer Request Indicator | O | | 9.2.1.55A | | YES | reject |
| HS-DSCH Information To Modify | O | | 9.2.1.31H | | YES | reject |
| HS-DSCH Information To Add | O | | HS-DSCH TDD Information 9.2.3.5F | | YES | reject |
| **HS-DSCH Information To Delete** | | *0..<maxno ofMACdFl ows>* | | | GLOBAL | reject |
| >HS-DSCH MAC-D flow ID | M | | 9.2.1.31I | | – | |
| HS-DSCH-RNTI | O | | 9.2.1.31J | | YES | reject |
| HS-PDSCH RL ID | O | | RL ID 9.2.1.53 | | YES | reject |

| PDSCH-RL-ID | O | | RL ID 9.2.1.53 | | YES | ignore |
|---|---|---|---|---|---|---|

| Range Bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for a UE |
| *maxnoofCCTrCHs* | Maximum number of CCTrCHs for a UE |
| *maxnoofDPCHs* | Maximum number of DPCHs in one CCTrCH for 3.84Mcps TDD |
| *maxnoofDPCHsLCR* | Maximum number of DPCHs in one CCTrCH for 1.28Mcps TDD |
| *maxnoofDSCHs* | Maximum number of DSCHs for one UE |
| *maxnoofUSCHs* | Maximum number of USCHs for one UE |
| *maxnoofDLts* | Maximum number of Downlink time slots per Radio Link for 3.84Mcps TDD |
| *maxnoofDLtsLCR* | Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD |
| *maxnoofULts* | Maximum number of Uplink time slots per Radio Link for 3.84Mcps TDD |
| *maxnoofULtsLCR* | Maximum number of Uplink time slots per Radio Link for 1.28Mcps TDD |
| *maxnoofMACdFlows* | Maximum number of HS-DSCH MAC-d flows |

<<<<<<<<<<<< next change >>>>>>>>>>>>>>>

## 9.2.2.4D    DCH FDD Information

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

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| **DCH FDD Information** | | *1..<maxnoofDCHs>* | | | – | |
| >Payload CRC Presence Indicator | M | | 9.2.1.49 | | – | |
| >UL FP Mode | M | | 9.2.1.66 | | – | |
| >ToAWS | M | | 9.2.1.61 | | – | |
| >ToAWE | M | | 9.2.1.60 | | – | |
| **>DCH Specific Info** | | *1..<maxnoofDCHs>* | | | – | |
| >>DCH ID | M | | 9.2.1.20 | | – | |
| >>Transport Format Set | M | | 9.2.1.59 | For UL | – | |
| >>Transport Format Set | M | | 9.2.1.59 | For DL | – | |
| >>Allocation/Retention Priority | M | | 9.2.1.1A | | – | |
| >>Frame Handling Priority | M | | 9.2.1.30 | | – | |
| >>QE-Selector | M | | 9.2.1.50A | | – | |
| >>Unidirectional DCH Indicator | O | | 9.2.1.68 | | YES | ignore |
| >TNL QoS | O | | 9.2.1.x | | YES | ignore |

| Range Bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for one UE |

## 9.2.2.4E    DCHs FDD To Modify

The *DCHs FDD To Modify* IE provides information for DCHs to be modified.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| **DCHs FDD To Modify** | | 1..<maxno ofDCHs> | | | – | |
| >UL FP Mode | O | | 9.2.1.66 | | – | |
| >ToAWS | O | | 9.2.1.61 | | – | |
| >ToAWE | O | | 9.2.1.60 | | – | |
| >Transport Bearer Request Indicator | M | | 9.2.1.62A | | – | |
| **>DCH Specific Info** | | 1..<maxno ofDCHs> | | | – | |
| >>DCH ID | M | | 9.2.1.20 | | – | |
| >>Transport Format Set | O | | 9.2.1.59 | For the UL. | – | |
| >>Transport Format Set | O | | 9.2.1.59 | For the DL. | – | |
| >>Allocation/Retention Priority | O | | 9.2.1.1A | | – | |
| >>Frame Handling Priority | O | | 9.2.1.30 | | – | |
| >TNL QoS | O | | 9.2.1.x | | YES | ignore |

| Range Bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for one UE |

<<<<<<<<<<<<< next change >>>>>>>>>>>>>>>

## 9.2.3.4C    DCH TDD Information

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

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| **DCH TDD Information** | | *1..<maxno ofDCHs>* | | | – | |
| >Payload CRC Presence Indicator | M | | 9.2.1.49 | | – | |
| >UL FP Mode | M | | 9.2.1.66 | | – | |
| >ToAWS | M | | 9.2.1.61 | | – | |
| >ToAWE | M | | 9.2.1.60 | | – | |
| **>DCH Specific Info** | | *1..<maxno ofDCHs>* | | | – | |
| >>DCH ID | M | | 9.2.1.20 | | – | |
| >>CCTrCH ID | M | | 9.2.3.3 | UL CCTrCH in which the DCH is mapped | – | |
| >>CCTrCH ID | M | | 9.2.3.3 | DL CCTrCH in which the DCH is mapped | – | |
| >>Transport Format Set | M | | 9.2.1.59 | For UL | – | |
| >>Transport Format Set | M | | 9.2.1.59 | For DL | – | |
| >>Allocation/Retention Priority | M | | 9.2.1.1A | | – | |
| >>Frame Handling Priority | M | | 9.2.1.30 | | – | |
| >>QE-Selector | C-CoorDCH | | 9.2.1.50A | | – | |
| >>Unidirectional DCH Indicator | O | | 9.2.1.68 | | YES | ignore |
| >TNL QoS | O | | 9.2.1.x | | YES | ignore |

| Condition | Explanation |
|---|---|
| CoorDCH | The IE shall be present if this DCH is part of a set of coordinated DCHs (number of instances of the *DCH Specific Info* IE is greater than 1). |

| Range Bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for one UE |

## 9.2.3.4D    DCHs TDD To Modify

The *DCHs TDD To Modify* IE provides information for DCHs to be modified.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| **DCHs TDD To Modify** | | 1..<max noofDCHs> | | | - | |
| >UL FP Mode | O | | 9.2.1.66 | | - | |
| >ToAWS | O | | 9.2.1.61 | | - | |
| >ToAWE | O | | 9.2.1.60 | | - | |
| >Transport Bearer Request Indicator | M | | 9.2.1.62A | | - | |
| **>DCH Specific Info** | | 1..<max noofDCHs> | | | - | |
| >>DCH ID | M | | 9.2.1.20 | | - | |
| >>CCTrCH ID | O | | 9.2.3.3 | UL CCTrCH in which the DCH is mapped. | - | |
| >>CCTrCH ID | O | | 9.2.3.3 | DL CCTrCH in which the DCH is mapped | - | |
| >>Transport Format Set | O | | 9.2.1.59 | For the UL. | - | |
| >>Transport Format Set | O | | 9.2.1.59 | For the DL. | - | |
| >>Allocation/Retention Priority | O | | 9.2.1.1A | | - | |
| >>Frame Handling Priority | O | | 9.2.1.30 | | - | |
| >TNL QoS | O | | 9.2.1.x | | YES | Ignore |

| Range Bound | Explanation |
|---|---|
| *maxnoofDCHs* | Maximum number of DCHs for one UE |

<<<<<<<<<<<< next change >>>>>>>>>>>>>>

### 9.2.3.28    USCH Information

The *USCH Information* IE provides information for USCHs to be established.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description | Criticality | Assigned Criticality |
|---|---|---|---|---|---|---|
| **USCH Information** | | 1..<max noofUSCHs> | | | – | |
| >USCH ID | M | | 9.2.3.27 | | – | |
| >CCTrCH ID | M | | 9.2.3.3 | UL CCTrCH in which the USCH is mapped | – | |
| >Transport Format Set | M | | 9.2.1.59 | For USCH | – | |
| >Allocation/Retention Priority | M | | 9.2.1.1A | | – | |
| >Binding ID | O | | 9.2.1.4 | Shall be ignored if bearer establishment with ALCAP. | YES | ignore |
| >Transport Layer Address | O | | 9.2.1.63 | Shall be ignored if bearer establishment with ALCAP. | YES | ignore |
| >TNL QoS | O | | 9.2.1.x | | YES | ignore |

| Range Bound | Explanation |
|---|---|
| *maxnoofUSCHs* | Maximum number of USCHs for one UE |

<<<<<<<<<<<<< next change >>>>>>>>>>>>>>>

## 9.2.1.x TNL QoS

This IE indicates the TNL QoS characteristics of the transport bearer for the uplink data traffic.

When the *DS field* IE is used, the value of this IE is configurable by the operator.

When the G*eneric Traffic Category* IE is used, generic traffic categories are implementation-specific (e.g. they may be determined by the sender from the application parameters). The value assigned to each of these categories and sent in the *Generic Traffic Category* IE is configurable by the operator, as well as the mapping of this value to DS field [x1] at the Node B side.

| IE/Group Name | Presence | Range | IE Type and Reference | Semantics Description |
|---|---|---|---|---|
| CHOICE *TNL QoS type* | M | | | |
| >DS Field | | | | |
| >>DS field | M | | BIT STRING (8) | DS field as defined in [x1]. Typically used when the NodeB and its CRNC are in the same DS domain as defined in [x2]. |
| >*Generic Traffic Category* | | | | |
| >>Generic Traffic Category | M | | BIT STRING (8) | |

<<<<<<<<<<<< next change >>>>>>>>>>>>>>>

## 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,
    CellSyncBurstCode,
    CellSyncBurstCodeShift,
    CellSyncBurstRepetitionPeriod,
    CellSyncBurstSIR,
    CellSyncBurstTiming,
    CellSyncBurstTimingThreshold,
    CFN,
    Channel-Assignment-Indication,
    ChipOffset,
    C-ID,
    Closedlooptimingadjustmentmode,
    CommonChannelsCapacityConsumptionLaw,
    Compressed-Mode-Deactivation-Flag,
    CommonMeasurementAccuracy,
    CommonMeasurementType,
    CommonMeasurementValue,
    CommonMeasurementValueInformation,
    CommonPhysicalChannelID,
    Common-PhysicalChannel-Status-Information,
    Common-TransportChannel-Status-Information,
    CommonTransportChannelID,
    CommonTransportChannel-InformationResponse,
    CommunicationControlPortID,
    ConfigurationGenerationID,
    ConstantValue,
    CriticalityDiagnostics,
    CPCH-Allowed-Total-Rate,
    CPCHScramblingCodeNumber,
    CPCH-UL-DPCCH-SlotFormat,
    CRNC-CommunicationContextID,
    CSBMeasurementID,
    CSBTransmissionID,
    DCH-FDD-Information,
    DCH-InformationResponse,
    DCH-ID,
    FDD-DCHs-to-Modify,
```

```
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DelayedActivation,
DelayedActivationUpdate,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-DPCH-TimingAdjustment,
DL-or-Global-CapacityCredit,
DL-Power,
DL-PowerBalancing-Information,
DL-PowerBalancing-ActivationIndicator,
DLPowerAveragingWindowSize,
DL-PowerBalancing-UpdatedIndicator,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo,
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,
DSCH-ID,
DSCH-FDD-Common-Information,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
End-Of-Audit-Sequence-Indicator,
EnhancedDSCHPC,
EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd,
EnhancedDSCHPowerOffset,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
HS-PDSCH-FDD-Code-Information,
HS-SCCH-ID,
HS-SCCH-FDD-Code-Information,
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,
Maximum-PDSCH-Power,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
```

```
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NEOT,
NCyclesPerSFNperiod,
NFmax,
NRepetitionsPerCyclePeriod,
N-INSYNC-IND,
N-OUTSYNC-IND,
NeighbouringCellMeasurementInformation,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
NodeB-CommunicationContextID,
NumberOfReportedCellPortion,
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,
S-FieldLength,
SFN,
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateQuality,
SFNSFNQuality,
ShutdownTimer,
SIB-Originator,
SpecialBurstScheduling,
SignallingBearerRequestIndicator,
SSDT-Cell-Identity,
```

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        SSDT-CellID-Length,
        SSDT-Indication,
        Start-Of-Audit-Sequence-Indicator,
        STTD-Indicator,
        SSDT-SupportIndicator,
        SyncCase,
        SYNCDlCodeId,
        SyncFrameNumber,
        SynchronisationReportCharacteristics,
        SynchronisationReportType,
        T-Cell,
        T-RLFAILURE,
        TDD-ChannelisationCode,
        TDD-ChannelisationCodeLCR,
        TDD-DL-Code-LCR-Information,
        TDD-DPCHOffset,
        TDD-TPC-DownlinkStepSize,
        TDD-PhysicalChannelOffset,
        TDD-UL-Code-LCR-Information,
        TFCI2-BearerInformationResponse,
        TFCI2BearerRequestIndicator,
        TFCI-Coding,
        TFCI-Presence,
        TFCI-SignallingMode,
        TFCS,
        TimeSlot,
        TimeSlotLCR,
        TimeSlotDirection,
        TimeSlotStatus,
        TimingAdjustmentValue,
        TimingAdvanceApplied,
        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-DPCCH-SlotFormat,
        UL-SIR,
        UL-FP-Mode,
        UL-PhysCH-SF-Variation,
        UL-ScramblingCode,
        UL-Timeslot-Information,
        UL-TimeslotLCR-Information,
        UL-TimeSlot-ISCP-Info,
        UL-TimeSlot-ISCP-LCR-Info,
        UL-TimeslotISCP-Value,
        UL-TimeslotISCP-Value-IncrDecrThres,
        USCH-ID,
        HSDSCH-FDD-Information,
        HSDSCH-FDD-Information-Response,
        HSDSCH-Information-to-Modify,
        HSDSCH-MACdFlow-ID,
        HSDSCH-RNTI,
        HSDSCH-TDD-Information,
        HSDSCH-TDD-Information-Response,
        PrimaryCCPCH-RSCP,
        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
```

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FROM NBAP-IEs

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

    id-Active-Pattern-Sequence-Information,
    id-AdjustmentRatio,
    id-AICH-Information,
    id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
    id-AP-AICH-Information,
    id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
    id-BCH-Information,
    id-BCCH-ModificationTime,
    id-bindingID,
    id-BlockingPriorityIndicator,
    id-Cause,
    id-CauseLevel-PSCH-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-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,
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id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-DCH-RearrangeList-Bearer-RearrangeInd,
id-DSCH-RearrangeList-Bearer-RearrangeInd,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-TimingAdjustment,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DL-PowerBalancing-UpdatedIndicator,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
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        id-InformationExchangeObjectType-InfEx-Rqst,
        id-InformationExchangeObjectType-InfEx-Rsp,
        id-InformationExchangeObjectType-InfEx-Rprt,
        id-InformationReportCharacteristics,
        id-InformationType,
        id-InitDL-Power,
        id-InnerLoopDLPCStatus,
        id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
        id-IPDLParameter-Information-Cell-ReconfRqstFDD,
        id-IPDLParameter-Information-Cell-SetupRqstFDD,
        id-IPDLParameter-Information-Cell-ReconfRqstTDD,
        id-IPDLParameter-Information-Cell-SetupRqstTDD,
        id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
        id-Limited-power-increase-information-Cell-SetupRqstFDD,
        id-Local-Cell-ID,
        id-Local-Cell-Group-InformationItem-AuditRsp,
        id-Local-Cell-Group-InformationItem-ResourceStatusInd,
        id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
        id-Local-Cell-Group-InformationList-AuditRsp,
        id-Local-Cell-InformationItem-AuditRsp,
        id-Local-Cell-InformationItem-ResourceStatusInd,
        id-Local-Cell-InformationItem2-ResourceStatusInd,
        id-Local-Cell-InformationList-AuditRsp,
        id-AdjustmentPeriod,
        id-MaxAdjustmentStep,
        id-MaximumTransmissionPower,
        id-MeasurementFilterCoefficient,
        id-MeasurementID,
        id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
        id-NCyclesPerSFNperiod,
        id-NeighbouringCellMeasurementInformation,
        id-NodeB-CommunicationContextID,
        id-NRepetitionsPerCyclePeriod,
        id-NumberOfReportedCellPortion,
        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,
```

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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-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-RL-Specific-DCH-Info,
id-S-CCPCH-Information,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-Secondary-CPICH-Information-Change,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SignallingBearerRequestIndicator,
id-SSDT-CellIDforEDSCHPC,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
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    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-UARFCNforNt,
    id-UARFCNforNd,
    id-UARFCNforNu,
    id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
    id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
    id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
    id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
    id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
    id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
    id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
    id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
    id-UL-DPCH-InformationList-RL-SetupRqstTDD,
    id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
    id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
    id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
    id-UL-DPCH-Information-RL-ReconfPrepFDD,
    id-UL-DPCH-Information-RL-ReconfRqstFDD,
    id-UL-DPCH-Information-RL-SetupRqstFDD,
    id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
    id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
    id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
    id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
    id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
    id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
    id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
    id-USCH-Information-Add,
    id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
    id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
    id-USCH-InformationResponse,
    id-USCH-Information,
    id-USCH-RearrangeList-Bearer-RearrangeInd,
    id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
    id-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-HSDSCH-FDD-Information,
        id-HSDSCH-FDD-Information-Response,
        id-HSDSCH-FDD-Information-to-Add,
        id-HSDSCH-FDD-Information-to-Delete,
        id-HSDSCH-Information-to-Modify,
        id-HSDSCH-RearrangeList-Bearer-RearrangeInd,
        id-HSDSCH-RNTI,
        id-HSDSCH-TDD-Information,
        id-HSDSCH-TDD-Information-Response,
        id-HSDSCH-TDD-Information-Response-LCR,
        id-HSDSCH-TDD-Information-to-Add,
        id-HSDSCH-TDD-Information-to-Delete,
        id-HSPDSCH-RL-ID,
        id-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,


        maxNrOfCCTrCHs,
        maxNrOfCellSyncBursts,
        maxNrOfCodes,
        maxNrOfCPCHs,
        maxNrOfDCHs,
        maxNrOfDLTSs,
        maxNrOfDLTSLCRs,
        maxNrOfDPCHs,
        maxNrOfDSCHs,
        maxNrOfFACHs,
        maxNrOfRLs,
        maxNrOfRLs-1,
        maxNrOfRLs-2,
        maxNrOfRLSets,
        maxNrOfPCPCHs,
        maxNrOfPDSCHs,
        maxNrOfPUSCHs,
        maxNrOfPRACHLCRs,
        maxNrOfPDSCHSets,
        maxNrOfPUSCHSets,
        maxNrOfReceptsPerSyncFrame,
        maxNrOfSCCPCHs,
        maxNrOfSCCPCHLCRs,
        maxNrOfULTSs,
        maxNrOfULTSLCRs,
        maxNrOfUSCHs,
        maxAPSigNum,
        maxCPCHCell,
        maxFACHCell,
        maxFPACHCell,
        maxNoofLen,
        maxRACHCell,
        maxPCPCHCell,
        maxPRACHCell,
        maxSCCPCHCell,
        maxSCPICHCell,
        maxCellinNodeB,
        maxCCinNodeB,
        maxCommunicationContext,
        maxLocalCellinNodeB,
        maxNrOfSlotFormatsPRACH,
        maxIB,
        maxIBSEG,
        maxNrOfHSSCCHs,
        maxNrOfHSSICHs,
        maxNrOfHSPDSCHs,
        maxNrOfSyncFramesLCR,
        maxNrOfReceptionsperSyncFrameLCR,
        maxNrOfSyncDLCodesLCR,
        maxNrOfMACdFlows
FROM NBAP-Constants;
```

<<<<<<<<<<<< partly ommited >>>>>>>>>>>>>>

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

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

RadioLinkReconfigurationPrepareTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID    id-NodeB-CommunicationContextID                        CRITICALITY    reject    TYPE
    { ID    id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD           CRITICALITY    reject
    { ID    id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD        CRITICALITY    reject
    { ID    id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD        CRITICALITY    reject
    { ID    id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD           CRITICALITY    reject
    { ID    id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD        CRITICALITY    reject
    { ID    id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD        CRITICALITY    reject
    { 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
    { ID    id-DSCH-Information-ModifyList-RL-ReconfPrepTDD            CRITICALITY    reject    TYPE
    { ID    id-DSCHs-to-Add-TDD        CRITICALITY    reject    TYPE    DSCH-TDD-Information
    { ID    id-DSCH-Information-DeleteList-RL-ReconfPrepTDD           CRITICALITY    reject    TYPE
    { ID    id-USCH-Information-ModifyList-RL-ReconfPrepTDD           CRITICALITY    reject    TYPE
    { ID    id-USCH-Information-Add        CRITICALITY    reject    TYPE    USCH-Information
    { ID    id-USCH-Information-DeleteList-RL-ReconfPrepTDD           CRITICALITY    reject    TYPE
    { ID    id-RL-Information-RL-ReconfPrepTDD                        CRITICALITY    reject    TYPE
    ...
}

RadioLinkReconfigurationPrepareTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-SignallingBearerRequestIndicator    CRITICALITY reject   EXTENSION
    SignallingBearerRequestIndicator                           PRESENCE optional    }|
    { ID    id-HSDSCH-Information-to-Modify          CRITICALITY reject      EXTENSION HSDSCH-
Information-to-Modify                PRESENCE optional    }|
    { ID    id-HSDSCH-TDD-Information-to-Add          CRITICALITY reject      EXTENSION HSDSCH-TDD-
Information              PRESENCE optional    }|
    { ID    id-HSDSCH-TDD-Information-to-Delete       CRITICALITY reject      EXTENSION HSDSCH-
DeleteList-RL-ReconfPrepTDD     PRESENCE optional    }|
    { ID    id-HSDSCH-RNTI                            CRITICALITY reject      EXTENSION HSDSCH-RNTI
    { ID    id-HSPDSCH-RL-ID                          CRITICALITY reject      EXTENSION RL-ID
    { ID    id-PDSCH-RL-ID                            CRITICALITY ignore      EXTENSION RL-ID
    ...
}

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

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

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD   CRITICALITY reject      EXTENSION
UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD     PRESENCE optional }|    -- Applicable to
1.28Mcps TDD only
    { ID id-UL-SIRTarget        CRITICALITY reject      EXTENSION       UL-SIR       PRESENCE
optional    }|
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 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-DPCH-InformationAddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-
InformationAddListIEs-RL-ReconfPrepTDD }}

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

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

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

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

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

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

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

UL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationModify-AddList    CRITICALITY reject    EXTENSION    UL-DPCH-
LCR-InformationModify-AddList-RL-ReconfPrepTDD    PRESENCE optional }|    -- Applicable to
1.28Mcps TDD only
    { ID id-UL-SIRTarget      CRITICALITY reject     EXTENSION     UL-SIR     PRESENCE
optional    }|
    -- Applicable to 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-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-
InformationModify-AddListIEs-RL-ReconfPrepTDD }}

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

UL-DPCH-InformationModify-AddItem-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod                         RepetitionPeriod,
```

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

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

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

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

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

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

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

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

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

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

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

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

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

```
    ...
}

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

UL-TimeslotLCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE
(1..maxNrOfULTSLCRs)) OF UL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD  --
Applicable to 1.28Mcps TDD only

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

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

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

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

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD  CRITICALITY reject   EXTENSION
TDD-UL-DPCH-TimeSlotFormat-LCR   PRESENCE  optional},

    ...
}

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

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

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

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

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

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

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

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

```
}

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

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

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD    CRITICALITY reject EXTENSION   DL-
DPCH-LCR-InformationAddList-RL-ReconfPrepTDD          PRESENCE optional }|   -- Applicable to
1.28Mcps TDD only
    { ID id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD                   CRITICALITY ignore  EXTENSION
DL-Power        PRESENCE optional    }|
    { ID id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD   CRITICALITY reject
    EXTENSION  TDD-TPC-DownlinkStepSize  PRESENCE optional}|
    { ID id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD CRITICALITY ignore  EXTENSION
DL-Power    PRESENCE optional    }|
    { ID id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD CRITICALITY ignore  EXTENSION
DL-Power    PRESENCE optional    },
    ...
}

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

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

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

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

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

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

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

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

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

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

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

DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD CRITICALITY reject
    EXTENSION   DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD    PRESENCE optional }| --
Applicable to 1.28Mcps TDD only
    { ID id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD CRITICALITY reject
    EXTENSION TDD-TPC-DownlinkStepSize  PRESENCE optional}|
    { ID id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD    CRITICALITY ignore
    EXTENSION DL-Power     PRESENCE optional    }|
    { ID id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD    CRITICALITY ignore
    EXTENSION DL-Power     PRESENCE optional    },
    ...
}

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

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

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

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

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

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

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

DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod                       RepetitionPeriod,
    repetitionLength                       RepetitionLength,
    tdd-DPCHOffset                         TDD-DPCHOffset,
```

```
    dL-Timeslot-InformationLCR               DL-TimeslotLCR-Information,
    iE-Extensions                            ProtocolExtensionContainer { { DL-DPCH-LCR-
InformationModify-AddItem-RL-ReconfPrepTDD-ExtIEs} }           OPTIONAL,
    ...
}

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

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

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

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

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

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

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

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD  CRITICALITY ignore
EXTENSION DL-Power      PRESENCE optional    }|
    -- Applicable to 1.28Mcps TDD only
    { ID id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD  CRITICALITY ignore
    EXTENSION DL-Power      PRESENCE optional    },
    -- Applicable to 1.28Mcps TDD only
    ...
}
DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-
Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

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

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

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

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD   ::= SEQUENCE {
    timeSlotLCR                              TimeSlotLCR,
    midambleShiftLCR                         MidambleShiftLCR       OPTIONAL,
```

```
    tFCI-Presence                                TFCI-Presence            OPTIONAL,
    dL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD         DL-Code-LCR-
InformationModify-ModifyList-RL-ReconfPrepTDD          OPTIONAL,
    iE-Extensions                          ProtocolExtensionContainer { { DL-Timeslot-LCR-
InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs} }    OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
DL-Code-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF
DL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDD

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DSCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID                   CRITICALITY ignore     EXTENSION   BindingID
    PRESENCE    optional     }|
    { ID id-transportlayeraddress       CRITICALITY ignore     EXTENSION
    TransportLayerAddress       PRESENCE    optional    },
    ...
}

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

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

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

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

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

USCH-Information-ModifyItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID                   CRITICALITY ignore     EXTENSION   BindingID
    PRESENCE    optional     }|
    { ID id-transportlayeraddress       CRITICALITY ignore     EXTENSION
    TransportLayerAddress       PRESENCE    optional    }|
    { ID id-TnlQos                      CRITICALITY   ignore   EXTENSION   TnlQos
    PRESENCE optional    },
    ...
}

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

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

}

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

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

RL-Information-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-InitDL-Power        CRITICALITY ignore      EXTENSION DL-Power        PRESENCE optional
    { ID id-RL-Specific-DCH-Info        CRITICALITY ignore      EXTENSION   RL-Specific-DCH-Info
    { 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-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD  CRITICALITY ignore  EXTENSION DL-
TimeslotISCPInfoLCR PRESENCE optional    },
    -- Applicable to 1.28Mcps TDD only
    ...
}

HSDSCH-DeleteList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-DeleteItem-
RL-ReconfPrepTDD

HSDSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {
    hsDSCH-MACdFlow-ID                       HSDSCH-MACdFlow-ID,
    iE-Extensions                            ProtocolExtensionContainer { { HSDSCH-
DeleteItem-RL-ReconfPrepTDD-ExtIEs} }     OPTIONAL,
    ...
}

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

<<<<<<<<<<<<< partly ommited >>>>>>>>>>>>>>>

## 9.3.4    Information Elements Definitions

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

<<<<<<<<<<<<< partly ommited >>>>>>>>>>>>>>>

```
-- =======================================
-- D
-- =======================================

DATA-ID ::= INTEGER (0..3)

DCH-ID ::= INTEGER (0..255)

DCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-FDD-InformationItem

DCH-FDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator      PayloadCRC-PresenceIndicator,
    ul-FP-Mode                        UL-FP-Mode,
    toAWS                             ToAWS,
    toAWE                             ToAWE,
    dCH-SpecificInformationList       DCH-Specific-FDD-InformationList,
    iE-Extensions                     ProtocolExtensionContainer { { DCH-FDD-InformationItem-
ExtIEs} }   OPTIONAL,
```

```
    ...
}

DCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { 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,
    ul-TransportFormatSet           TransportFormatSet,
    dl-TransportFormatSet           TransportFormatSet,
    allocationRetentionPriority     AllocationRetentionPriority,
    frameHandlingPriority           FrameHandlingPriority,
    qE-Selector                     QE-Selector,
    iE-Extensions                   ProtocolExtensionContainer { { DCH-Specific-FDD-Item-ExtIEs}
}   OPTIONAL,
    ...
}

DCH-Specific-FDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Unidirectional-DCH-Indicator    CRITICALITY ignore  EXTENSION Unidirectional-DCH-
Indicator   PRESENCE optional    },
    ...
}

DCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-InformationResponseItem

DCH-InformationResponseItem ::= SEQUENCE {
    dCH-ID                                  DCH-ID,
    bindingID                               BindingID           OPTIONAL,
    transportLayerAddress                   TransportLayerAddress   OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { DCH-
InformationResponseItem-ExtIEs} }      OPTIONAL,
    ...
}

DCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-TDD-InformationItem

DCH-TDD-InformationItem ::= SEQUENCE {
    payloadCRC-PresenceIndicator        PayloadCRC-PresenceIndicator,
    ul-FP-Mode                          UL-FP-Mode,
    toAWS                               ToAWS,
    toAWE                              ToAWE,
    dCH-SpecificInformationList         DCH-Specific-TDD-InformationList,
    iE-Extensions                       ProtocolExtensionContainer { { DCH-TDD-InformationItem-
ExtIEs} }      OPTIONAL,
    ...
}

DCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    {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,
    dl-CCTrCH-ID                    CCTrCH-ID,
    ul-TransportFormatSet           TransportFormatSet,
    dl-TransportFormatSet           TransportFormatSet,
    allocationRetentionPriority     AllocationRetentionPriority,
    frameHandlingPriority           FrameHandlingPriority,
    qE-Selector                     QE-Selector                 OPTIONAL,
    -- This IE shall be present if DCH is part of set of Coordinated DCHs
    iE-Extensions                   ProtocolExtensionContainer { { DCH-Specific-TDD-Item-
ExtIEs} }      OPTIONAL,
    ...
```

```
}

DCH-Specific-TDD-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-Unidirectional-DCH-Indicator   CRITICALITY ignore  EXTENSION Unidirectional-DCH-
Indicator   PRESENCE optional   },
    ...
}

FDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF FDD-DCHs-to-ModifyItem

FDD-DCHs-to-ModifyItem   ::= SEQUENCE {
    ul-FP-Mode                          UL-FP-Mode      OPTIONAL,
    toAWS                               ToAWS           OPTIONAL,
    toAWE                               ToAWE           OPTIONAL,
    transportBearerRequestIndicator     TransportBearerRequestIndicator,
    dCH-SpecificInformationList         DCH-ModifySpecificInformation-FDD,
    iE-Extensions                       ProtocolExtensionContainer { { FDD-DCHs-to-ModifyItem-
ExtIEs} }       OPTIONAL,
    ...
}

FDD-DCHs-to-ModifyItem-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlQos                       CRITICALITY ignore    EXTENSION TnlQos      PRESENCE
optional},
    ...
}

DCH-ModifySpecificInformation-FDD::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-FDD

DCH-ModifySpecificItem-FDD::=   SEQUENCE {
    dCH-ID                              DCH-ID,
    ul-TransportFormatSet               TransportFormatSet          OPTIONAL,
    dl-TransportFormatSet               TransportFormatSet          OPTIONAL,
    allocationRetentionPriority         AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority               FrameHandlingPriority       OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { DCH-
ModifySpecificItem-FDD-ExtIEs} }       OPTIONAL,
    ...
}

DCH-ModifySpecificItem-FDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}


TDD-DCHs-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifyItem-TDD

DCH-ModifyItem-TDD ::= SEQUENCE {
    ul-FP-Mode                          UL-FP-Mode      OPTIONAL,
    toAWS                               ToAWS           OPTIONAL,
    toAWE                               ToAWE           OPTIONAL,
    transportBearerRequestIndicator     TransportBearerRequestIndicator,
    dCH-SpecificInformationList         DCH-ModifySpecificInformation-TDD,
    iE-Extensions                       ProtocolExtensionContainer { { TDD-DCHs-to-ModifyItem-
ExtIEs} }           OPTIONAL,
    ...
}

TDD-DCHs-to-ModifyItem-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    {ID id-TnlQos                       CRITICALITY ignore    EXTENSION TnlQos      PRESENCE
optional},
    ...
}

DCH-ModifySpecificInformation-TDD ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF DCH-ModifySpecificItem-TDD

DCH-ModifySpecificItem-TDD ::=  SEQUENCE {
    dCH-ID                              DCH-ID,
    ul-CCTrCH-ID                        CCTrCH-ID                   OPTIONAL,
    dl-CCTrCH-ID                        CCTrCH-ID                   OPTIONAL,
    ul-TransportFormatSet               TransportFormatSet          OPTIONAL,
    dl-TransportFormatSet               TransportFormatSet          OPTIONAL,
    allocationRetentionPriority         AllocationRetentionPriority OPTIONAL,
    frameHandlingPriority               FrameHandlingPriority       OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { DCH-
ModifySpecificItem-TDD-ExtIEs} }           OPTIONAL,
    ...
}
```

```
DCH-ModifySpecificItem-TDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

<<<<<<<<<<<< partly ommited >>>>>>>>>>>>>>>>

```
DSCH-ID ::= INTEGER (0..255)

DSCH-InformationResponse ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-InformationResponseItem

DSCH-InformationResponseItem ::= SEQUENCE {
    dSCH-ID                              DSCH-ID,
    bindingID                            BindingID                OPTIONAL,
    transportLayerAddress                TransportLayerAddress    OPTIONAL,
    iE-Extensions                        ProtocolExtensionContainer { { DSCH-
InformationResponseItem-ExtIEs } }    OPTIONAL,
    ...
}

DSCH-InformationResponseItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-FDD-Common-Information ::= SEQUENCE {
    enhancedDSCHPCIndicator       EnhancedDSCHPCIndicator    OPTIONAL,
    enhancedDSCHPC                EnhancedDSCHPC             OPTIONAL,
    -- The IE shall be present if the Enhanced DSCH PC Indicator IE is set to "Enhanced DSCH PC
Active in the UE".
    iE-Extensions                 ProtocolExtensionContainer { { DSCH-FDD-Common-Information-
ExtIEs} }    OPTIONAL,
    ...
}

DSCH-FDD-Common-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-FDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-FDD-InformationItem

DSCH-FDD-InformationItem ::= SEQUENCE {
    dSCH-ID                      DSCH-ID,
    transportFormatSet           TransportFormatSet,
    allocationRetentionPriority  AllocationRetentionPriority,
    frameHandlingPriority        FrameHandlingPriority,
    toAWS                        ToAWS,
    toAWE                        ToAWE,
    iE-Extensions                ProtocolExtensionContainer { { DSCH-FDD-InformationItem-
ExtIEs} }    OPTIONAL,
    ...
}

DSCH-FDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID                    CRITICALITY ignore    EXTENSION    BindingID
    PRESENCE    optional    }|
    { ID id-transportlayeraddress        CRITICALITY ignore    EXTENSION
    TransportLayerAddress    PRESENCE    optional    },
    ...
}

DSCH-TDD-Information ::= SEQUENCE (SIZE (1..maxNrOfDSCHs)) OF DSCH-TDD-InformationItem

DSCH-TDD-InformationItem ::= SEQUENCE {
    dSCH-ID                      DSCH-ID,
    cCTrCH-ID                    CCTrCH-ID,
    transportFormatSet           TransportFormatSet,
    allocationRetentionPriority  AllocationRetentionPriority,
    frameHandlingPriority        FrameHandlingPriority,
    toAWS                        ToAWS,
    toAWE                        ToAWE,
    iE-Extensions                ProtocolExtensionContainer { { DSCH-TDD-InformationItem-
ExtIEs} }    OPTIONAL,
    ...
```

```
}

DSCH-TDD-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID                   CRITICALITY ignore      EXTENSION   BindingID
    PRESENCE    optional    }|
    { ID id-transportlayeraddress       CRITICALITY ignore      EXTENSION
    TransportLayerAddress       PRESENCE    optional    },
    ...
}

DsField ::= BIT STRING (SIZE (8))
```

<<<<<<<<<<<< partly ommited >>>>>>>>>>>>>>

```
-- ==========================================
--  G
-- ==========================================

GapLength               ::= INTEGER (1..14)
-- Unit slot

GapDuration             ::= INTEGER (1..144,...)
-- Unit frame

GenericTrafficCategory  ::= BIT STRING (SIZE (8))
```

<<<<<<<<<<<< partly ommited >>>>>>>>>>>>>>

```
-- ==========================================
--  T
-- ==========================================
```

<<<<<<<<<<<< partly ommited >>>>>>>>>>>>>>

```
TimingAdjustmentValue ::= CHOICE {
    initialPhase        INTEGER (0..255),
    steadyStatePhase    INTEGER (0..1048575)
}

TimingAdvanceApplied ::= ENUMERATED {
    yes,
    no
}
-- For 1.28Mcps TDD TimingAdvanceApplied = No

TnlQoS ::= CHOICE {
    dsField                 DsField,
    genericTrafficCategory  GenericTrafficCategory,
    ...
}

ToAWE ::= INTEGER (0..2559)
-- Unit ms

ToAWS ::= INTEGER (0..1279)
-- Unit ms
```

```
-- =======================================
--  U
-- =======================================
```

```
USCH-Information ::= SEQUENCE (SIZE (1..maxNrOfUSCHs)) OF USCH-InformationItem

USCH-InformationItem ::= SEQUENCE {
    uSCH-ID                             USCH-ID,
    cCTrCH-ID                           CCTrCH-ID,
    transportFormatSet                  TransportFormatSet,
    allocationRetentionPriority         AllocationRetentionPriority,
    iE-Extensions                       ProtocolExtensionContainer { { USCH-InformationItem-
ExtIEs} }       OPTIONAL,
    ...
}

USCH-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-bindingID                   CRITICALITY ignore    EXTENSION   BindingID
    { ID id-transportlayeraddress       CRITICALITY ignore    EXTENSION
    TransportLayerAddress       PRESENCE    optional    },
    { ID id-TnlQos                      CRITICALITY ignore    EXTENSION   TnlQos  PRESENCE
    optional    },
    ...
}
```

<<<<<<<<<<<< next change >>>>>>>>>>>>>>>>

## 9.3.6     Constant Definitions

```
-- ************************************************************
--
-- Constant definitions
--
-- ************************************************************
```

<<<<<<<<<<<< next change >>>>>>>>>>>>>>>>

```
-- ************************************************************
--
-- IEs
--
-- ************************************************************

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

```
id-CCP-InformationItem-ResourceStatusInd                        ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp                                ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd                       ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp                                ProtocolIE-ID ::= 19
id-CellParameterID                                              ProtocolIE-ID ::= 23
id-CFN                                                          ProtocolIE-ID ::= 24
id-C-ID                                                         ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy                                    ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt                          ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst                          ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp                           ProtocolIE-ID ::= 33
id-CommonMeasurementType                                        ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID                                      ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD                  ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD                  ProtocolIE-ID ::= 37
id-CommunicationControlPortID                                   ProtocolIE-ID ::= 40
id-ConfigurationGenerationID                                    ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID                                  ProtocolIE-ID ::= 44
id-CriticalityDiagnostics                                       ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD                                              ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD                                 ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD                                              ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD                              ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD                              ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD                              ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD                              ProtocolIE-ID ::= 55
id-DCH-FDD-Information                                          ProtocolIE-ID ::= 56
id-DCH-TDD-Information                                          ProtocolIE-ID ::= 57
id-DCH-InformationResponse                                      ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify                                           ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify                                           ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD                              ProtocolIE-ID ::= 65
id-DCH-RearrangeList-Bearer-RearrangeInd                        ProtocolIE-ID ::= 135
id-DedicatedMeasurementObjectType-DM-Rprt                       ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst                       ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp                        ProtocolIE-ID ::= 69
id-DedicatedMeasurementType                                     ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD                    ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD                 ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD                    ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD                   ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD                      ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD                         ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD                         ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD                          ProtocolIE-ID ::= 83
id-DL-DPCH-TimingAdjustment                                     ProtocolIE-ID ::= 21
id-DL-ReferencePowerInformationItem-DL-PC-Rqst                  ProtocolIE-ID ::= 84
id-DLReferencePower                                             ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst                              ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD                                ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD                                             ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD                             ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD                             ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD                                             ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD                 ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD                 ProtocolIE-ID ::= 100
id-DSCH-InformationResponse                                     ProtocolIE-ID ::= 105
id-DSCH-FDD-Information                                         ProtocolIE-ID ::= 106
id-DSCH-TDD-Information                                         ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD                             ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD                             ProtocolIE-ID ::= 112
id-DSCH-RearrangeList-Bearer-RearrangeInd                       ProtocolIE-ID ::= 136
id-End-Of-Audit-Sequence-Indicator                             ProtocolIE-ID ::= 113
id-FACH-Information                                             ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd                       ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD                       ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD                      ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD                      ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd                             ProtocolIE-ID ::= 123
id-Local-Cell-ID                                                ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp                    ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd           ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd          ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp                    ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp                          ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd                 ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd                ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp                          ProtocolIE-ID ::= 128
```

```
id-AdjustmentPeriod                                          ProtocolIE-ID ::= 129
id-MaxAdjustmentStep                                         ProtocolIE-ID ::= 130
id-MaximumTransmissionPower                                  ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient                              ProtocolIE-ID ::= 132
id-MeasurementID                                             ProtocolIE-ID ::= 133
id-MessageStructure                                          ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst           ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID                              ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation                    ProtocolIE-ID ::= 455
id-P-CCPCH-Information                                        ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd                 ProtocolIE-ID ::= 145
id-P-CPICH-Information                                        ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd                 ProtocolIE-ID ::= 147
id-P-SCH-Information                                          ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD                      ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD                       ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD                         ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD                      ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD                      ProtocolIE-ID ::= 157
id-PCH-Information                                            ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst                ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst             ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst                         ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst                      ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst                      ProtocolIE-ID ::= 165
id-PICH-Information                                           ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD                        ProtocolIE-ID ::= 168
id-PowerAdjustmentType                                       ProtocolIE-ID ::= 169
id-PRACH-Information                                          ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD               ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD                ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD               ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD                ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD                 ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD                  ProtocolIE-ID ::= 180
id-PrimaryScramblingCode                                     ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD                        ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD                         ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst                ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst             ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst                         ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst                      ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst                      ProtocolIE-ID ::= 189
id-RACH-Information                                           ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD                     ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD                      ProtocolIE-ID ::= 197
id-ReportCharacteristics                                     ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd                            ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd                            ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt                                ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst                                ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp                                 ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD                     ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst                        ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd                          ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd                  ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD                       ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRqstFDD                       ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd                          ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRqstFDD                        ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRqstFDD                     ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRqst                        ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd                  ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD                       ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRqstFDD                       ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRqstFDD                        ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD              ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady                 ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp                   ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD                 ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD              ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady                 ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp                   ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD                 ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD                  ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD                     ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRqstTDD                         ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRqstTDD                           ProtocolIE-ID ::= 228
```

```
id-RL-Information-RL-ReconfPrepTDD                                  ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRqstTDD                                   ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure                  ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt                                  ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp                                   ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd                            ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd                           ProtocolIE-ID ::= 242
id-S-CCPCH-Information                                              ProtocolIE-ID ::= 247
id-S-CPICH-Information                                              ProtocolIE-ID ::= 249
id-SCH-Information                                                  ProtocolIE-ID ::= 251
id-S-SCH-Information                                                ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD                        ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD              ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD                   ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD              ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD              ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD              ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD              ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD                     ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRqstFDD                      ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate                       ProtocolIE-ID ::= 266
id-SFN                                                              ProtocolIE-ID ::= 268
id-SignallingBearerRequestIndicator                                ProtocolIE-ID ::= 138
id-ShutdownTimer                                                   ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator                              ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD        ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD           ProtocolIE-ID ::= 271
id-SyncCase                                                        ProtocolIE-ID ::= 274
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH                    ProtocolIE-ID ::= 275
id-T-Cell                                                          ProtocolIE-ID ::= 276
id-TargetCommunicationControlPortID                                ProtocolIE-ID ::= 139
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD                    ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD                     ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied                                    ProtocolIE-ID ::= 279
id-TypeOfError                                                     ProtocolIE-ID ::= 508
id-UARFCNforNt                                                     ProtocolIE-ID ::= 280
id-UARFCNforNd                                                     ProtocolIE-ID ::= 281
id-UARFCNforNu                                                     ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD                      ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD                   ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD                      ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD                     ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD                        ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD                            ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD                            ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD                             ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD      ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD         ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD          ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD             ProtocolIE-ID ::= 301
id-USCH-Information-Add                                             ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD                    ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD                    ProtocolIE-ID ::= 306
id-USCH-InformationResponse                                        ProtocolIE-ID ::= 309
id-USCH-Information                                                 ProtocolIE-ID ::= 310
id-USCH-RearrangeList-Bearer-RearrangeInd                          ProtocolIE-ID ::= 141
id-Active-Pattern-Sequence-Information                             ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD                       ProtocolIE-ID ::= 316
id-AdjustmentRatio                                                 ProtocolIE-ID ::= 317
id-AP-AICH-Information                                              ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD                    ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD                       ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailure                                  ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD                               ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD                               ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure                                    ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD                                  ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD                                  ProtocolIE-ID ::= 329
id-CDCA-ICH-Information                                             ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD                   ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode                             ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD                    ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag                              ProtocolIE-ID ::= 335
id-CPCH-Information                                                 ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp                                  ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD                       ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD                  ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD              ProtocolIE-ID ::= 347
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id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD             ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD             ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD             ProtocolIE-ID ::= 350
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD            ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD            ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD              ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD          ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD        ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD        ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count                                        ProtocolIE-ID ::= 358
id-DPC-Mode                                                     ProtocolIE-ID ::= 450
id-DPCHConstant                                                 ProtocolIE-ID ::= 359
id-DSCH-FDD-Common-Information                                  ProtocolIE-ID ::= 94
id-EnhancedDSCHPC                                               ProtocolIE-ID ::= 110
id-EnhancedDSCHPCIndicator                                      ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp                           ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD         ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp                                ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD                       ProtocolIE-ID ::= 375
id-PCPCH-Information                                            ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD                      ProtocolIE-ID ::= 380
id-PRACHConstant                                               ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD                   ProtocolIE-ID ::= 383
id-PUSCHConstant                                               ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp                              ProtocolIE-ID ::= 385
id-SSDT-CellIDforEDSCHPC                                        ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst               ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst                ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information               ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD              ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD            ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD           ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD           ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD           ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD           ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD           ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD             ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD         ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD       ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD       ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD             ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD             ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset                          ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset                      ProtocolIE-ID ::= 414
id-ResetIndicator                                              ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD                   ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD           ProtocolIE-ID ::= 418
id-TFCI2-BearerInformationResponse                             ProtocolIE-ID ::= 419
id-TFCI2BearerRequestIndicator                                 ProtocolIE-ID ::= 142
id-TimingAdvanceApplied                                        ProtocolIE-ID ::= 287
id-CFNReportingIndicator                                       ProtocolIE-ID ::= 6
id-SFNReportingIndicator                                       ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus                                         ProtocolIE-ID ::= 12
id-TimeslotISCPInfo                                            ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD                       ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD                      ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd                        ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd                        ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD                          ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD                     ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD               ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD                 ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD           ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD         ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD     ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD      ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD           ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD            ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD         ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD                              ProtocolIE-ID ::= 429
id-CSBTransmissionID                                           ProtocolIE-ID ::= 430
id-CSBMeasurementID                                            ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD                  ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod                                         ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod                                 ProtocolIE-ID ::= 434
id-SyncFrameNumber                                            ProtocolIE-ID ::= 437
id-SynchronisationReportType                                  ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics                       ProtocolIE-ID ::= 439
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id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD    ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD                    ProtocolIE-ID ::= 119
id-ReferenceClockAvailability                                      ProtocolIE-ID ::= 435
id-ReferenceSFNoffset                                              ProtocolIE-ID ::= 436
id-InformationExchangeID                                           ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst                        ProtocolIE-ID ::= 445
id-InformationType                                                 ProtocolIE-ID ::= 446
id-InformationReportCharacteristics                               ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp                         ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt                        ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD                     ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD                      ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD                     ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD                      ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD                          ProtocolIE-ID ::= 74
id-DwPCH-LCR-Information                                           ProtocolIE-ID ::= 78
id-DwPCH-LCR-InformationList-AuditRsp                              ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD                          ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD                         ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd                          ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD                             ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD                            ProtocolIE-ID ::= 174
id-FPACH-LCR-Information                                           ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp                                  ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp                              ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd                     ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD                          ProtocolIE-ID ::= 312
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD                         ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD                         ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD                                 ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD                                ProtocolIE-ID ::= 458
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD                           ProtocolIE-ID ::= 459
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD                      ProtocolIE-ID ::= 461
id-RL-InformationResponse-LCR-RL-SetupRspTDD                       ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD             ProtocolIE-ID ::= 465
id-TimeSlot                                                       ProtocolIE-ID ::= 495
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD                ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD                 ProtocolIE-ID ::= 467
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD                       ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rqst                                            ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD                          ProtocolIE-ID ::= 470
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD                  ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD                  ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD             ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD                 ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD          ProtocolIE-ID ::= 477
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD   ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD                          ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD               ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList                           ProtocolIE-ID ::= 483
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD                      ProtocolIE-ID ::= 485
id-UL-SIRTarget                                                   ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst                        ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst              ProtocolIE-ID ::= 487
id-PDSCH-Information-Cell-SetupRqstFDD                             ProtocolIE-ID ::= 26
id-PDSCH-Information-Cell-ReconfRqstFDD                            ProtocolIE-ID ::= 27
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst                     ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst        ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst                        ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst              ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst                     ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst        ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD                          ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD                                 ProtocolIE-ID ::= 497
id-Power-Local-Cell-Group-InformationItem-AuditRsp                ProtocolIE-ID ::= 498
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd       ProtocolIE-ID ::= 499
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd      ProtocolIE-ID ::= 500
id-Power-Local-Cell-Group-InformationList-AuditRsp                ProtocolIE-ID ::= 501
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd       ProtocolIE-ID ::= 502
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd      ProtocolIE-ID ::= 503
id-Power-Local-Cell-Group-ID                                      ProtocolIE-ID ::= 504
id-PUSCH-Info-DM-Rqst                                             ProtocolIE-ID ::= 505
id-GPUSCH-Info-DM-Rsp                                             ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt                                             ProtocolIE-ID ::= 507
id-InitDL-Power                                                   ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod                                  ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification                       ProtocolIE-ID ::= 512
id-SFNSFNMeasurementValueInformation                              ProtocolIE-ID ::= 513
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id-SFNSFNMeasurementThresholdInformation                          ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation                           ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation                       ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR                                  ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD                   ProtocolIE-ID ::= 51
id-DL-PowerBalancing-Information                                  ProtocolIE-ID ::= 28
id-DL-PowerBalancing-ActivationIndicator                          ProtocolIE-ID ::= 29
id-DL-PowerBalancing-UpdatedIndicator                             ProtocolIE-ID ::= 30
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD                        ProtocolIE-ID ::= 517
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD                     ProtocolIE-ID ::= 518
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD                       ProtocolIE-ID ::= 519
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD                ProtocolIE-ID ::= 41
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD               ProtocolIE-ID ::= 42
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst                      ProtocolIE-ID ::= 522
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst               ProtocolIE-ID ::= 523
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst                  ProtocolIE-ID ::= 524
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst                   ProtocolIE-ID ::= 525
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst                       ProtocolIE-ID ::= 526
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst                  ProtocolIE-ID ::= 527
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst                  ProtocolIE-ID ::= 528
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst             ProtocolIE-ID ::= 529
id-bindingID                                                      ProtocolIE-ID ::= 102
id-RL-Specific-DCH-Info                                           ProtocolIE-ID ::= 103
id-transportlayeraddress                                          ProtocolIE-ID ::= 104
id-DelayedActivation                                              ProtocolIE-ID ::= 231
id-DelayedActivationList-RL-ActivationCmdFDD                      ProtocolIE-ID ::= 232
id-DelayedActivationInformation-RL-ActivationCmdFDD              ProtocolIE-ID ::= 233
id-DelayedActivationList-RL-ActivationCmdTDD                      ProtocolIE-ID ::= 234
id-DelayedActivationInformation-RL-ActivationCmdTDD             ProtocolIE-ID ::= 235
id-neighbouringTDDCellMeasurementInformationLCR                  ProtocolIE-ID ::= 58
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD           ProtocolIE-ID ::= 543
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD         ProtocolIE-ID ::= 544
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD          ProtocolIE-ID ::= 545
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD      ProtocolIE-ID ::= 546
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD                ProtocolIE-ID ::= 547
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD                    ProtocolIE-ID ::= 548
id-SyncDLCodeIdThreInfoLCR                                       ProtocolIE-ID ::= 549
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD               ProtocolIE-ID ::= 550
id-DwPCH-Power                                                   ProtocolIE-ID ::= 551
id-AccumulatedClockupdate-CellSyncReprtTDD                       ProtocolIE-ID ::= 552
id-Angle-Of-Arrival-Value-LCR                                    ProtocolIE-ID ::= 521
id-HSDSCH-FDD-Information                                         ProtocolIE-ID ::= 530
id-HSDSCH-FDD-Information-Response                                ProtocolIE-ID ::= 531
id-HSDSCH-FDD-Information-to-Add                                  ProtocolIE-ID ::= 532
id-HSDSCH-FDD-Information-to-Delete                               ProtocolIE-ID ::= 533
id-HSDSCH-Information-to-Modify                                   ProtocolIE-ID ::= 534
id-HSDSCH-RNTI                                                    ProtocolIE-ID ::= 535
id-HSDSCH-TDD-Information                                         ProtocolIE-ID ::= 536
id-HSDSCH-TDD-Information-Response                                ProtocolIE-ID ::= 537
id-HSDSCH-TDD-Information-Response-LCR                            ProtocolIE-ID ::= 538
id-HSDSCH-TDD-Information-to-Add                                  ProtocolIE-ID ::= 539
id-HSDSCH-TDD-Information-to-Delete                               ProtocolIE-ID ::= 540
id-HSPDSCH-RL-ID                                                  ProtocolIE-ID ::= 541
id-PrimCCPCH-RSCP-DL-PC-RqstTDD                                   ProtocolIE-ID ::= 542
id-Qth-Parameter                                                  ProtocolIE-ID ::= 64
id-PDSCH-RL-ID                                                    ProtocolIE-ID ::= 66
id-HSDSCH-RearrangeList-Bearer-RearrangeInd                      ProtocolIE-ID ::= 553
id-UL-Synchronisation-Parameters-LCR                             ProtocolIE-ID ::= 554
id-HSDSCH-FDD-Update-Information                                  ProtocolIE-ID ::= 555
id-HSDSCH-TDD-Update-Information                                  ProtocolIE-ID ::= 556
id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD        ProtocolIE-ID ::= 558
id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD        ProtocolIE-ID ::= 559
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD                    ProtocolIE-ID ::= 560
id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRqstTDD                 ProtocolIE-ID ::= 561
id-TDD-TPC-DownlinkStepSize-RL-AdditionRqstTDD                   ProtocolIE-ID ::= 562
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD    ProtocolIE-ID ::= 563
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD ProtocolIE-ID ::= 564
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD   ProtocolIE-ID ::= 565
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD      ProtocolIE-ID ::= 566
id-CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD                       ProtocolIE-ID ::= 567
id-CCTrCH-Minimum-DL-Power-RL-SetupRqstTDD                       ProtocolIE-ID ::= 568
id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD                    ProtocolIE-ID ::= 569
id-CCTrCH-Minimum-DL-Power-RL-AdditionRqstTDD                    ProtocolIE-ID ::= 570
id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD       ProtocolIE-ID ::= 571
id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD       ProtocolIE-ID ::= 572
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD    ProtocolIE-ID ::= 573
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD    ProtocolIE-ID ::= 574
id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD ProtocolIE-ID ::= 575
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id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD    ProtocolIE-ID ::= 576
id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD         ProtocolIE-ID ::= 577
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD        ProtocolIE-ID ::= 578
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD        ProtocolIE-ID ::= 579
id-Initial-DL-Power-TimeslotLCR-InformationItem                     ProtocolIE-ID ::= 580
id-Maximum-DL-Power-TimeslotLCR-InformationItem                     ProtocolIE-ID ::= 581
id-Minimum-DL-Power-TimeslotLCR-InformationItem                     ProtocolIE-ID ::= 582
id-HS-DSCHProvidedBitRate                                           ProtocolIE-ID ::= 583
id-HS-DSCHProvidedBitRateValue                                      ProtocolIE-ID ::= 584
id-HS-DSCHRequiredPower                                             ProtocolIE-ID ::= 585
id-HS-DSCHRequiredPowerValue                                        ProtocolIE-ID ::= 586
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission ProtocolIE-ID ::= 587
id-HS-SICH-Reception-Quality                                        ProtocolIE-ID ::= 588
id-HS-SICH-Reception-Quality-Measurement-Value                      ProtocolIE-ID ::= 589
id-HSSICH-Info-DM-Rprt                                              ProtocolIE-ID ::= 590
id-HSSICH-Info-DM-Rqst                                              ProtocolIE-ID ::= 591
id-HSSICH-Info-DM-Rsp                                               ProtocolIE-ID ::= 592
id-Best-Cell-Portions-Value                                        ProtocolIE-ID ::= 593
id-Primary-CPICH-Usage-for-Channel-Estimation                      ProtocolIE-ID ::= 594
id-Secondary-CPICH-Information-Change                               ProtocolIE-ID ::= 595
id-NumberOfReportedCellPortion                                      ProtocolIE-ID ::= 596
id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD                       ProtocolIE-ID ::= 599
id-Unidirectional-DCH-Indicator                                    ProtocolIE-ID ::= 602
id-TnlQoS                                                          ProtocolIE-ID ::= 616

END
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