

**TSG RAN Meeting #19**  
**Birmingham, UK, 11 - 14 March 2003**

**RP-030062**

**Title** CRs (Rel-5 only) to 25.423  
**Source** TSG RAN WG3  
**Agenda Item** 8.3.5

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-030077	25.423	5.4.0	5.5.0	REL-5	778	-	F	Correction of Guaranteed DL Rate	TEI5
R3-030317	25.423	5.4.0	5.5.0	REL-5	780	1	F	Correction of the TDD UE capabilities necessary to pass from SRNC to CRNC	TEI5

## CHANGE REQUEST

# 25.423 CR 778 #rev - # Current version: 5.4.0 #

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

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

<b>Title:</b>	# Correction of Guaranteed DL Rate	
<b>Source:</b>	# RAN WG3	
<b>Work item code:</b>	# TEI5	<b>Date:</b> # 17/02/2003
<b>Category:</b>	# F	<b>Release:</b> # Rel-5
Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
<b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification)		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)
Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		

<b>Reason for change:</b>	# There is an error in the Radio Link Setup procedure text when receiving <i>Guaranteed DL Rate</i> IE. Currently it is stated the the DRNS shall apply the <i>Guaranteed Rate</i> in the uplink of this DCH. This is not correct, the <i>Guaranteed Rate</i> shall be applied in the downlink.
<b>Summary of change:</b>	# Replace uplink with downlink in the procedure text for <i>Guaranteed DL Rate</i> IE.
<b>Impact Assessment:</b> This CR has no impact with the previous version of the specification (same release) since there is no functional modifacaton.	
<b>Consequences if not approved:</b>	# If the CR is not approved, the Radio Link Setup procedure text when receiving <i>Guaranteed DL Rate</i> IE will be incorrect.

<b>Clauses affected:</b>	# 8.3.1.2								
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>Y</td> <td>N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td>X</td> <td></td> </tr> </table> Other core specifications # <input type="checkbox"/> Test specifications # <input type="checkbox"/> O&M Specifications # <input type="checkbox"/>	Y	N	X		X		X	
Y	N								
X									
X									
X									
<b>Other comments:</b>	#								

### How to create CRs using this form:

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

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

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

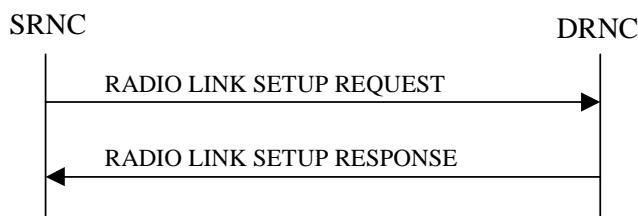
## 8.3.1 Radio Link Setup

### 8.3.1.1 General

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

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

### 8.3.1.2 Successful Operation



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

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

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

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

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

#### Transport Channels Handling:

##### DCH(s):

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

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

[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 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 *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 updownlink 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.

/\* Partly omitted \*/

## CHANGE REQUEST

# 25.423 CR 780 # rev 1 # Current version: 5.4.0 #

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

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

<b>Title:</b>	# Correction of the TDD UE capabilities necessary to pass from SRNC to CRNC	
<b>Source:</b>	# RAN WG3	
<b>Work item code:</b>	# TE15	<b>Date:</b> # 23/01/2002
<b>Category:</b>	# <b>F</b> Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	<b>Release:</b> # Rel-5 Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

<b>Reason for change:</b>	# For physical channel allocation in TDD the CRNC needs the values of certain UE capabilities such as maximum codes per timeslot and per frame. However the current specification does not allow the passing of the maximum codes per timeslot. There the CRNC may assume in its physical allocations that the UE has greater capabilities than it has in reality. In addition for LCR the parameter ranges for UE capabilities need to be adjusted for the number of codes and timeslots possible in LCR, and an indication of the support of 8PSK needs to be passed.
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<b>Summary of change:</b>	# In Radio Link Setup new parameters are included to allow for SRNC to pass the value of the maximum number of physical channels per timeslot and support of 8PSK, plus the ranges of all of the parameters are clarified for LCR.  Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects only the initial establishment of radio links in TDD for UEs that have capabilities for maximum physical channels per timeslot below the realistic maximum or assume other defaults that are not specified.
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<b>Consequences if not approved:</b>	# A situation may exist where a particular CRNC would not be able to establish a radio link for a particular UE with reduced capability for maximum physical channels per timeslot.
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<b>Clauses affected:</b>	# 8.3.1, 9.1.3, 9.2.3.3A, 9.2.3.3B, 9.2.3.3C, 9.2.3.x1, 9.2.3.x2, 9.3.3, 9.3.4, 9.3.6
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**Y** **N**

<b>Other specs affected:</b>	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td></td><td>X</td></tr> <tr><td></td><td>X</td></tr> <tr><td></td><td>X</td></tr> </table>		X		X		X	Other core specifications	⌘
	X								
	X								
	X								
<b>Other comments:</b>	⌘ x1= 3b ,x2=3D								

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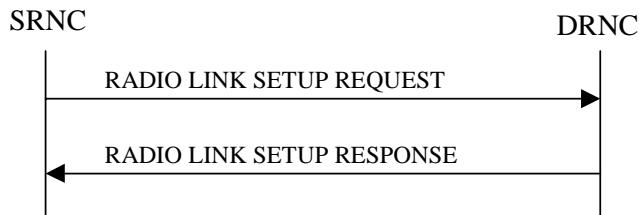
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If the RADIO LINK SETUP REQUEST message includes the *Allowed Queuing Time* IE the DRNS may queue the request for a time period not to exceed the value of the *Allowed Queuing Time* IE before starting to execute the request.

#### Transport Channels Handling:

##### DCH(s):

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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 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 *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, 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.]

[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 *HS-DSCH Information* IE is present, the DRNS shall establish the requested HS-DSCH resources on the RL indicated by the *HS-PDSCH RL ID* IE.

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.

The DRNS shall also include 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. If there are multiple HS-SCCHs assigned for one UE then the same power offset is applied to each of the HS-SCCH channel.]

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 – The DRNS shall set the Measurement Feedback Reporting Cycle to a default value equal to the largest of the k1 and k2 values.]

[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.]

**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*".]

#### **General:**

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

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

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

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

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

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

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

#### **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.

- In case of combining, the *RL ID* IE indicates one of the existing RLs that the concerned RL is combined with.
- In case of not combining, 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.]

[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.]

[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, *DPCCH 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 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 StateIndicator IE* may be absent. The DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Restriction StateIndicator IE* for the neighbouring cells which are controlled by the DRNC in the *Neighbouring FDD Cell Information IE*, the *Neighbouring TDD Cell Information IE* and the *Neighbouring TDD Cell Information LCR IE*.
- If available, the DRNC shall include the *SNA Information IE* for the concerned neighbouring cells in the *Neighbouring FDD Cell Information IE*, the *Neighbouring TDD Cell Information IE* and the *Neighbouring TDD Cell Information LCR IE*.

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

#### General:

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

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

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

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

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

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

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

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

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

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

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

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

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

If the 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 RLSet within the UE Context.]

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

[FDD –The UL out-of-sync algorithm defined in ref. [10] shall, for each of the established RL Set(s), use the maximum value of the parameters N\_OUTSYNC\_IND and T\_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].]

### 9.1.3 RADIO LINK SETUP REQUEST

#### 9.1.3.1 FDD Message

#### 9.1.3.2 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		—	
SRNC-ID	M		RNC-ID 9.2.1.50		YES	reject
S-RNTI	M		9.2.1.53		YES	reject
D-RNTI	O		9.2.1.24		YES	reject
<b>UL Physical Channel Information</b>		1			YES	reject
>Maximum Number of Timeslots <b>per Frame</b>	M		9.2.3.3A	For the UL	—	
>Minimum Spreading Factor	M		9.2.3.4A	For the UL	—	
>Maximum Number of UL Physical Channels per Timeslot	M		9.2.3.3B		—	
> <a href="#">Support of 8PSK</a>	O		<a href="#">9.2.3.x2</a>	<a href="#">Applicable to 1.28Mcps TDD only</a>	YES	ignore
<b>DL Physical Channel Information</b>		1			YES	reject
>Maximum Number of Timeslots <b>per Frame</b>	M		9.2.3.3A	For the DL	—	
>Minimum Spreading Factor	M		9.2.3.4A	For the DL	—	
>Maximum Number of DL Physical Channels <b>per Frame</b>	M		9.2.3.3C		—	
> <a href="#">Maximum Number of DL Physical Channels per Timeslot</a>	O		<a href="#">9.2.3.x1</a>		YES	ignore
> <a href="#">Support of 8PSK</a>	O		<a href="#">9.2.3.x2</a>	<a href="#">Applicable to 1.28Mcps TDD only</a>	YES	ignore
Allowed Queuing Time	O		9.2.1.2		YES	reject
<b>UL CCTrCH Information</b>		0..<maxno ofCCTrCHs>		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		—	
<b>DL CCTrCH Information</b>		0..<maxno ofCCTrCHs>		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		—	
>TDD TPC Downlink Step Size	M		9.2.3.10		—	
> <b>TPC CCTrCH List</b>		0..<maxno CCTrCHs>		List of uplink CCTrCH which provide TPC	—	
>>TPC CCTrCH ID	M		CCTrCH		—	

			ID 9.2.3.2			
DCH Information	O		DCH TDD Information 9.2.3.2A		YES	reject
DSCH Information	O		DSCH TDD Information 9.2.3.3a		YES	reject
USCH Information	O		9.2.3.15		YES	reject
<b>RL Information</b>		1			YES	reject
>RL ID	M		9.2.1.49		-	
>C-ID	M		9.2.1.6		-	
>Frame Offset	M		9.2.1.30		-	
>Special Burst Scheduling	M		9.2.3.7D		-	
>Primary CCPCH RSCP	O		9.2.3.5		-	
>DL Time Slot ISCP Info	O		9.2.3.2D	Applicable to 3.84Mcps TDD only	-	
>DL Time Slot ISCP Info LCR	O		9.2.3.2F	Applicable to 1.28Mcps TDD only	YES	reject
>TSTD Support Indicator	O		9.2.3.13F	Applicable to 1.28Mcps TDD only	YES	ignore
>RL Specific DCH Information	O		9.2.1.49A		YES	ignore
>Delayed Activation	O		9.2.1.19Aa		YES	reject
<b>&gt;UL Synchronisation Parameters LCR</b>		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		-	
Permanent NAS UE Identity	O		9.2.1.73		YES	ignore
HS-DSCH Information	O		HS-DSCH TDD Information 9.2.3.3aa		YES	reject
HS-PDSCH RL ID	C - InfoHSDS CH		RL ID 9.2.1.49		YES	reject
PDSCH-RL-ID	O		RL ID 9.2.1.49		YES	ignore

Condition	Explanation
InfoHSDSCH	This IE shall be present if HS-DSCH Information IE is present.

Range bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCH for one UE.

### 9.2.3.3A Maximum Number of Timeslots **per Frame**

Defines the maximum number of timeslots the UE has the capability of receiving or transmitting [[3.84Mcps TDD – in a frame](#)] [[1.28Mcps TDD – in a subframe](#)].

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of Timeslots <b>per Frame</b>			INTEGER (1..14)	<a href="#">For 1.28Mcps TDD the values 7 through 14 are not used</a>

### 9.2.3.3B Maximum Number of UL Physical Channels per Timeslot

Defines the maximum number of physical channels [[3.84Mcps TDD – per frame](#)] [[1.28Mcps TDD – per subframe](#)] that the UE is capable to transmit.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of UL Physical Channels per Timeslot			INTEGER (1..2)	

### 9.2.3.3C Maximum Number of DL Physical Channels **per Frame**

Defines the maximum number of physical channels [[3.84Mcps TDD – per frame](#)] [[1.28Mcps TDD – per subframe](#)] that the UE is capable to receive.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Maximum Number of DL Physical Channels <b>per Frame</b>			INTEGER (1..224)	<a href="#">For 1.28Mcps TDD the values 97 through 224 are not used</a>

### 9.2.3.x1 Maximum Number of DL Physical Channels per Timeslot

Defines the maximum number of physical channels per timeslot that the UE is capable to receive.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
<a href="#">Maximum Number of DL Physical Channels per Timeslot</a>			INTEGER (1..16)	

### 9.2.3.x2 Support of 8PSK

The *Support of 8PSK* IE indicates whether 8PSK is supported or not.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
<a href="#">Support of 8PSK</a>			ENUMERATED(supported)	

### 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,
    AllowedQueueingTime,
    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,  
IMSI,  
InformationExchangeID,  
InformationReportCharacteristics,  
InformationType,  
InnerLoopDLPCTStatus,  
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,  
PowerAdjustmentType,  
PowerOffset,  
PrimaryCCPCH-RSCP,  
PrimaryCPICH-EcNo,  
PrimaryCPICH-Power,  
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,  
SCH-TimeSlot,  
SAI,  
SFN,  
Secondary-CCPCH-Info,  
Secondary-CCPCH-Info-TDD,  
Secondary-LCR-CCPCH-Info-TDD,  
SNA-Information,  
SpecialBurstScheduling,  
SSDT-CellID,  
SSDT-CellID-Length,  
SSDT-Indication,  
SSDT-SupportIndicator,  
STD-Indicator,  
STD-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,  
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,  
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  
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,
maxNoOfDSCHsLCR,
maxNoOfUSCHsLCR,
maxNrOfCCTrCHsLCR,
maxNrOfTsLCR,
maxNrOfDLTSLCR,
maxNrOfULTSLCR,
maxNrOfDPCHsLCR,
maxNrOfLCRTDDNeighboursPerRNC,
maxNrOfMeasNCell,
maxNrOfMACdFlows,

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,
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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-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-IMSI,  
id-InformationExchangeID,  
id-InformationExchangeObjectType-InfEx-Rprt,  
id-InformationExchangeObjectType-InfEx-Rqst,  
id-InformationExchangeObjectType-InfEx-Rsp,  
id-InformationReportCharacteristics,  
id-InformationType,  
id-InnerLoopDLPCTStatus,  
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-FACH-FlowControlInformation,  
id-PowerAdjustmentType,  
id-PrimCCPCH-RSCP-DL-PC-RqstTDD,  
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-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-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,

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id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID,
id-ContextInfoItem-Reset,
id-Transmission-Gap-Pattern-Sequence-Information,
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-SIRTtarget,
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,
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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

FROM RNSAP-Constants;

-- ****
-- 
-- RADIO LINK SETUP REQUEST FDD
-- 
-- ****

RadioLinkSetupRequestFDD ::= SEQUENCE {
    protocolIES          ProtocolIE-Container {{RadioLinkSetupRequestFDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-Extensions}} OPTIONAL,
    ...
}

RadioLinkSetupRequestFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-SRNC-ID           CRITICALITY reject TYPE RNC-ID           PRESENCE mandatory} |
    { ID id-S-RNTI            CRITICALITY reject TYPE S-RNTI           PRESENCE mandatory } |
    { ID id-D-RNTI            CRITICALITY reject TYPE D-RNTI           PRESENCE optional } |
    { ID id-AllowedQueuingTime CRITICALITY reject TYPE AllowedQueuingTime PRESENCE optional } |
    { ID id-UL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE UL-DPCH-Information-RL-SetupRqstFDD PRESENCE mandatory } |
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD CRITICALITY reject TYPE DL-DPCH-Information-RL-SetupRqstFDD PRESENCE mandatory } |
    { ID id-DCH-FDD-Information CRITICALITY reject TYPE DCH-FDD-Information PRESENCE mandatory } |
    { ID id-DSCH-FDD-Information CRITICALITY reject TYPE DSCH-FDD-Information PRESENCE optional } |
    { ID id-RL-Information-RL-SetupRqstFDD     CRITICALITY notify  TYPE RL-InformationList-RL-SetupRqstFDD PRESENCE mandatory } |
}

```

```

{ ID id-Transmission-Gap-Pattern-Sequence-Information      CRITICALITY reject   TYPE Transmission-Gap-Pattern-Sequence-Information   PRESENCE
optional } |
{ ID id-Active-Pattern-Sequence-Information CRITICALITY reject   TYPE Active-Pattern-Sequence-Information   PRESENCE optional },
...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
  ul-ScramblingCode          UL-ScramblingCode,
  minUL-ChannelisationCodeLength    MinUL-ChannelisationCodeLength,
  maxNrOfUL-DPCHs           MaxNrOfUL-DPCHs      OPTIONAL
  -- This IE shall be present if minUL-ChannelisationCodeLength equals to 4 --
  ul-PunctureLimit          PunctureLimit,
  ul-TFCs                   TFCS,
  ul-DPCCH-SlotFormat       UL-DPCCH-SlotFormat,
  ul-SIRTarget              UL-SIR                  OPTIONAL,
  diversityMode             DiversityMode,
  sSDT-CellIdLength         SSDT-CellID-Length   OPTIONAL,
  s-FieldLength              S-FieldLength        OPTIONAL,
  iE-Extensions             ProtocolExtensionContainer { {UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DPC-Mode           CRITICALITY reject   EXTENSION DPC-Mode   PRESENCE optional },
  ...
}

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
  tFCS                      TFCS,
  dl-DPCH-SlotFormat        DL-DPCH-SlotFormat,
  nrOfDLchannelisationcodes NrofDLchannelisationcodes,
  tFCI-SignallingMode       TFCI-SignallingMode,
  tFCI-Presence              TFCI-Presence        OPTIONAL
  -- This IE shall be present if DL DPCH Slot Format IE is equal to any of the values from 12 to 16 --
  multiplexingPosition      MultiplexingPosition,
  powerOffsetInformation     PowerOffsetInformation-RL-SetupRqstFDD,
  fdd-dl-TPC-DownlinkStepSize FDD-TPC-DownlinkStepSize,
  limitedPowerIncrease       LimitedPowerIncrease,
  innerLoopDLPCStatus       InnerLoopDLPCStatus,
  iE-Extensions             ProtocolExtensionContainer { {DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-SplitType   CRITICALITY reject   EXTENSION SplitType   PRESENCE optional } |
  { ID id-LengthOfTFCI2  CRITICALITY reject   EXTENSION LengthOfTFCI2  PRESENCE optional } ,
  ...
}

PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {
  po1-ForTFCI-Bits          PowerOffset,
  po2-ForTPC-Bits            PowerOffset,
  po3-ForPilotBits           PowerOffset,

```

```

    iE-Extensions
    ...
}

PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-InformationList-RL-SetupRqstFDD      ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationItemIEs-RL-SetupRqstFDD} }

RL-InformationItemIEs-RL-SetupRqstFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationItem-RL-SetupRqstFDD CRITICALITY notify TYPE RL-InformationItem-RL-SetupRqstFDD PRESENCE mandatory }
}

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
    rL-ID
    c-ID
    firstRLS-indicator
    frameOffset
    chipOffset
    propagationDelay
    diversityControlField
    -- This IE shall be present if the RL is not the first one in the RL-InformationList-RL-SetupRqstFDD --
    dl-InitialTX-Power
    primaryCPICH-EcNo
    ssDT-CellID
    transmitDiversityIndicator
    -- This IE shall be present unless Diversity Mode IE in UL DPCH Information group is "none"
    iE-Extensions
    ...
}

RL-InformationItem-RL-SetupRqstFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSDT-CellID PRESENCE conditional } |
    -- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Information IE.
    { ID id-Enhanced-PrimaryCPICH-EcNo CRITICALITY ignore EXTENSION Enhanced-PrimaryCPICH-EcNo PRESENCE optional } |
    { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional } |
    { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional } |
    { ID id-Qth-Parameter CRITICALITY ignore EXTENSION Qth-Parameter PRESENCE optional },
    ...
}

RadioLinkSetupRequestFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Permanent-NAS-UE-Identity CRITICALITY ignore EXTENSION Permanent-NAS-UE-Identity PRESENCE optional } |
    { ID id-DL-PowerBalancing-Information CRITICALITY ignore EXTENSION DL-PowerBalancing-Information PRESENCE optional } |
    { ID id-HSDSCH-FDD-Information CRITICALITY reject EXTENSION HSDSCH-FDD-Information PRESENCE optional } |
    { ID id-HSPDSCH-RL-ID CRITICALITY reject EXTENSION RL-ID PRESENCE conditional },
    ...
}

-- ****
-- 
```

```

-- RADIO LINK SETUP REQUEST TDD
--
-- ****
RadioLinkSetupRequestTDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container {{RadioLinkSetupRequestTDD-IEs}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestTDD-Extensions}}
} OPTIONAL,
...
}

RadioLinkSetupRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
{ ID id-SRNC-ID           CRITICALITY reject TYPE RNC-ID           PRESENCE mandatory } |
{ ID id-S-RNTI            CRITICALITY reject TYPE S-RNTI           PRESENCE mandatory } |
{ ID id-D-RNTI            CRITICALITY reject TYPE D-RNTI           PRESENCE optional } |
{ ID id-UL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject TYPE UL-Physical-Channel-Information-RL-SetupRqstTDD PRESENCE mandatory } |
{ ID id-DL-Physical-Channel-Information-RL-SetupRqstTDD CRITICALITY reject TYPE DL-Physical-Channel-Information-RL-SetupRqstTDD PRESENCE mandatory } |
{ ID id-AllowedQueueingTime CRITICALITY reject TYPE AllowedQueueingTime PRESENCE optional } |
{ ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE UL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE optional } |
{ ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE DL-CCTrCH-InformationList-RL-SetupRqstTDD PRESENCE optional } |
{ ID id-DCH-TDD-Information CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional } |
{ ID id-DSCH-TDD-Information CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional } |
{ ID id-USCH-Information   CRITICALITY reject TYPE USCH-Information  PRESENCE optional } |
{ ID id-RL-Information-RL-SetupRqstTDD      CRITICALITY reject TYPE RL-Information-RL-SetupRqstTDD      PRESENCE mandatory },
...
}

UL-Physical-Channel-Information-RL-SetupRqstTDD ::= SEQUENCE {
    maxNrTimeslots-UL        MaxNrTimeslots,
    minimumSpreadingFactor-UL MinimumSpreadingFactor,
    maxNrULPhysicalchannels  MaxNrULPhysicalchannels,
    iE-Extensions             ProtocolExtensionContainer { {UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
} ...

UL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-TDD-Support-8PSK   CRITICALITY ignore      EXTENSION Support-8PSK      PRESENCE optional },
-- Applicable to 1.28Mcps TDD only
...
}

DL-Physical-Channel-Information-RL-SetupRqstTDD ::= SEQUENCE {
    maxNrTimeslots-DL        MaxNrTimeslots,
    minimumSpreadingFactor-DL MinimumSpreadingFactor,
    maxNrDLPhysicalchannels  MaxNrDLPhysicalchannels,
    iE-Extensions             ProtocolExtensionContainer { {DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
} ...

DL-Physical-Channel-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{ ID id-TDD-maxNrDLPhysicalchannels   CRITICALITY ignore      EXTENSION MaxNrDLPhysicalchannelsTS  PRESENCE optional } |
{ ID id-TDD-Support-8PSK              CRITICALITY ignore      EXTENSION Support-8PSK                PRESENCE optional },

```

```

|   -- Applicable to 1.28Mcps TDD only
|   ...
| }

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

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

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  ul-TFCS            TFCS,
  tFCI-Coding        TFCI-Coding,
  ul-PunctureLimit   PunctureLimit,
  iE-Extensions      ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

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

DL-CCTrCH-InformationItemIEs-RL-SetupRqstTDD RNSAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD  CRITICALITY notify  TYPE DL-CCTrCH-InformationItem-RL-SetupRqstTDD  PRESENCE mandatory  }
}

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCTrCH-ID          CCTrCH-ID,
  dl-TFCS            TFCS,
  tFCI-Coding        TFCI-Coding,
  dl-PunctureLimit   PunctureLimit,
  tdd-TPC-DownlinkStepSize,
  cCTrCH-TPCList     CCTrCH-TPCList-RL-SetupRqstTDD OPTIONAL,
  iE-Extensions      ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
  ...
}

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

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

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

```

```

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

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
    rL-ID                      RL-ID,
    c-ID                       C-ID,
    frameOffset                FrameOffset,
    specialBurstScheduling     SpecialBurstScheduling,
    primaryCCPCH-RSCP          PrimaryCCPCH-RSCP      OPTIONAL,
    dL-TimeSlot-ISCP            DL-TimeSlot-ISCP-Info  OPTIONAL,
    --for 3.84Mcps TDD only
    iE-Extensions               ProtocolExtensionContainer { {RL-Information-RL-SetupRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-RL-SetupRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD   CRITICALITY reject      EXTENSION  DL-TimeSlot-ISCP-LCR-Information PRESENCE
optional   }|
    { ID id-TSTD-Support-Indicator-RL-SetupRqstTDD           CRITICALITY ignore       EXTENSION  TSTD-Support-Indicator      PRESENCE
optional   }|
    --for 1.28Mcps TDD only
    { ID id-RL-Specific-DCH-Info    CRITICALITY ignore      EXTENSION  RL-Specific-DCH-Info    PRESENCE  optional }|
    { ID id-DelayedActivation      CRITICALITY reject      EXTENSION  DelayedActivation PRESENCE optional }|
    { ID id-UL-Synchronisation-Parameters-LCR    CRITICALITY ignore      EXTENSION  UL-Synchronisation-Parameters-LCR  PRESENCE
optional   },  -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    ...
}

RadioLinkSetupRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-Permanent-NAS-UE-Identity        CRITICALITY ignore      EXTENSION Permanent-NAS-UE-Identity  PRESENCE optional }|
    { ID id-HSDSCH-TDD-Information          CRITICALITY reject      EXTENSION HSDSCH-TDD-Information  PRESENCE optional }|
    { ID id-HSPDSCH-RL-ID                  CRITICALITY reject      EXTENSION RL-ID                  PRESENCE conditional }|
    { ID id-PDSCH-RL-ID                   CRITICALITY ignore      EXTENSION RL-ID                  PRESENCE optional },
    ...
}

```

### 9.3.4 Information Element Definitions

```
-- M

MaxNrOfUL-DPCHs      ::= INTEGER (1..6)

MAC-c-sh-SDU-Length   ::= INTEGER (1..5000)

MAC-c-sh-SDU-LengthList ::= SEQUENCE(SIZE(1..maxNrOfMACcshSDU-Length)) OF MAC-c-sh-SDU-Length

MACdPDU-Size ::= INTEGER (1..5000,...)

MACdPDU-Size-IndexList ::= SEQUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem

MACdPDU-Size-IndexItem ::= SEQUENCE {
    SID,
    mACdPDU-Size,
    iE-Extensions
        ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-ExtIEs } }           OPTIONAL,
    ...
}

MACdPDU-Size-IndexItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MACdPDU-Size-IndexList-to-Modify ::= SEQUENCE (SIZE (1..maxNrOfPDUIndexes)) OF MACdPDU-Size-IndexItem-to-Modify

MACdPDU-Size-IndexItem-to-Modify ::= SEQUENCE {
    SID,
    mACdPDU-Size
        OPTIONAL,
    iE-Extensions
        ProtocolExtensionContainer { { MACdPDU-Size-IndexItem-to-Modify-ExtIEs } }           OPTIONAL,
    ...
}

MACdPDU-Size-IndexItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

MAC-hsWindowSize       ::= ENUMERATED {v4, v6, v8, v12, v16, v24, v32,...}

MaximumAllowedULTxPower ::= INTEGER (-50..33)

MaxNrDLPhysicalchannels ::= INTEGER (1..224)
-- 1.28Mcps TDD 97 - 224 are unused

MaxNrDLPhysicalchannelsTS ::= INTEGER (1..16)

MaxNrTimeslots         ::= INTEGER (1..14)
-- 1.28Mcps values 7-14 are unused
```

```

MaxNrULPhysicalchannels ::= INTEGER (1..2)

MaxTFCIvalue ::= INTEGER (1..1023)

MeasurementFilterCoefficient ::= ENUMERATED{k0, k1, k2, k3, k4, k5, k6, k7, k8, k9, k11, k13, k15, k17, k19,...}
-- Measurement Filter Coefficient to be used for measurement

MeasurementID ::= INTEGER (0..1048575)

Measurement-Power-Offset ::= INTEGER(-12 .. 26)
-- Actual value = IE value * 0.5

MinimumSpreadingFactor ::= INTEGER (1..16)

Multi-code-info ::= INTEGER (1..16)

MultipleURAsIndicator ::= ENUMERATED {
    multiple-URAs-exist,
    single-URA-exists
}

MaxAdjustmentStep ::= INTEGER(1..10)
-- Unit Slot

MeasurementChangeTime ::= INTEGER (1..6000,...)
-- The MeasurementChangeTime gives the MeasurementChangeTime
-- in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10 ms

Measurement-Feedback-Offset ::= INTEGER (0..79,...)

MeasurementHysteresisTime ::= INTEGER (1..6000,...)
-- The MeasurementHysteresisTime gives the
-- MeasurementHysteresisTime in number of 10 ms periods.
-- E.g. Value 6000 means 60000ms(1min)
-- Unit is ms, Step is 10ms

MeasurementIncreaseDecreaseThreshold ::= CHOICE {
    sir
    sir-error
    transmitted-code-power
    rscp
    round-trip-time
    ...
    extension-MeasurementIncreaseDecreaseThreshold Extension-MeasurementIncreaseDecreaseThreshold
}

Extension-MeasurementIncreaseDecreaseThreshold ::= ProtocolIE-Single-Container {{ Extension-MeasurementIncreaseDecreaseThresholdIE }}

Extension-MeasurementIncreaseDecreaseThresholdIE RNSAP-PROTOCOL-IES ::= {
    { ID id-Load-Value-IncrDecrThres CRITICALITY reject TYPE Load-Value-IncrDecrThres PRESENCE mandatory } |
}

```

```

{ ID id-Transmitted-Carrier-Power-Value-IncrDecrThres CRITICALITY reject TYPE Transmitted-Carrier-Power-Value-IncrDecrThres PRESENCE
mandatory }|
{ ID id-Received-Total-Wideband-Power-Value-IncrDecrThres CRITICALITY reject TYPE Received-Total-Wideband-Power-Value-IncrDecrThres
PRESENCE mandatory }|
{ ID id-UL-Timeslot-ISCP-Value-IncrDecrThres CRITICALITY reject TYPE UL-Timeslot-ISCP-Value-IncrDecrThres PRESENCE mandatory }|
{ ID id-RT-Load-Value-IncrDecrThres CRITICALITY reject TYPE RT-Load-Value-IncrDecrThres PRESENCE mandatory }|
{ ID id-NRT-Load-Information-Value-IncrDecrThres CRITICALITY reject TYPE NRT-Load-Information-Value-IncrDecrThres PRESENCE mandatory }
}

MeasurementThreshold ::= CHOICE {
    sir
        SIR-Value,
    sir-error
        SIR-Error-Value,
    transmitted-code-power
        Transmitted-Code-Power-Value,
    rscp
        RSCP-Value,
    rx-timing-deviation
        Rx-Timing-Deviation-Value,
    round-trip-time
        Round-Trip-Time-Value,
    ...
    extension-MeasurementThreshold Extension-MeasurementThreshold
}

Extension-MeasurementThreshold ::= ProtocolIE-Single-Container {{ Extension-MeasurementThresholdIE }}
```

**Extension-MeasurementThresholdIE RNSAP-PROTOCOL-IES ::= {**

```

{ ID id-TUTRANGPSMeasurementThresholdInformation CRITICALITY reject TYPE TUTRANGPSMeasurementThresholdInformation PRESENCE mandatory }|
{ ID id-SFNSFNMeasurementThresholdInformation CRITICALITY reject TYPE SFNSFNMeasurementThresholdInformation PRESENCE mandatory }|
{ ID id-Load-Value CRITICALITY reject TYPE Load-Value PRESENCE mandatory }|
{ ID id-Transmitted-Carrier-Power-Value CRITICALITY reject TYPE Transmitted-Carrier-Power-Value PRESENCE mandatory }|
{ ID id-Received-Total-Wideband-Power-Value CRITICALITY reject TYPE Received-Total-Wideband-Power-Value PRESENCE mandatory }|
{ ID id-UL-Timeslot-ISCP-Value CRITICALITY reject TYPE UL-Timeslot-ISCP-Value PRESENCE mandatory }|
{ ID id-RT-Load-Value CRITICALITY reject TYPE RT-Load-Value PRESENCE mandatory }|
{ ID id-NRT-Load-Information-Value CRITICALITY reject TYPE NRT-Load-Information-Value PRESENCE mandatory }|
{ ID id-Rx-Timing-Deviation-Value-LCR CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR PRESENCE mandatory }
```

**}**

MidambleConfigurationBurstType1And3 ::= ENUMERATED {v4, v8, v16}

MidambleConfigurationBurstType2 ::= ENUMERATED {v3, v6}

MidambleShiftAndBurstType ::= CHOICE {

```

type1
    SEQUENCE {
        midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
        midambleAllocationMode CHOICE {
            defaultMidamble NULL,
            commonMidamble NULL,
            ueSpecificMidamble MidambleShiftLong,
            ...
        },
        ...
    },
    type2
        SEQUENCE {
            midambleConfigurationBurstType2 MidambleConfigurationBurstType2,
            midambleAllocationMode CHOICE {
                defaultMidamble NULL,
                ...
            }
        }
    }
}
```

```

commonMidamble           NULL,
ueSpecificMidamble      MidambleShiftShort,
...
},
...
},
type3                   SEQUENCE {
    midambleConfigurationBurstType1And3 MidambleConfigurationBurstType1And3,
    midambleAllocationMode          CHOICE {
        defaultMidamble           NULL,
        ueSpecificMidamble       MidambleShiftLong,
        ...
    },
    ...
},
...
}
}

MidambleShiftLong ::=          INTEGER (0..15)

MidambleShiftShort ::=         INTEGER (0..5)

MidambleShiftLCR ::= SEQUENCE {
    midambleAllocationMode     MidambleAllocationMode,
    midambleShift              MidambleShiftLong      OPTIONAL,
    iE-Extensions             ProtocolExtensionContainer { {MidambleShiftLCR-ExtIEs} }      OPTIONAL,
    ...
}

MidambleAllocationMode ::= ENUMERATED {
    defaultMidamble,
    commonMidamble,
    uESpecificMidamble,
    ...
}

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

MinUL-ChannelisationCodeLength ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    v64,
    v128,
    v256
}

Modulation ::= ENUMERATED {
    qPSK,
    eightPSK,
}

```

```
    ...
}

MultiplexingPosition ::= ENUMERATED {
    fixed,
    flexible
}

MAChs-ResetIndicator ::= ENUMERATED{
    mAChs-NotReset
}
```

```

-- S

SAC ::= OCTET STRING (SIZE (2))

SAI ::= SEQUENCE {
    pLMN-Identity      PLMN-Identity,
    LAC                 LAC,
    SAC                 SAC,
    iE-Extensions       ProtocolExtensionContainer { {SAI-ExtIEs} } OPTIONAL
}

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

SAT-ID ::= INTEGER (0..63)

SCH-TimeSlot ::= INTEGER (0..6)

ScaledAdjustmentRatio ::= INTEGER(0..100)
-- AdjustmentRatio = ScaledAdjustmentRatio / 100

Secondary-CCPCH-Info ::= SEQUENCE {
    fDD-S-CCPCH-Offset          FDD-S-CCPCH-Offset,
    dl-ScramblingCode           DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber FDD-DL-ChannelisationCodeNumber,
    dl-TFCS                      TFCS,
    secondaryCCPCH-SlotFormat   SecondaryCCPCH-SlotFormat,
    tFCI-Presence                TFCI-Presence OPTIONAL,
    -- This IE shall be present only if the Secondary CCPCH Slot Format IE is equal to any of the values from 8 to 17
    multiplexingPosition         MultiplexingPosition,
    sTTD-Indicator               STTD-Indicator,
    fACH-PCH-InformationList    FACH-PCH-InformationList,
    iB-schedulingInformation     IB-SchedulingInformation,
    iE-Extensions                 ProtocolExtensionContainer { { Secondary-CCPCH-Info-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-Info-TDD ::= SEQUENCE {
    dl-TFCS                      TFCS,
    tFCI-Coding                   TFCI-Coding,
    secondary-CCPCH-TDD-InformationList Secondary-CCPCH-TDD-InformationList,
    fACH-InformationList          FACH-InformationList,
    pCH-InformationList           PCH-InformationList,
    iE-Extensions                 ProtocolExtensionContainer { { Secondary-CCPCH-Info-TDD-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCH-Info-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
}

```

```

}

Secondary-LCR-CCPCH-Info-TDD ::= SEQUENCE {
    dl-TFCS                               TFCS,
    tFCI-Coding                            TFCI-Coding,
    secondary-LCR-CCPCH-TDD-InformationList Secondary-LCR-CCPCH-TDD-InformationList,
    fACH-InformationList                  FACH-InformationList,
    pCH-InformationList                  PCH-InformationList,
    iE-Extensions                          ProtocolExtensionContainer { { Secondary-LCR-CCPCH-Info-TDD-ExtIEs } } OPTIONAL,
    ...
}

Secondary-LCR-CCPCH-Info-TDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-CCPCH-TDD-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-CCPCH-TDD-InformationItem

Secondary-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlot                           TimeSlot,
    midambleShiftAndBurstType        MidambleShiftAndBurstType,
    tFCI-Presence                      TFCI-Presence,
    secondary-CCPCH-TDD-Code-Information Secondary-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset          TDD-PhysicalChannelOffset,
    repetitionLength                   RepetitionLength,
    repetitionPeriod                  RepetitionPeriod,
    iE-Extensions                      ProtocolExtensionContainer { { Secondary-CCPCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

Secondary-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-LCR-CCPCH-TDD-InformationList ::= SEQUENCE (SIZE(0.. maxNrOfSCCPCHs)) OF Secondary-LCR-CCPCH-TDD-InformationItem

Secondary-LCR-CCPCH-TDD-InformationItem ::= SEQUENCE {
    timeSlotLCR                         TimeSlotLCR,
    midambleShiftLCR                     MidambleShiftLCR,
    tFCI-Presence                        TFCI-Presence,
    secondary-LCR-CCPCH-TDD-Code-Information Secondary-LCR-CCPCH-TDD-Code-Information,
    tDD-PhysicalChannelOffset            TDD-PhysicalChannelOffset,
    repetitionLength                    RepetitionLength,
    repetitionPeriod                   RepetitionPeriod,
    iE-Extensions                      ProtocolExtensionContainer { { Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs } } OPTIONAL,
    ...
}

Secondary-LCR-CCPCH-TDD-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

Secondary-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs) ) OF Secondary-CCPCH-TDD-Code-InformationItem

Secondary-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCode          TDD-ChannelisationCode,
    iE-Extensions                   ProtocolExtensionContainer { {Secondary-CCPCH-TDD-Code-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

Secondary-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

Secondary-LCR-CCPCH-TDD-Code-Information ::= SEQUENCE ( SIZE (1..maxNrOfSCCPCHs) ) OF Secondary-LCR-CCPCH-TDD-Code-InformationItem

Secondary-LCR-CCPCH-TDD-Code-InformationItem ::= SEQUENCE {
    tDD-ChannelisationCodeLCR      TDD-ChannelisationCodeLCR,
    s-CCPCH-TimeSlotFormat-LCR    TDD-DL-DPCH-TimeSlotFormat-LCR,
    iE-Extensions                  ProtocolExtensionContainer { {Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs} } OPTIONAL,
    ...
}

Secondary-LCR-CCPCH-TDD-Code-InformationItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeslot-related,
    ...
}

Seed ::= INTEGER (0..63)

SFN ::= INTEGER (0..4095)

SFNSFN-FDD ::= INTEGER(0..614399)

SFNSFN-TDD ::= INTEGER(0..40961)

GA-AccessPointPositionwithOptionalAltitude ::= SEQUENCE {
    geographicalCoordinate           GeographicalCoordinate,
    altitudeAndDirection            GA-AltitudeAndDirection OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { {GA-AccessPointPositionwithOptionalAltitude-ExtIEs} } OPTIONAL,
    ...
}

GA-AccessPointPositionwithOptionalAltitude-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

SFNSFNChangeLimit ::= INTEGER (1..256)
-- Unit chip, Step 1/16 chip, Range 1/16..16 chip

```

```

SFNSFNDriftRate ::= INTEGER (-100..100)
-- Unit chip/s, Step 1/256 chip/s, Range -100/256..+100/256 chip/s

SFNSFNDriftRateQuality ::= INTEGER (0..100)
-- Unit chip/s, Step 1/256 chip/s, Range 0..100/256 chip/s

SFNSFNMeasurementThresholdInformation ::= SEQUENCE {
    sFNSFNChangeLimit          SFNSFNChangeLimit           OPTIONAL,
    predictedSFNSFNDeviationLimit PredictedSFNSFNDeviationLimit   OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { SFNSFNMeasurementThresholdInformation-ExtIEs } }   OPTIONAL,
    ...
}

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

SFNSFNMeasurementValueInformation ::= SEQUENCE {
    successfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation      SEQUENCE (SIZE(1..maxNrOfMeasNCell)) OF
        SEQUENCE {
            uc-ID       UC-ID,
            sFNSFNValue      SFNSFNValue,
            sFNSFNQuality     SFNSFNQuality           OPTIONAL,
            sFNSFNDriftRate    SFNSFNDriftRate,
            sFNSFNDriftRateQuality SFNSFNDriftRateQuality,
            sFNSFNTimeStampInformation SFNSFNTimeStampInformation   OPTIONAL,
            iE-Extensions     ProtocolExtensionContainer { {
                SuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs } }   OPTIONAL,
            ...
        },
    unsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformation      SEQUENCE (SIZE(0..maxNrOfMeasNCell-1)) OF
        SEQUENCE {
            uc-ID       UC-ID,
            iE-Extensions     ProtocolExtensionContainer { { UnsuccessfullNeighbouringCellSFNSFNObservedTimeDifferenceMeasurementInformationItem-ExtIEs } }   OPTIONAL,
            ...
        },
    iE-Extensions     ProtocolExtensionContainer { { SFNSFNMeasurementValueInformationItem-ExtIEs } }   OPTIONAL,
    ...
}

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

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

```

```

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

SFNSFNQuality ::= INTEGER (0..255)
-- Unit chip, Step 1/16 chip, Range 0.. 255/16 chip

SFNSFNTimeStampInformation ::= CHOICE {
  SFNSFNTimeStamp-FDD      SFN,
  SFNSFNTimeStamp-TDD      SFNSFNTimeStamp-TDD,
  ...
}

SFNSFNTimeStamp-TDD ::= SEQUENCE {
  SFN          SFN,
  timeSlot     TimeSlot,
  iE-Extensions ProtocolExtensionContainer { { SFNSFNTimeStamp-ExtIEs} } OPTIONAL,
  ...
}

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

SFNSFNValue ::= CHOICE {
  SFNSFN-FDD      SFNSFN-FDD,
  SFNSFN-TDD      SFNSFN-TDD,
  ...
}

SID ::= INTEGER (0..maxNrOfPDUIndexes-1)

SIR-Error-Value      ::= INTEGER (0..125)

SIR-Error-Value-IncrDecrThres      ::= INTEGER (0..124)

SIR-Value           ::= INTEGER (0..63)
-- According to mapping in 25.215/25.225

SIR-Value-IncrDecrThres ::= INTEGER (0..62)

SecondaryCCPCH-SlotFormat      ::= INTEGER (0..17,...)
-- refer to 25.211

S-FieldLength      ::= ENUMERATED {
  v1,
  v2,
  ...
}

```

```
}

SNA-Information ::= SEQUENCE {
    pLMN-Identity    PLMN-Identity,
    listOfSNAs        ListOfSNAs                               OPTIONAL,
    iE-Extensions     ProtocolExtensionContainer { { SNA-Information-ExtIEs } } OPTIONAL,
    ...
}

SNA-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

ListOfSNAs ::= SEQUENCE (SIZE (1.. maxNrOfSNAs, ...)) OF SNACode

SNACode ::= INTEGER (0..65535)

SpecialBurstScheduling ::= INTEGER (1..256)

SplitType ::= ENUMERATED {
    hard,
    logical
}

SpreadingFactor       ::= INTEGER (4| 8| 16| 32| 64| 128| 256)

S-RNTI               ::= INTEGER (0..1048575)
-- From 0 to 2^20-1

SRB-Delay ::= INTEGER(0..7,...)

SSDT-CellID ::= ENUMERATED {
    a,
    b,
    c,
    d,
    e,
    f,
    g,
    h
}

SSDT-CellID-Length ::= ENUMERATED {
    short,
    medium,
    long
}

SSDT-Indication ::= ENUMERATED {
    SSDT-active-in-the-UE,
    SSDT-not-active-in-the-UE
}
```

```
SSDT-SupportIndicator ::= ENUMERATED {
    SSDT-supported,
    SSDT-not-supported
}

STTD-Indicator ::= ENUMERATED {
    active,
    inactive
}

STTD-SupportIndicator ::= ENUMERATED {
    STTD-Supported,
    STTD-not-Supported
}

Support-8PSK ::= ENUMERATED {
    v8PSK-Supported
}

SyncCase ::= INTEGER (1..2,...)

SynchronisationConfiguration ::= SEQUENCE {
    n-INSYNC-IND          INTEGER (1..256),
    n-OUTSYNC-IND         INTEGER (1..256),
    t-RLFailure           INTEGER (0..255),
    -- Unit seconds, Range 0s .. 25.5s, Step 0.1s
    iE-Extensions         ProtocolExtensionContainer { { SynchronisationConfiguration-ExtIEs} }   OPTIONAL,
    ...
}

SynchronisationConfiguration-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

### 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
maxNrOfDSCHs-1                           INTEGER ::= 9
maxNrOfTsLCR                             INTEGER ::= 6
maxNoSat                                INTEGER ::= 16
maxNoGPSTypes                           INTEGER ::= 8
maxNrOfMeasNCell                         INTEGER ::= 96
maxNrOfMeasNCell-1                      INTEGER ::= 95 -- maxNrOfMeasNCell - 1
maxResetContext                          INTEGER ::= 250
maxNrOfHARQProc                           INTEGER ::= 8
maxNrOfHSSCCHCodes                      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-AllowedQueueingTime                  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-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-InformationListIE-RL-ReconfReadyTDD
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-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-TimingAdjustment
id-DLReferencePower
id-DLReferencePowerList-DL-PC-Rqst
id-DL-ReferencePowerInformation-DL-PC-Rqst
id-DPC-Mode
id-DRXCycleLengthCoefficient
id-DedicatedMeasurementObjectType-DM-Fail-Ind
id-DedicatedMeasurementObjectType-DM-Fail
id-DedicatedMeasurementObjectType-DM-Rprt
id-DedicatedMeasurementObjectType-DM-Rqst
id-DedicatedMeasurementObjectType-DM-Rsp
id-DedicatedMeasurementType
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD
id-Guaranteed-Rate-Information
id-IMSI
id-HCS-Prio
id-L3-Information
id-AdjustmentPeriod
id-MaxAdjustmentStep
id-MeasurementFilterCoefficient
id-MessageStructure

```

```

ProtocolIE-ID ::= 21
ProtocolIE-ID ::= 22
ProtocolIE-ID ::= 26
ProtocolIE-ID ::= 27
ProtocolIE-ID ::= 30
ProtocolIE-ID ::= 31
ProtocolIE-ID ::= 32
ProtocolIE-ID ::= 33
ProtocolIE-ID ::= 34
ProtocolIE-ID ::= 35
ProtocolIE-ID ::= 39
ProtocolIE-ID ::= 40
ProtocolIE-ID ::= 43
ProtocolIE-ID ::= 38
ProtocolIE-ID ::= 44
ProtocolIE-ID ::= 45
ProtocolIE-ID ::= 46
ProtocolIE-ID ::= 47
ProtocolIE-ID ::= 48
ProtocolIE-ID ::= 49
ProtocolIE-ID ::= 50
ProtocolIE-ID ::= 51
ProtocolIE-ID ::= 52
ProtocolIE-ID ::= 53
ProtocolIE-ID ::= 54
ProtocolIE-ID ::= 59
ProtocolIE-ID ::= 60
ProtocolIE-ID ::= 61
ProtocolIE-ID ::= 62
ProtocolIE-ID ::= 63
ProtocolIE-ID ::= 64
ProtocolIE-ID ::= 278
ProtocolIE-ID ::= 67
ProtocolIE-ID ::= 68
ProtocolIE-ID ::= 69
ProtocolIE-ID ::= 12
ProtocolIE-ID ::= 70
ProtocolIE-ID ::= 470
ProtocolIE-ID ::= 471
ProtocolIE-ID ::= 71
ProtocolIE-ID ::= 72
ProtocolIE-ID ::= 73
ProtocolIE-ID ::= 74
ProtocolIE-ID ::= 82
ProtocolIE-ID ::= 83
ProtocolIE-ID ::= 41
ProtocolIE-ID ::= 84
ProtocolIE-ID ::= 311
ProtocolIE-ID ::= 85
ProtocolIE-ID ::= 90
ProtocolIE-ID ::= 91
ProtocolIE-ID ::= 92
ProtocolIE-ID ::= 57

```

```

id-MeasurementID
id-Neighbouring-GSM-CellInformation
id-Neighbouring-UMTS-CellInformationItem
id-NRT-Load-Information-Value
id-NRT-Load-Information-Value-IncrDecrThres
id-PagingArea-PagingRqst
id-FACH-FlowControlInformation
id-PartialReportingIndicator
id-Permanent-NAS-UE-Identity
id-PowerAdjustmentType
id-RANAP-RelocationInformation
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-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-InformationResponse-RL-ReconfRspTDD
id-RL-InformationResponseList-RL-SetupRspFDD
id-RL-ReconfigurationFailure-RL-ReconfFail
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

```

```

ProtocolIE-ID ::= 93
ProtocolIE-ID ::= 13
ProtocolIE-ID ::= 95
ProtocolIE-ID ::= 305
ProtocolIE-ID ::= 306
ProtocolIE-ID ::= 102
ProtocolIE-ID ::= 103
ProtocolIE-ID ::= 472
ProtocolIE-ID ::= 17
ProtocolIE-ID ::= 107
ProtocolIE-ID ::= 109
ProtocolIE-ID ::= 110
ProtocolIE-ID ::= 111
ProtocolIE-ID ::= 112
ProtocolIE-ID ::= 113
ProtocolIE-ID ::= 114
ProtocolIE-ID ::= 115
ProtocolIE-ID ::= 116
ProtocolIE-ID ::= 117
ProtocolIE-ID ::= 118
ProtocolIE-ID ::= 119
ProtocolIE-ID ::= 55
ProtocolIE-ID ::= 120
ProtocolIE-ID ::= 121
ProtocolIE-ID ::= 122
ProtocolIE-ID ::= 2
ProtocolIE-ID ::= 123
ProtocolIE-ID ::= 56
ProtocolIE-ID ::= 124
ProtocolIE-ID ::= 125
ProtocolIE-ID ::= 1
ProtocolIE-ID ::= 126
ProtocolIE-ID ::= 127
ProtocolIE-ID ::= 128
ProtocolIE-ID ::= 129
ProtocolIE-ID ::= 130
ProtocolIE-ID ::= 131
ProtocolIE-ID ::= 132
ProtocolIE-ID ::= 133
ProtocolIE-ID ::= 134
ProtocolIE-ID ::= 135
ProtocolIE-ID ::= 136
ProtocolIE-ID ::= 28
ProtocolIE-ID ::= 137
ProtocolIE-ID ::= 141
ProtocolIE-ID ::= 143
ProtocolIE-ID ::= 144
ProtocolIE-ID ::= 145
ProtocolIE-ID ::= 146
ProtocolIE-ID ::= 147
ProtocolIE-ID ::= 473
ProtocolIE-ID ::= 474
ProtocolIE-ID ::= 475

```

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-RT-Load-Value  
 id-RT-Load-Value-IncrDecrThres  
 id-S-RNTI  
 id-ResetIndicator  
 id-RNC-ID  
 id-SAI  
 id-SRNC-ID  
 id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD  
 id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD  
 id-TransportBearerID  
 id-TransportBearerRequestIndicator  
 id-TransportLayerAddress  
 id-TypeOfError  
 id-UC-ID  
 id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD  
 id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD  
 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-SIRTTarget  
 id-URA-Information  
 id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD  
 id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD  
 id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD  
 id-Active-Pattern-Sequence-Information  
 id-AdjustmentRatio  
 id-CauseLevel-RL-AdditionFailureFDD  
 id-CauseLevel-RL-AdditionFailureTDD  
 id-CauseLevel-RL-ReconfFailure  
 id-CauseLevel-RL-SetupFailureFDD  
 id-CauseLevel-RL-SetupFailureTDD  
 id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD  
 id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD  
 id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD  
 id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD  
 id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD  
 id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD

ProtocolIE-ID ::= 476  
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 ProtocolIE-ID ::= 206  
 ProtocolIE-ID ::= 207  
 ProtocolIE-ID ::= 208  
 ProtocolIE-ID ::= 209  
 ProtocolIE-ID ::= 210

```

id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD
id-DSCHs-to-Add-TDD
id-DSCHs-to-Add-FDD
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-Information-RL-SetupRqstFDD
id-DSCH-ModifyList-RL-ReconfPrepTDD
id-DSCH-Modify-RL-ReconfPrepFDD
id-DSCH-Specific-FDD-Additional-List
id-DSCHsToBeAddedOrModified-FDD
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD
id-EnhancedDSCHPC
id-EnhancedDSCHPCIndicator
id-GA-Cell
id-GA-CellAdditionalShapes
id-SSDT-CellIDforEDSCHPC
id-Transmission-Gap-Pattern-Sequence-Information
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD
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-Physical-Channel-Information-RL-SetupRqstTDD
id-UL-Physical-Channel-Information-RL-SetupRqstTDD
id-ClosedLoopModel-SupportIndicator
id-ClosedLoopMode2-SupportIndicator
id-STTD-SupportIndicator
id-CFNReportingIndicator
id-CNOriginatedPage-PagingRqst
id-InnerLoopDLPStatus
id-PropagationDelay
id-RxTimingDeviationForTA
id-timeSlot-ISCP

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ProtocolIE-ID ::= 212
ProtocolIE-ID ::= 213
ProtocolIE-ID ::= 214
ProtocolIE-ID ::= 215
ProtocolIE-ID ::= 216
ProtocolIE-ID ::= 217
ProtocolIE-ID ::= 218
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ProtocolIE-ID ::= 14
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ProtocolIE-ID ::= 24
ProtocolIE-ID ::= 25
ProtocolIE-ID ::= 36
ProtocolIE-ID ::= 37

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id-CCTrCH-InformationItem-RL-FailureInd  
 id-CCTrCH-InformationItem-RL-RestoreInd  
 id-CommonMeasurementAccuracy  
 id-CommonMeasurementObjectType-CM-Rprt  
 id-CommonMeasurementObjectType-CM-Rqst  
 id-CommonMeasurementObjectType-CM-Rsp  
 id-CommonMeasurementType  
 id-CongestionCause  
 id-SFN  
 id-SFNReportingIndicator  
 id-InformationExchangeID  
 id-InformationExchangeObjectType-InfEx-Rprt  
 id-InformationExchangeObjectType-InfEx-Rqst  
 id-InformationExchangeObjectType-InfEx-Rsp  
 id-InformationReportCharacteristics  
 id-InformationType  
 id-neighbouring-LCR-TDD-CellInformation  
 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-RestrictionStateIndicator  
 id-Load-Value  
 id-Load-Value-IncrDecrThres  
 id-OnModification  
 id-Received-Total-Wideband-Power-Value  
 id-Received-Total-Wideband-Power-Value-IncrDecrThres  
 id-SFNSFNMeasurementThresholdInformation  
 id-Transmitted-Carrier-Power-Value  
 id-Transmitted-Carrier-Power-Value-IncrDecrThres  
 id-TUTRANGPSMeasurementThresholdInformation  
 id-UL-Timeslot-ISCP-Value  
 id-UL-Timeslot-ISCP-Value-IncrDecrThres

ProtocolIE-ID ::= 15  
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 ProtocolIE-ID ::= 242  
 ProtocolIE-ID ::= 243

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id-Rx-Timing-Deviation-Value-LCR
id-DPC-Mode-Change-SupportIndicator
id-SplitType
id-LengthOfTFCI2
id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD
id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD
id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD
id-DSCH-RNTI
id-DL-PowerBalancing-Information
id-DL-PowerBalancing-ActivationIndicator
id-DL-PowerBalancing-UpdatedIndicator
id-DL-ReferencePowerInformation
id-Enhanced-PrimaryCPICH-EcNo
id-IPDL-TDD-ParametersLCR
id-CellCapabilityContainer-FDD
id-CellCapabilityContainer-TDD
id-CellCapabilityContainer-TDD-LCR
id-RL-Specific-DCH-Info
id-RL-ReconfigurationRequestFDD-RL-InformationList
id-RL-ReconfigurationRequestFDD-RL-Information-IEs
id-RL-ReconfigurationReadyTDD-RL-Information
id-RL-ReconfigurationRequestTDD-RL-Information
id-CommonTransportChannelResourcesInitialisationNotRequired
id-DelayedActivation
id-DelayedActivationList-RL-ActivationCmdFDD
id-DelayedActivationInformation-RL-ActivationCmdFDD
id-DelayedActivationList-RL-ActivationCmdTDD
id-DelayedActivationInformation-RL-ActivationCmdTDD
id-neighbouringTDDCellMeasurementInformationLCR
id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD
id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD
id-PrimCCPCH-RSCP-DL-PC-RqstTDD
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-Information-to-Modify
id-HSDSCH-RNTI
id-HSDSCH-TDD-Information
id-HSDSCH-TDD-Information-Response
id-HSDSCH-TDD-Information-Response-LCR
id-HSDSCH-TDD-Information-to-Add
id-HSDSCH-TDD-Information-to-Delete
id-HSDSCH-TDD-Update-Information
id-HSPDSCH-RL-ID
id-Angle-Of-Arrival-Value-LCR
id-TrafficClass
id-TFCI-PC-SupportIndicator
id-Qth-Parameter
id-PDSCH-RL-ID
id-TimeSlot-RL-SetupRspTDD
id-GERAN-Cell-Capability

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ProtocolIE-ID ::= 293
ProtocolIE-ID ::= 19
ProtocolIE-ID ::= 247
ProtocolIE-ID ::= 295
ProtocolIE-ID ::= 202
ProtocolIE-ID ::= 203
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ProtocolIE-ID ::= 158
ProtocolIE-ID ::= 248
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ProtocolIE-ID ::= 323
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ProtocolIE-ID ::= 468

```

id-GERAN-Classmark  
id-DSCH-InitialWindowSize  
id-UL-Synchronisation-Parameters-LCR  
id-SNA-Information  
id-MACHs-ResetIndicator  
id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD  
id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD  
**id-TDD-Support-ePSK**  
**id-TDD-maxNrDLPhysicalchannels**

END

ProtocolIE-ID ::= 469  
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ProtocolIE-ID ::= 479  
ProtocolIE-ID ::= 465  
ProtocolIE-ID ::= 481  
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**ProtocolIE-ID ::= 513**