

TSG-RAN Meeting #22
Maui, Hawaii, USA, 9 - 12 December 2003

RP-030726

Title: **Release 6 CRs on beamforming to TS 25.215, TS 25.423, TS 25.425, TS 25.433, TS 25.435**

Source: **Nokia**

Agenda item: **8.2.2**

RP tdoc#	Spec	CR	R	Subject	Ph	Cat	Current	New	WI	Remarks
RP-030726	25.215	145	2	Beamforming Enhancement related measurements	Rel-6	B	5.5.0	6.0.0	RANimp-BFE	
RP-030726	25.423	66	1	Signalling Support for Beamforming Enhancement	Rel-6	B	5.7.0	6.0.0	RANimp-BFE	
RP-030726	25.425	64	1	Signalling Support for Beamforming Enhancement	Rel-6	B	5.5.0	6.0.0	RANimp-BFE	
RP-030726	25.433	935	2	Signalling Support for Beamforming Enhancement	Rel-6	B	5.6.0	6.0.0	RANimp-BFE	
RP-030726	25.435	827		Signalling Support for Beamforming Enhancement	Rel-6	B	5.5.0	6.0.0	RANimp-BFE	

CHANGE REQUEST

⌘ TS25.215 CR 145 ⌘ rev 2 ⌘ Current version: 5.5.0 ⌘

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

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

Title:	⌘ Beamforming Enhancement related measurements	
Source:	⌘ Nokia	
Work item code: ⌘ RANimp-BFE	Date: ⌘ 29/08/2003	
Category: ⌘ B	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)	Release: ⌘ Rel-6 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)
Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u> .		

Reason for change: ⌘	Agreed changes to UTRAN measurements from Work Item on Beamforming Enhancements are introduced.
Summary of change: ⌘	A new Rel'6 feature of beamforming enhancement is added to the specification. UTRAN measurements for received total wide band power, transmitted carrier power and transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission are revised to be made for each cell portion when cell portions are defined in the cell. SIR measurement is extended to cover also RACH, and it is possible to do the measurement for each cell portion when cell portions are defined in the cell.
Consequences if not approved: ⌘	Rel'6 beamforming solution is not complete in the specification.

Clauses affected:	⌘ 5.2.1, 5.2.2, 5.2.4, 5.2.15					
Other specs	⌘ <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></table>	Y	N	X		Other core specifications ⌘ CR845 TS25.423 V5.6.0 CR063 TS25.425 V5.5.0 CR870 TS25.433 V5.5.0 CR103 TS25.435 V5.5.0
Y	N					
X						
affected:	⌘ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td>X</td></tr><tr><td>X</td><td></td></tr></table>		X	X		Test specifications O&M Specifications
	X					
X						
Other comments: ⌘						

How to create CRs using this form:

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- 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.

5.1.10 UE Rx-Tx time difference

Definition	The difference in time between the UE uplink DPCCH/DPDCH frame transmission and the first detected path (in time), of the downlink DPCH frame from the measured radio link. Type 1 and Type 2 are defined. For Type 1, the reference Rx path shall be the first detected path (in time) amongst the paths (from the measured radio link) used in the demodulation process. For Type 2, the reference Rx path shall be the first detected path (in time) amongst all paths (from the measured radio link) detected by the UE. The reference path used for the measurement may therefore be different for Type 1 and Type 2. The reference point for the UE Rx-Tx time difference shall be the antenna connector of the UE. Measurement shall be made for each cell included in the active set.
Applicable for	CELL_DCH intra

5.1.11 Observed time difference to GSM cell

Definition	<p>The Observed time difference to GSM cell is defined as: $T_{RxGSMj} - T_{RxSFNi}$, where:</p> <p>T_{RxSFNi} is the time at the beginning of the P-CCPCH frame with SFN=0 from cell i. Cell i is an intra-frequency cell.</p> <p>T_{RxGSMj} is the time at the beginning of the GSM BCCH 51-multiframe from GSM frequency j received closest in time after the time T_{RxSFNi}. If the next GSM multiframe is received exactly at T_{RxSFNi} then $T_{RxGSMj} = T_{RxSFNi}$ (which leads to $T_{RxGSMj} - T_{RxSFNi} = 0$). The reference point for the Observed time difference to GSM cell shall be the antenna connector of the UE.</p> <p>The beginning of the GSM BCCH 51-multiframe is defined as the beginning of the first tail bit of the frequency correction burst in the first TDMA-frame of the GSM BCCH 51-multiframe, i.e. the TDMA-frame following the IDLE-frame.</p> <p>The reported time difference is calculated from the actual measurement in the UE. The actual measurement shall be based on:</p> <p>$T_{MeasGSM,j}$: The start of the first tail bit of the most recently received GSM SCH on frequency j</p> <p>$T_{MeasSFN,i}$: The start of the last P-CCPCH frame received from cell i before receiving the GSM SCH on frequency j</p> <p>For calculating the reported time difference, the frame lengths are always assumed to be 10 ms for UTRA and (60/13) ms for GSM.</p>
Applicable for	Idle, URA_PCH inter-RAT, CELL_PCH inter-RAT, CELL_DCH inter-RAT

5.1.12 UE GPS Timing of Cell Frames for UE positioning

Definition	The timing between cell j and GPS Time Of Week. $T_{UE-GPSj}$ is defined as the time of occurrence of a specified UTRAN event according to GPS time. The specified UTRAN event is the beginning of a particular frame (identified through its SFN) in the first detected path (in time) of the cell j CPICH, where cell j is a cell chosen by the UE. The reference point for $T_{UE-GPSj}$ shall be the antenna connector of the UE.
Applicable for	CELL_FACH intra, CELL_DCH intra

5.1.13 UE GPS code phase

Definition	The whole and fractional phase of the spreading code of the i^{th} GPS satellite signal. The reference point for the GPS code phase shall be the antenna connector of the UE.
Applicable for	Void (this measurement is not related to UTRAN/GSM signals; its applicability is therefore independent of the UE RRC state)

5.2 UTRAN measurement abilities

The structure of the table defining a UTRAN measurement quantity is shown below.

Column field	Comment
Definition	Contains the definition of the measurement.

The term "antenna connector" used in this sub-clause to define the reference point for the UTRAN measurements refers to the "BS antenna connector" test port A and test port B as described in [19]. The term "antenna connector" refers to Rx or Tx antenna connector as described in the respective measurement definitions.

5.2.1 Received total wide band power

Definition	The received wide band power, including noise generated in the receiver, within the bandwidth defined by the receiver pulse shaping filter. The reference point for the measurement shall be the Rx antenna connector. In case of receiver diversity the reported value shall be linear average of the power in the diversity branches. When cell portions are defined in the cell, the total received wideband power shall be measured for each cell portion.
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5.2.2 SIR

Definition	<p>Type 1: <u>Signal to Interference Ratio</u>, is defined as: $(RSCP/ISCP) \times SF$. Measurement shall be performed on the DPCCH of a Radio Link Set. In compressed mode the SIR shall not be measured in the transmission gap. The reference point for the SIR measurements shall be the Rx antenna connector. If the radio link set contains more than one radio link, the reported value shall be the linear summation of the SIR from each radio link of the radio link set. If Rx diversity is used in the Node B for a cell, the SIR for a radio link shall be the linear summation of the SIR from each Rx antenna for that radio link. <u>where:</u> <u>RSCP</u> = Received Signal Code Power, unbiased measurement of the received power on one code. <u>ISCP</u> = Interference Signal Code Power, the interference on the received signal. <u>SF</u>=The spreading factor used on the DPCCH.</p> <p>Type 2: <u>Signal to Interference Ratio</u>, is defined as: $(RSCP/ISCP) \times SF$. The measurement shall be performed on the PRACH control part. The reference point for the SIR measurements shall be the Rx antenna connector. When cell portions are defined in the cell, the SIR measurement shall be possible in each cell portion. <u>where:</u> <u>RSCP</u> = Received Signal Code Power, unbiased measurement of the received power on the code. <u>ISCP</u> = Interference Signal Code Power, the interference on the received signal. <u>SF</u>=The spreading factor used on the control part of the PRACH.</p>
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5.2.3 SIR_{error}

Definition	$SIR_{\text{error}} = SIR - SIR_{\text{target_ave}}$, where: <u>SIR</u> = the SIR measured by UTRAN, defined in section 5.2, given in dB. <u>$SIR_{\text{target_ave}}$</u> = the SIR_{target} averaged over the same time period as the SIR used in the SIR_{error} calculation. In compressed mode $SIR_{\text{target}}=SIR_{\text{cm_target}}$ shall be used when calculating $SIR_{\text{target_ave}}$. In compressed mode the $SIR_{\text{target_ave}}$ shall not be calculated over the transmission gap. The averaging of SIR_{target} shall be made in a linear scale and $SIR_{\text{target_ave}}$ shall be given in dB.
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5.2.4 Transmitted carrier power

Definition	Transmitted carrier power, is the ratio between the total transmitted power on one DL carrier from one UTRAN access point, and the maximum transmission power possible to use on that DL carrier at this moment of time. Total transmission power is the mean power [W] on one carrier from one UTRAN access point. Maximum transmission power is the mean power [W] on one carrier from one UTRAN access point when transmitting at the configured maximum power for the cell. Measurement shall be possible on any carrier transmitted from the UTRAN access point. The reference point for the transmitted carrier power measurement shall be the Tx antenna connector. In case of Tx diversity the transmitted carrier power for each branch shall be measured and the maximum of the two values shall be reported to higher layers, i.e. only one value will be reported to higher layers. <u>When cell portions are defined in the cell, the transmitted carrier power for each cell portion shall be measured and reported to higher layers.</u>
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5.2.5 Transmitted code power

Definition	Transmitted code power, is the transmitted power on one channelisation code on one given scrambling code on one given carrier. Measurement shall be possible on the DPCCH-field of any dedicated radio link transmitted from the UTRAN access point and shall reflect the power on the pilot bits of the DPCCH-field. When measuring the transmitted code power in compressed mode all slots shall be included in the measurement, e.g. also the slots in the transmission gap shall be included in the measurement. The reference point for the transmitted code power measurement shall be the Tx antenna connector. In case of Tx diversity the transmitted code power for each branch shall be measured and summed together in [W].
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5.2.6 Transport channel BER

Definition	The transport channel BER is an estimation of the average bit error rate (BER) of the DPDCH data of a Radio Link Set. The transport channel (TrCH) BER is measured from the data considering only non-punctured bits at the input of the channel decoder in Node B. It shall be possible to report an estimate of the transport channel BER for a TrCH after the end of each TTI of the TrCH. The reported TrCH BER shall be an estimate of the BER during the latest TTI for that TrCH.
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5.2.7 Physical channel BER

Definition	The Physical channel BER is an estimation of the average bit error rate (BER) on the DPCCH of a Radio Link Set. An estimate of the Physical channel BER shall be possible to be reported after the end of each TTI of any of the transferred TrCHs. The reported physical channel BER shall be an estimate of the BER averaged over the latest TTI of the respective TrCH.
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5.2.8 Round trip time

Definition	Round trip time (RTT), is defined as $\text{RTT} = T_{\text{RX}} - T_{\text{TX}}$, where T_{TX} = The time of transmission of the beginning of a downlink DPCH frame to a UE. The reference point for T_{TX} shall be the Tx antenna connector. T_{RX} = The time of reception of the beginning (the first detected path, in time) of the corresponding uplink DPCCH/DPDCH frame from the UE. The reference point for T_{RX} shall be the Rx antenna connector. Measurement shall be possible on DPCH for each RL transmitted from an UTRAN access point and DPDCH/DPCCH for each RL received in the same UTRAN access point.
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5.2.9 UTRAN GPS Timing of Cell Frames for UE positioning

Definition	$T_{\text{UTRAN-GPS}}$ is defined as the time of the occurrence of a specified UTRAN event according to GPS Time Of Week. The specified UTRAN event is the beginning of the transmission of a particular frame in the cell. The reference point for $T_{\text{UTRAN-GPS}}$ shall be the Tx antenna connector.
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5.2.10 PRACH/PCPCH Propagation delay

Definition	Propagation delay is defined as one-way propagation delay as measured during either PRACH or PCPCH access: <u>PRACH:</u> Propagation delay = $(T_{\text{RX}} - T_{\text{TX}} - 2560)/2$, where: T_{TX} = The transmission time of AICH access slot ($n-2$ -AICH transmission timing), where $0 \leq (n-2-\text{AICH Transmission Timing}) \leq 14$ and AICH_Transmission_Timing can have values 0 or 1. The reference point for T_{TX} shall be the Tx antenna connector. T_{RX} = The time of reception of the beginning (the first detected path, in time) of the PRACH message from the UE at PRACH access slot n . The reference point for T_{RX} shall be the Rx antenna connector. <u>PCPCH:</u> Propagation delay = $(T_{\text{RX}} - T_{\text{TX}} - (L_{\text{pc-preamble}} + 1)*2560 - (k-1)*38400)/2$, where T_{TX} = The transmission time of CD-ICH at access slot ($n-2-T_{\text{cpch}}$), where $0 \leq (n-2-T_{\text{cpch}}) \leq 14$ and T_{cpch} can have values 0 or 1. The reference point for T_{TX} shall be the Tx antenna connector. T_{RX} = The time of reception of the first chip (the first detected path, in time) of the k th frame of the PCPCH message from the UE, where $k \in \{1, 2, \dots, N_{\text{Max_frames}}\}$. The reference point for T_{RX} shall be the Rx antenna connector. $N_{\text{max_frames}}$ is a higher layer parameter and defines the maximum length of the PCPCH message. The PCPCH message begins at uplink access slot $(n+L_{\text{pc-preamble}}/2)$, where $0 \leq (n + L_{\text{pc-preamble}}/2) \leq 14$ and where $L_{\text{pc-preamble}}$ can have values 0 or 8.
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5.2.11 Acknowledged PRACH preambles

Definition	The Acknowledged PRACH preambles measurement is defined as the total number of acknowledged PRACH preambles per access frame per PRACH. This is equivalent to the number of positive acquisition indicators transmitted per access frame per AICH.
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5.2.12 Detected PCPCH access preambles

Definition	The detected PCPCH access preambles measurement is defined as the total number of detected access preambles per access frame on the PCPCHs belonging to a CPCH set.
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5.2.13 Acknowledged PCPCH access preambles

Definition	The Acknowledged PCPCH access preambles measurement is defined as the total number of acknowledged PCPCH access preambles per access frame on the PCPCHs belonging to a SF. This is equivalent to the number of positive acquisition indicators transmitted for a SF per access frame per AP-AICH.
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5.2.14 SFN-SFN observed time difference

Definition	<p>The relative timing difference between cell j and cell i, defined as $T_{CPICHRxj} - T_{CPICHRx_i}$, where:</p> <p>$T_{CPICHRxj}$ is the time when the LMU receives the beginning of one Primary CPICH frame from cell j and</p> <p>$T_{CPICHRx_i}$ is the time when the LMU receives the beginning of the Primary CPICH frame from cell i that is closest in time to the beginning of Primary CPICH frame received from cell j.</p> <p>The reference point for the measurements shall be the Rx antenna connector.</p>
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5.2.15 Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission

Definition	<p>Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission is the ratio between the total transmitted power of all codes not used for HS-PDSCH or HS-SCCH transmission on one DL carrier from one UTRAN access point, and the maximum transmission power possible to use on that DL carrier at this moment of time. Total transmission power of all codes not used for HS-PDSCH or HS-SCCH transmission is the mean power [W] of all codes not used for HS-PDSCH or HS-SCCH transmission on one carrier from one UTRAN access point. Maximum transmission power is the mean power [W] on one carrier from one UTRAN access point when transmitting at the configured maximum power for the cell. The measurement shall be possible on any carrier transmitted from the UTRAN access point. The reference point for the transmitted carrier power measurement of all codes not used for HS-PDSCH or HS-SCCH transmission shall be the Tx antenna connector. In case of Tx diversity the transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for each branch shall be measured and the maximum of the two values shall be reported to higher layers, i.e. only one value will be reported to higher layers. <u>When cell portions are defined in the cell, the transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for each cell portion shall be measured and reported to higher layers.</u></p>
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3GPP TSG-RAN Meeting #22
Hawaii, USA, 9th – 12th, December 2003

Tdoc #RP-03xxxx

CR-Form-v7

CHANGE REQUEST

25.423 CR 887 #rev - # Current version: **5.7.0**

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

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

Title:	# Signalling Support for Beamforming Enhancement	
Source:	# Nokia	
Work item code:	# RANimp-BFE	Date: # 17/11/2003
Category:	# B Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u> .	Release: # Rel-6 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)

Reason for change:	# Beamforming Enhancement WI has been worked out by RAN1 in the past and consequently it is required for RAN3 to provide proper signalling. This CR provides necessary signalling to support beamforming enhancement.
Summary of change:	- Cell Portion ID IE is added to RL Setup Request and UL Signalling Transfer Indication message. - Secondary CPICH Information IE is added to RL Setup Response, RL Setup Failure.
Consequences if not approved:	# Beamforming Enhancement will not be completed. <u>Impact Analysis:</u> Impact assessment towards the previous version of the specification (same release): This CR has no impact on the previous version of the specification because the functionality is introduced in backward compatible way. Impact assessment towards the previous release of the specification: This CR has no impact on previous releases because the functionality is introduced in backward compatible way.
Clauses affected:	# 8.2.1.2, 8.3.1.2, 9.1.3.1, 9.1.4.1, 9.1.5.1, 9.1.24.1, new 9.2.2.xx, 9.3.3, 9.3.4, 9.3.6

Y N

Other specs	⌘ <input checked="" type="checkbox"/>	Other core specifications	⌘ CR145 TS 25.215 v5.5.0 CR064 TS 25.425 v5.5.0 CR935 TS 25.433 v5.6.0 CR106 TS 25.435 v5.5.0
affected:	<input type="checkbox"/>	Test specifications	
Other comments:	⌘		

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8.2.1 Uplink Signalling Transfer

8.2.1.2 Successful Operation

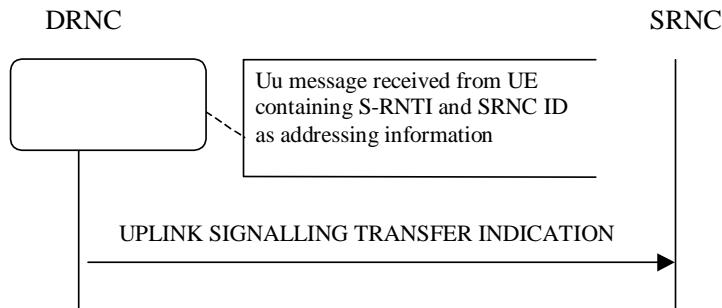


Figure 1: Uplink Signalling Transfer procedure, Successful Operation

When the DRNC receives an Uu message on the CCCH in which the UE addressing information is U-RNTI, i.e. S-RNTI and SRNC-ID, DRNC shall send the UPLINK SIGNALLING TRANSFER INDICATION message to the SRNC identified by the SRNC-ID received from the UE.

If at least one URA Identity is being broadcast in the cell where the Uu message was received (the accessed cell), the DRNC shall include a URA Identity for this cell in the *URA ID* IE, the *Multiple URAs Indicator* IE indicating whether or not multiple URA Identities are being broadcast in the accessed cell, and the RNC Identity of all other RNCs that are having at least one cell within the URA where the Uu message was received in the *URA Information* IE in the UPLINK SIGNALLING TRANSFER INDICATION message.

The DRNC shall include in the message the C-RNTI that it allocates to identify the UE in the radio interface in the accessed cell. If there is no valid C-RNTI for the UE in the accessed cell, the DRNS shall allocate a new C-RNTI for the UE. If the DRNS allocates a new C-RNTI it shall also release any C-RNTI previously allocated for the UE.

If the DRNS has any RACH, [FDD - CPCH], and/or FACH resources allocated for the UE identified by the U-RNTI in another cell than the accessed cell in which the Mac SDU sizes, flow control settings (including credits) and/or transport bearer are different from those in the old cell, then the DRNS shall not include the *Common Transport Channel Resources Initialisation not Required* IE in the UPLINK SIGNALLING TRANSFER INDICATION message. In addition the DRNS shall release these RACH, [FDD - CPCH,] and/or FACH resources in old cell.

If the DRNS has any RACH, [FDD - CPCH], and/or FACH resources allocated for the UE identified by the U-RNTI in another cell than the accessed cell in which the Mac SDU sizes, flow control settings (including credits) and transport bearer are the same as in the old cell, there is no need for Common Transport Channel Resources Initialisation to be initiated. In that case, DRNC may include the *Common Transport Channel Resources Initialisation not Required* IE in the UPLINK SIGNALLING TRANSFER INDICATION message. In addition, the DRNS shall move these RACH, [FDD - CPCH,] and/or FACH resources to the new cell. If no Common Transfer Channel Resources Initialisation procedure is executed, the currently applicable Mac SDU sizes, flow control settings (including credits) and transport bearer shall continue to be used while the UE is in the new cell.

If no context exists for this UE in the DRNC, the DRNC shall create a UE Context for this UE, allocate a D-RNTI for the UE Context, and include the *D-RNTI* IE and the identifiers for the CN CS Domain and CN PS Domain that the DRNC is connected to in the UPLINK SIGNALLING TRANSFER INDICATION message. These CN Domain Identifiers shall be based on the LAC and RAC respectively of the cell where the message was received from the UE.

Depending on local configuration in the DRNS, it may include the geographical co-ordinates of the cell, represented either by the *Cell GAI* IE or by the *Cell GA Additional Shapes* IE, in which the Uu message was received in the UPLINK SIGNALLING TRANSFER INDICATION message. If the DRNC includes the *Cell GA Additional Shapes* IE in the UPLINK SIGNALLING TRANSFER INDICATION message, it shall also include the *Cell GAI* IE.

[FDD - The DRNC shall include the *DPC Mode Change Support Indicator* IE in the UPLINK SIGNALLING TRANSFER INDICATION message if the accessed cell supports DPC mode change.]

[FDD- The DRNC shall include the *Flexible Hard Split Support Indicator* IE in the UPLINK SIGNALLING TRANSFER INDICATION message if the accessed cell supports TFCI flexible hard split mode.]

The DRNC shall include [FDD - the *Cell Capability Container FDD IE*] [3.84Mcps TDD - the *Cell Capability Container TDD IE*] [1.28Mcps TDD - the *Cell Capability Container TDD LCR IE*] in the UPLINK SIGNALLING TRANSFER INDICATION message if the accessed cell supports any functionalities listed in [FDD - 9.2.2.D] [3.84Mcps TDD - 9.2.3.1a] [1.28Mcps TDD - 9.2.3.1b].

If available, the DRNC shall include the *SNA Information IE* for the concerned cell.

When receiving the *SNA Information IE*, 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.

[FDD- The DRNC shall include the *Cell Portion ID IE* in the UPLINK SIGNALLING TRANSFER INDICATION message if available.]

8.3.1 Radio Link Setup

8.3.1.2 Successful Operation

/* partly omitted */

Physical Channels Handling:

[FDD - Compressed Mode]:

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

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

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

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

[FDD - DL Code Information]:

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

[FDD – Phase Reference Handling]:

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

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

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

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

General:

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

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

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

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

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

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

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

Radio Link Handling:**Diversity Combination Control:**

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

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

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

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

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

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

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

[FDD-Transmit Diversity]:

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

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

DL Power Control:

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

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

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

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

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

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

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

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

[FDD - The DRNS shall start any DL transmission using the indicated DL TX power level (if received) or the decided DL TX power level on each DL channelisation code of a RL until UL synchronisation is

achieved on the Uu interface for the concerned RLS or Power Balancing is activated. No inner loop power control or power balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10] subclause 5.2.1.2) and the power control procedure (see 8.3.15).]

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

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

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

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

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

Neighbouring Cell Handling:

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

- The DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Neighbouring FDD Cell Information* IE and/or *Neighbouring TDD Cell Information* IE in the *Neighbouring UMTS Cell Information* IE for each neighbouring FDD cell and/or TDD cell respectively. In addition, if the information is available, the DRNC shall include in the RADIO LINK SETUP RESPONSE message the *Frame Offset* IE, *Primary CPICH Power* IE, *Cell Individual Offset* IE, *STTD Support Indicator* IE, *Closed Loop Mode1 Support Indicator* IE, *Closed Loop Mode2 Support Indicator* IE, *Coverage Indicator* IE, *Antenna Co-location Indicator* IE and *HCS Prio* IE in the *Neighbouring FDD Cell Information* IE, and the *Frame Offset* IE, *Cell Individual Offset* IE, *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*, and if the *Cell Individual Offset IE* alone cannot represent the value of the offset, the DRNC shall also include the *Extended GSM Cell Individual Offset IE* in the *Neighbouring GSM Cell Information IE*. If available the DRNC shall also include in the RADIO LINK SETUP RESPONSE message the *Coverage Indicator IE*, *Antenna Co-location Indicator IE* and *HCS Prio IE* in the *Neighbouring GSM Cell Information IE*. If available, the DRNC shall also include the *SNA Information IE* for the concerned neighbouring cells in the *Neighbouring GSM Cell Information IE*.

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

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

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

[1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:

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

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

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

General:

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

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

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

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

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

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

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

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

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

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

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

For each Radio Link established in a cell in which at least one URA Identity is being broadcast, the DRNC shall include in the *URA Information IE* within the RADIO LINK SETUP RESPONSE message URA 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 DRNC includes the *Cell GA Additional Shapes IE* in the RADIO LINK SETUP RESPONSE message, it shall also include the *Cell GAI IE*.

If the DRNS need to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) when starting to utilise a new Radio Link, the DRNC shall

include in the RADIO LINK SETUP RESPONSE message the *Allowed UL Rate IE* in the *DCH Information Response IE* for this Radio Link.

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

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

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

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

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

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

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

[FDD - Radio Link Set Handling]:

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

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

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

[FDD - The UL out-of-sync algorithm defined in ref. [10] shall, for each of the established RL Set(s), use the maximum value of the parameters *N_OUTSYNC_IND* and *T_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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		—	
SRNC-ID	M		RNC-ID 9.2.1.50		YES	reject
S-RNTI	M		9.2.1.53		YES	reject
D-RNTI	O		9.2.1.24		YES	reject
Allowed Queuing Time	O		9.2.1.2		YES	reject
UL DPCH Information		1			YES	reject
>UL Scrambling Code	M		9.2.2.53		—	
>Min UL Channelisation Code Length	M		9.2.2.25		—	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.24		—	
>Puncture Limit	M		9.2.1.46	For the UL.	—	
>TFCS	M		TFCS for the UL 9.2.1.63		—	
>UL DPCCH Slot Format	M		9.2.2.52		—	
>Uplink SIR Target	O		Uplink SIR 9.2.1.69		—	
>Diversity mode	M		9.2.2.8		—	
>SSDT Cell Identity Length	O		9.2.2.41		—	
>S Field Length	O		9.2.2.36		—	
>DPC Mode	O		9.2.2.12A		YES	reject
DL DPCH Information		1			YES	reject
>TFCS	M		TFCS for the DL. 9.2.1.63		—	
>DL DPCH Slot Format	M		9.2.2.9		—	
>Number of DL Channelisation Codes	M		9.2.2.26A		—	
>TFCI Signalling Mode	M		9.2.2.46		—	
>TFCI Presence	C- SlotFormat		9.2.1.55		—	
>Multiplexing Position	M		9.2.2.26		—	
>Power Offset Information		1			—	
>>PO1	M		Power Offset 9.2.2.30	Power offset for the TFCI bits.	—	
>>PO2	M		Power Offset 9.2.2.30	Power offset for the TPC bits.	—	
>>PO3	M		Power Offset 9.2.2.30	Power offset for the pilot bits.	—	
>FDD TPC Downlink Step Size	M		9.2.2.16		—	
>Limited Power Increase	M		9.2.2.21A		—	
>Inner Loop DL PC Status	M		9.2.2.21a		—	
>Split Type	O		9.2.2.39a		YES	reject
>Length of TFCI2	O		9.2.2.21C		YES	reject
DCH Information	M		DCH FDD Information 9.2.2.4A		YES	reject
DSCH Information	O		DSCH FDD Information 9.2.2.13A		YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
RL Information		1...<maxn oofRLs>			EACH	notify
>RL ID	M		9.2.1.49		—	
>C-ID	M		9.2.1.6		—	
>First RLS Indicator	M		9.2.2.16A		—	
>Frame Offset	M		9.2.1.30		—	
>Chip Offset	M		9.2.2.1		—	
>Propagation Delay	O		9.2.2.33		—	
>Diversity Control Field	C – NotFirstRL		9.2.1.20		—	
>Initial DL TX Power	O		DL Power 9.2.1.21A		—	
>Primary CPICH Ec/No	O		9.2.2.32		—	
>SSDT Cell Identity	O		9.2.2.40		—	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.48		—	
>SSDT Cell Identity for EDSCHPC	C- EDSCHPC		9.2.2.40A		YES	ignore
>Enhanced Primary CPICH Ec/No	O		9.2.2.13I		YES	ignore
>RL Specific DCH Information	O		9.2.1.49A		YES	ignore
>Delayed Activation	O		9.2.1.19Aa		YES	reject
>Qth Parameter	O		9.2.2.34a		YES	ignore
>Cell Portion ID	O		9.2.2.xx		YES	ignore
Transmission Gap Pattern Sequence Information	O		9.2.2.47A		YES	reject
Active Pattern Sequence Information	O		9.2.2.A		YES	reject
Permanent NAS UE Identity	O		9.2.1.73		YES	ignore
DL Power Balancing Information	O		9.2.2.10A		YES	ignore
HS-DSCH Information	O		HS-DSCH FDD Information 9.2.2.19a		YES	reject
HS-PDSCH RL ID	C – InfoHSDS CH		RL ID 9.2.1.49		YES	reject
UE Support Of Dedicated Pilots For Channel Estimation	O		9.2.2.50A		YES	ignore
UE Support Of Dedicated Pilots For Channel Estimation Of HS-DSCH	O		9.2.2.50B		YES	ignore

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

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.

9.1.4 RADIO LINK SETUP RESPONSE

9.1.4.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
D-RNTI	O		9.2.1.24		YES	ignore
CN PS Domain Identifier	O		9.2.1.12		YES	ignore
CN CS Domain Identifier	O		9.2.1.11		YES	ignore
RL Information Response		1..<maxno ofRLs>			EACH	ignore
>RL ID	M		9.2.1.49		–	
>RL Set ID	M		9.2.2.35		–	
>URA Information	O		9.2.1.70B		–	
>SAI	M		9.2.1.52		–	
>Cell GAI	O		9.2.1.5A		–	
>UTRAN Access Point Position	O		9.2.1.70A		–	
>Received Total Wide Band Power	M		9.2.2.35A		–	
>Secondary CCPCH Info	O		9.2.2.37B		–	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		–	
>CHOICE Diversity Indication	M				–	
>>Combining					–	
>>>RL ID	M		9.2.1.49	Reference RL ID for the combining	–	
>>>DCH Information Response	O		9.2.1.16A		YES	ignore
>>Non Combining or First RL					–	
>>>DCH Information Response	M		9.2.1.16A		–	
>SSDT Support Indicator	M		9.2.2.43		–	
>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>Minimum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>Closed Loop Timing Adjustment Mode	O		9.2.2.3A		–	
>Maximum Allowed UL Tx Power	M		9.2.1.35		–	
>Maximum DL TX Power	M		DL Power 9.2.1.21A		–	
>Minimum DL TX Power	M		DL Power 9.2.1.21A		–	
>Primary Scrambling Code	O		9.2.1.45		–	
>UL UARFCN	O		UARFCN 9.2.1.66	Corresponds to Nu in ref. [6]	–	
>DL UARFCN	O		UARFCN 9.2.1.66	Corresponds to Nd in ref. [6]	–	
>Primary CPICH Power	M		9.2.1.44		–	
>DSCH Information Response	O		DSCH FDD Information Response 9.2.2.13B		YES	ignore

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

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.

9.1.5 RADIO LINK SETUP FAILURE

9.1.5.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
D-RNTI	O		9.2.1.24		YES	ignore
CN PS Domain Identifier	O		9.2.1.12		YES	ignore
CN CS Domain Identifier	O		9.2.1.11		YES	ignore
CHOICE Cause Level	M				YES	ignore
>General					–	
>>Cause	M		9.2.1.5		–	
>>RL Specific					–	
>>Unsuccessful RL Information Response		1..<maxno ofRLs>			EACH	ignore
>>>RL ID	M		9.2.1.49		–	
>>>Cause	M		9.2.1.5		–	
>>Successful RL Information Response		0..<maxno ofRLs-1>			EACH	ignore
>>>RL ID	M		9.2.1.49		–	
>>>RL Set ID	M		9.2.2.35		–	
>>>URA Information	O		9.2.1.70B		–	
>>>SAI	M		9.2.1.52		–	
>>>Cell GAI	O		9.2.1.5A		–	
>>>UTRAN Access Point Position	O		9.2.1.70A		–	
>>>Received Total Wide Band Power	M		9.2.2.35A		–	
>>>Secondary CCPCH Info	O		9.2.2.37B		–	
>>>DL Code Information	M		FDD DL Code Information 9.2.2.14A		–	
>>>CHOICE Diversity Indication	M				–	
>>>>Combining					–	
>>>>RL ID	M		9.2.1.49	Reference RL ID for the combining	–	
>>>>DCH Information Response	O		9.2.1.16A		YES	ignore
>>>>Non Combining or First RL					–	
>>>>DCH Information Response	M		9.2.1.16A		–	
>>>SSDT Support Indicator	M		9.2.2.43		–	
>>>Maximum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>>>Minimum Uplink SIR	M		Uplink SIR 9.2.1.69		–	
>>>Closed Loop Timing Adjustment Mode	O		9.2.2.3A		–	
>>>Maximum Allowed UL Tx Power	M		9.2.1.35		–	
>>>Maximum DL TX Power	M		DL Power 9.2.1.21A		–	
>>>Minimum DL TX Power	M		DL Power 9.2.1.21A		–	
>>>Primary CPICH Power	M		9.2.1.44		–	

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

Range bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE.

9.1.24 UPLINK SIGNALLING TRANSFER INDICATION

9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	ignore
Transaction ID	M		9.2.1.59		—	
UC-ID	M		9.2.1.71		YES	ignore
SAI	M		9.2.1.52		YES	ignore
Cell GAI	O		9.2.1.5A		YES	ignore
C-RNTI	M		9.2.1.14		YES	ignore
S-RNTI	M		9.2.1.54		YES	ignore
D-RNTI	O		9.2.1.24		YES	ignore
Propagation Delay	M		9.2.2.33		YES	ignore
STTD Support Indicator	M		9.2.2.45		YES	ignore
Closed Loop Mode1 Support Indicator	M		9.2.2.2		YES	ignore
Closed Loop Mode2 Support Indicator	M		9.2.2.3		YES	ignore
L3 Information	M		9.2.1.32		YES	ignore
CN PS Domain Identifier	O		9.2.1.12		YES	ignore
CN CS Domain Identifier	O		9.2.1.11		YES	ignore
URA Information	O		9.2.1.70B		YES	ignore
Cell GA Additional Shapes	O		9.2.1.5B		YES	ignore
DPC Mode Change Support Indicator	O		9.2.2.56		YES	ignore
Common Transport Channel Resources Initialisation not required	O		9.2.1.12F		YES	Ignore
Cell Capability Container FDD	O		9.2.2.D		YES	ignore
SNA Information	O		9.2.1.52Ca		YES	ignore
Cell Portion ID	O		9.2.2.xx		YES	ignore

9.2.2.xx Cell Portion ID

Cell Portion ID is the unique identifier for a cell portion within a cell. See [11].

<u>IE/Group Name</u>	<u>Presence</u>	<u>Range</u>	<u>IE Type and Reference</u>	<u>Semantics Description</u>
Cell Portion ID			INTEGER (0..63,...)	

9.3.3 PDU Definitions

```
-- ****
-- PDU definitions for RNSAP.
--
-- ****

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

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

IMPORTS
    Active-Pattern-Sequence-Information,
    AllocationRetentionPriority,
    AllowedQueuingTime,
    Allowed-Rate-Information,
    AlphaValue,
    AntennaColocationIndicator,
    BLER,
    SCTD-Indicator,
    BindingID,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CFN,
    ClosedLoopModel-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    ClosedloopTimingadjustmentmode,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    CNDomainType,
    Cause,
    CellCapabilityContainer-FDD,
    CellCapabilityContainer-TDD,
    CellCapabilityContainer-TDD-LCR,
    CellParameterID,
    CellPortionID,
    ChipOffset,
    CommonMeasurementAccuracy,
```

```
CommonMeasurementType,  
CommonMeasurementValue,  
CommonMeasurementValueInformation,  
CommonTransportChannelResourcesInitialisationNotRequired,  
CongestionCause,  
CoverageIndicator,  
CriticalityDiagnostics,  
D-RNTI,  
D-RNTI-ReleaseIndication,  
DCH-FDD-Information,  
DCH-ID,  
DCH-InformationResponse,  
DCH-TDD-Information,  
DL-DPCH-SlotFormat,  
DL-TimeslotISCP,  
DL-Power,  
DL-PowerBalancing-Information,  
DL-PowerBalancing-ActivationIndicator,  
DL-PowerBalancing-UpdatedIndicator,  
DL-ReferencePowerInformation,  
DL-ScramblingCode,  
DL-Timeslot-Information,  
DL-TimeslotLCR-Information,  
DL-TimeSlot-ISCP-Info,  
DL-TimeSlot-ISCP-LCR-Information,  
DPC-Mode,  
DPC-Mode-Change-SupportIndicator,  
DPCH-ID,  
DL-DPCH-TimingAdjustment,  
DRACControl,  
DRXCycleLengthCoefficient,  
DedicatedMeasurementType,  
DedicatedMeasurementValue,  
DedicatedMeasurementValueInformation,  
DelayedActivation,  
DelayedActivationUpdate,  
DiversityControlField,  
DiversityMode,  
DSCH-FDD-Information,  
DSCH-FDD-InformationResponse,  
DSCH-FlowControlInformation,  
DSCH-FlowControlItem,  
DSCH-TDD-Information,  
DSCH-ID,  
DSCH-RNTI,  
SchedulingPriorityIndicator,  
EnhancedDSCHPC,  
EnhancedDSCHPCCounter,  
EnhancedDSCHPCIndicator,  
EnhancedDSCHPCWnd,  
EnhancedDSCHPowerOffset,
```

Enhanced-PrimaryCPICH-EcNo,
FACH-FlowControlInformation,
FDD-DCHs-to-Modify,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FrameHandlingPriority,
FrameOffset,
GA-AccessPointPosition,
GA-Cell,
GA-CellAdditionalShapes,
HCS-Prio,
HSDSCH-FDD-Information,
HSDSCH-FDD-Information-Response,
HSDSCH-FDD-Update-Information,
HSDSCH-TDD-Update-Information,
HSDSCH-Information-to-Modify,
HSDSCH-MACdFlow-ID,
HSDSCH-RNTI,
HSDSCH-TDD-Information,
HSDSCH-TDD-Information-Response,
HS-SICH-ID,
IMSI,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
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,
Phase-Reference-Update-Indicator,
PowerAdjustmentType,
PowerOffset,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
Primary-CPICH-Usage-For-Channel-Estimation,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
Qth-Parameter,
RANAP-RelocationInformation,
RB-Info,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
Received-total-wide-band-power,
RequestedDataValue,
RequestedDataValueInformation,
RL-Specific-DCH-Info,
RxTimingDeviationForTA,
S-FieldLength,
S-RNTI,
S-RNTI-Group,
SCH-TimeSlot,
SAI,
SFN,
Secondary-CCPCH-Info,
Secondary-CCPCH-Info-TDD,
Secondary-CPICH-Information,
Secondary-CPICH-Information-Change,
Secondary-LCR-CCPCH-Info-TDD,
SNA-Information,
SpecialBurstScheduling,
SSDT-CellID,
SSDT-CellID-Length,

SSDT-Indication,
SSDT-SupportIndicator,
STTD-Indicator,
STTD-SupportIndicator,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
SecondaryCCPCH-SlotFormat,
SRB-Delay,
Support-8PSK,
SyncCase,
SynchronisationConfiguration,
TDD-ChannelisationCode,
TDD-DCHs-to-Modify,
TDD-DL-Code-Information,
TDD-DPCHOffset,
TDD-PhysicalChannelOffset,
TDD-TPC-DownlinkStepSize,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-UL-Code-Information,
TDD-UL-Code-LCR-Information,
TFCI-Coding,
TFCI-PC-SupportIndicator,
TFCI-Presence,
TFCI-SignallingMode,
TimeSlot,
TimeSlotLCR,
TimingAdvanceApplied,
ToAWE,
ToAWS,
TrafficClass,
TransmitDiversityIndicator,
TransportBearerID,
TransportBearerRequestIndicator,
TFCS,
Transmission-Gap-Pattern-Sequence-Information,
TransportFormatManagement,
TransportFormatSet,
TransportLayerAddress,
TrCH-SrcStatisticsDescr,
TSTD-Indicator,
TSTD-Support-Indicator,
UARFCN,
UC-ID,
UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation,
UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH,
UL-DPCCH-SlotFormat,
UL-SIR,
UL-FP-Mode,
UL-PhysCH-SF-Variation,

```
UL-ScramblingCode,  
UL-Timeslot-Information,  
UL-TimeslotLCR-Information,  
UL-TimeSlot-ISCP-Info,  
UL-TimeSlot-ISCP-LCR-Info,  
URA-ID,  
URA-Information,  
USCH-ID,  
USCH-Information,  
UL-Synchronisation-Parameters-LCR,  
TDD-DL-DPCH-TimeSlotFormat-LCR,  
TDD-UL-DPCH-TimeSlotFormat-LCR,  
MACHs-ResetIndicator,  
UL-TimingAdvanceCtrl-LCR,  
TDD-TPC-UplinkStepSize-LCR  
FROM RNSAP-IES
```

```
PrivateIE-Container{},  
ProtocolExtensionContainer{},  
ProtocolIE-ContainerList{},  
ProtocolIE-ContainerPair{},  
ProtocolIE-ContainerPairList{},  
ProtocolIE-Container{},  
ProtocolIE-Single-Container{},  
RNSAP-PRIVATE-IES,  
RNSAP-PROTOCOL-EXTENSION,  
RNSAP-PROTOCOL-IES,  
RNSAP-PROTOCOL-IES-PAIR  
FROM RNSAP-Containers
```

```
maxNoOfDSCHs,  
maxNoOfUSCHs,  
maxNrOfCCTrCHs,  
maxNrOfDCHs,  
maxNrOfTS,  
maxNrOfDPCHs,  
maxNrOfRLs,  
maxNrOfRLSets,  
maxNrOfRLSets-1,  
maxNrOfRLs-1,  
maxNrOfRLs-2,  
maxNrOfULTs,  
maxNrOfDLTs,  
maxResetContext,  
maxResetContextGroup,  
maxNoOfDSCHsLCR,  
maxNoOfUSCHsLCR,  
maxNrOfCCTrCHsLCR,  
maxNrOfTsLCR,  
maxNrOfDLTsLCR,  
maxNrOfULTsLCR,
```

```
maxNrOfDPCHsLCR,  
maxNrOfLCRTDDNeighboursPerRNC,  
maxNrOfMeasNCell,  
maxNrOfMACdFlows,  
maxNrOfHSSICHs,  
  
id-Active-Pattern-Sequence-Information,  
id-AdjustmentRatio,  
id-AllowedQueueingTime,  
id-AntennaColocationIndicator,  
id-BindingID,  
id-C-ID,  
id-C-RNTI,  
id-CFN,  
id-CFNReportingIndicator,  
id-CN-CS-DomainIdentifier,  
id-CN-PS-DomainIdentifier,  
id-Cause,  
id-CauseLevel-RL-AdditionFailureFDD,  
id-CauseLevel-RL-AdditionFailureTDD,  
id-CauseLevel-RL-ReconfFailure,  
id-CauseLevel-RL-SetupFailureFDD,  
id-CauseLevel-RL-SetupFailureTDD,  
id-CCTrCH-InformationItem-RL-FailureInd,  
id-CCTrCH-InformationItem-RL-RestoreInd,  
id-CellCapabilityContainer-FDD,  
id-CellCapabilityContainer-TDD,  
id-CellCapabilityContainer-TDD-LCR,  
id-CellPortionID,  
id-ClosedLoopModel-SupportIndicator,  
id-ClosedLoopMode2-SupportIndicator,  
id-CNOriinatedPage-PagingRqst,  
id-CommonMeasurementAccuracy,  
id-CommonMeasurementObjectType-CM-Rprt,  
id-CommonMeasurementObjectType-CM-Rqst,  
id-CommonMeasurementObjectType-CM-Rsp,  
id-CommonMeasurementType,  
id-CommonTransportChannelResourcesInitialisationNotRequired,  
id-CongestionCause,  
id-CoverageIndicator,  
id-CriticalityDiagnostics,  
id-D-RNTI,  
id-D-RNTI-ReleaseIndication,  
id-DCHs-to-Add-FDD,  
id-DCHs-to-Add-TDD,  
id-DCH-DeleteList-RL-ReconfPrepFDD,  
id-DCH-DeleteList-RL-ReconfPrepTDD,  
id-DCH-DeleteList-RL-ReconfRqstFDD,  
id-DCH-DeleteList-RL-ReconfRqstTDD,  
id-DCH-FDD-Information,  
id-DCH-TDD-Information,
```

```
id-FDD-DCHs-to-Modify,  
id-TDD-DCHs-to-Modify,  
id-DCH-InformationResponse,  
id-DCH-Rate-InformationItem-RL-CongestInd,  
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,  
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,  
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,  
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,  
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,  
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,  
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,  
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,  
id-FDD-DL-CodeInformation,  
id-DL-DPCH-Information-RL-ReconfPrepFDD,  
id-DL-DPCH-Information-RL-SetupRqstFDD,  
id-DL-DPCH-Information-RL-ReconfRqstFDD,  
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,  
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,  
id-DL-DPCH-InformationItem-RL-SetupRspTDD,  
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,  
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,  
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,  
id-DL-DPCH-TimingAdjustment,  
id-DL-Physical-Channel-Information-RL-SetupRqstTDD,  
id-DL-PowerBalancing-Information,  
id-DL-PowerBalancing-ActivationIndicator,  
id-DL-PowerBalancing-UpdatedIndicator,  
id-DL-ReferencePowerInformation,  
id-DLReferencePower,  
id-DLReferencePowerList-DL-PC-Rqst,  
id-DL-ReferencePowerInformation-DL-PC-Rqst,  
id-DRXCycleLengthCoefficient,  
id-DedicatedMeasurementObjectType-DM-Fail,  
id-DedicatedMeasurementObjectType-DM-Fail-Ind,  
id-DedicatedMeasurementObjectType-DM-Rprt,  
id-DedicatedMeasurementObjectType-DM-Rqst,  
id-DedicatedMeasurementObjectType-DM-Rsp,  
id-DedicatedMeasurementType,  
id-DelayedActivation,  
id-DelayedActivationList-RL-ActivationCmdFDD,  
id-DelayedActivationList-RL-ActivationCmdTDD,  
id-DelayedActivationInformation-RL-ActivationCmdFDD,  
id-DelayedActivationInformation-RL-ActivationCmdTDD,
```

```
id-DPC-Mode,
id-DPC-Mode-Change-SupportIndicator,
id-DSCHs-to-Add-FDD,
id-DSCHs-to-Add-TDD,
id-DSCH-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Delete-RL-ReconfPrepFDD,
id-DSCH-FDD-Information,
id-DSCH-InformationListIE-RL-AdditionRspTDD,
id-DSCH-InformationListIES-RL-SetupRspTDD,
id-DSCH-TDD-Information,
id-DSCH-FDD-InformationResponse,
id-DSCH-ModifyList-RL-ReconfPrepTDD,
id-DSCH-Modify-RL-ReconfPrepFDD,
id-DSCH-RNTI,
id-DSCHsToBeAddedOrModified-FDD,
id-DSCHsToBeAddedOrModifiedList-RL-ReconfReadyTDD,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-Enhanced-PrimaryCPICH-EcNo,
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD,
id-GA-Cell,
id-GA-CellAdditionalShapes,
id-HCS-Prio,
id-HSDSCH-FDD-Information,
id-HSDSCH-FDD-Information-Response,
id-HSDSCH-FDD-Information-to-Add,
id-HSDSCH-FDD-Information-to-Delete,
id-HSDSCH-FDD-Update-Information,
id-HSDSCH-TDD-Update-Information,
id-HSDSCH-Information-to-Modify,
id-HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd,
id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd,
id-HSDSCH-RNTI,
id-HSDSCH-TDD-Information,
id-HSDSCH-TDD-Information-Response,
id-HSDSCH-TDD-Information-Response-LCR,
id-HSDSCH-TDD-Information-to-Add,
id-HSDSCH-TDD-Information-to-Delete,
id-HSPDSCH-RL-ID,
id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD,
id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD,
id-HSSICH-Info-DM-Rprt,
id-HSSICH-Info-DM-Rqst,
id-HSSICH-Info-DM-Rsp,
id-IMSI,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationReportCharacteristics,
```

```
id-InformationType,
id-InnerLoopDLPStatus,
id-SplitType,
id-LengthOfTFCI2,
id-L3-Information,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-PagingArea-PagingRqst,
id-PartialReportingIndicator,
id-PDSCH-RL-ID,
id-Permanent-NAS-UE-Identity,
id-Phase-Reference-Update-Indicator,
id-FACH-FlowControlInformation,
id-PowerAdjustmentType,
id-PrimCCPCH-RSCP-DL-PC-RqstTDD,
id-Primary-CPICH-Usage-For-Channel-Estimation,
id-PropagationDelay,
id-Qth-Parameter,
id-RANAP-RelocationInformation,
id-ResetIndicator,
id-RL-Information-PhyChReconfRqstFDD,
id-RL-Information-PhyChReconfRqstTDD,
id-RL-Information-RL-AdditionRqstFDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-DeletionRqst,
id-RL-Information-RL-FailureInd,
id-RL-Information-RL-ReconfPrepFDD,
id-RL-Information-RL-RestoreInd,
id-RL-Information-RL-SetupRqstFDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-InformationItem-RL-CongestInd,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-CongestInd,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadyTDD,
id-RL-InformationResponse-RL-ReconfRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRspFDD,
id-RL-InformationResponseItem-RL-SetupRspFDD,
```

```
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReadyFDD,
id-RL-InformationResponseList-RL-ReconfRspFDD,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-ParameterUpdateIndicationFDD-RL-Information-Item,
id-RL-ParameterUpdateIndicationFDD-RL-InformationList,
id-RL-ReconfigurationFailure-RL-ReconfFail,
id-RL-ReconfigurationReadyTDD-RL-Information,
id-RL-ReconfigurationRequestFDD-RL-InformationList,
id-RL-ReconfigurationRequestFDD-RL-Information-IEs,
id-RL-ReconfigurationRequestTDD-RL-Information,
id-RL-Specific-DCH-Info,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rgst,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-Information-RL-FailureInd,
id-RL-Set-Information-RL-RestoreInd,
id-RL-Set-Successful-InformationItem-DM-Fail,
id-RL-Set-Unsuccessful-InformationItem-DM-Fail,
id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind,
id-RL-Successful-InformationItem-DM-Fail,
id-RL-Unsuccessful-InformationItem-DM-Fail,
id-RL-Unsuccessful-InformationItem-DM-Fail-Ind,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporing-Object-RL-RestoreInd,
id-RNC-ID,
id-RxTimingDeviationForTA,
id-S-RNTI,
id-SAI,
id-Secondary-CPICH-Information,
id-Secondary-CPICH-Information-Change,
id-SFN,
id-SFNReportingIndicator,
id-SNA-Information,
id-SRNC-ID,
id-SSDT-CellIDforEDSCHPC,
id-STTD-SupportIndicator,
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-TDD-maxNrDLPhysicalchannels,
id-TDD-Support-8PSK,
id-TFCI-PC-SupportIndicator,
id-timeSlot-ISCP,
id-TimeSlot-RL-SetupRspTDD,
id-TransportBearerID,
id-TransportBearerRequestIndicator,
id-TransportLayerAddress,
id-UC-ID,
id-ContextInfoItem-Reset,
id-ContextGroupInfoItem-Reset,
```

id-Transmission-Gap-Pattern-Sequence-Information,
id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation,
id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH,
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,
id-UL-Physical-Channel-Information-RL-SetupRqstTDD,
id-UL-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,
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD,

```
id-RL-LCR-InformationResponse-RL-AdditionRspTDD,
id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,
id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,
id-DSCH-LCR-InformationListIES-RL-AdditionRspTDD,
id-USCH-LCR-InformationListIES-RL-AdditionRspTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD,
id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD,
id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD,
id-TSTD-Support-Indicator-RL-SetupRqstTDD,
id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD,
id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD,
id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD,
id-neighbouringTDDCellMeasurementInformationLCR,
id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD,
id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD,
id-TrafficClass,
id-UL-Synchronisation-Parameters-LCR,
id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD,
id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD,
id-MAChs-ResetIndicator,
id-UL-TimingAdvanceCtrl-LCR,
id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD,
id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD,
id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD,
id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD,
id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD,
id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD,
id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD,
id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationList-RL-ReconfRspTDD,
id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD,
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationItem-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationItem-RL-AdditionRqstTDD,
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD,
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD
```

```
FROM RNSAP-Constants;
```

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

```

-- 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-TxTransmission-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     SSIDT-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                ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

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

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

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

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
    rL-ID                      RL-ID,
    c-ID                       C-ID,
    firstRLS-indicator         FirstRLS-Indicator,
    frameOffset                 FrameOffset,
    chipOffset                  ChipOffset,
    propagationDelay            PropagationDelay OPTIONAL,
    diversityControlField       DiversityControlField OPTIONAL
-- This IE shall be present if the RL is not the first one in the RL-InformationList-RL-SetupRqstFDD --,
    dl-InitialTX-Power          DL-Power OPTIONAL,
    primaryCPICH-EcNo           PrimaryCPICH-EcNo OPTIONAL,
    sSDT-CellID                 SSDT-CellID OPTIONAL,
    transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
-- This IE shall be present unless Diversity Mode IE in UL DPCH Information group is "none"
}

```

```

IE-Extensions          ProtocolExtensionContainer { {RL-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

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

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 }|
{ ID id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation    CRITICALITY ignore      EXTENSION UE-Support-Of-Dedicated-Pilots-For-Channel-
Estimation    PRESENCE optional }|
{ ID id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH    CRITICALITY ignore      EXTENSION UE-Support-Of-Dedicated-Pilots-
For-Channel-Estimation-Of-HS-DSCH    PRESENCE optional },
...
}

/* partly omitted */

-- ****
-- 
-- RADIO LINK SETUP RESPONSE FDD
-- 
-- ****

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

RadioLinkSetupResponseFDD-IEs RNSAP-PROTOCOL-IES ::= {
{ ID id-D-RNTI           CRITICALITY ignore      TYPE D-RNTI      PRESENCE optional } |
{ ID id-CN-PS-DomainIdentifier    CRITICALITY ignore      TYPE CN-PS-DomainIdentifier    PRESENCE optional } |
{ ID id-CN-CS-DomainIdentifier    CRITICALITY ignore      TYPE CN-CS-DomainIdentifier    PRESENCE optional } |
{ ID id-RL-InformationResponseList-RL-SetupRspFDD  CRITICALITY ignore      TYPE RL-InformationResponseList-RL-SetupRspFDD  PRESENCE mandatory } |
{ ID id-UL-SIRTarget          CRITICALITY ignore      TYPE UL-SIR      PRESENCE optional } |
{ ID id-CriticalityDiagnostics    CRITICALITY ignore      TYPE CriticalityDiagnostics    PRESENCE optional },
...
}

```

```

RL-InformationResponseList-RL-SetupRspFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {RL-InformationResponseItemIEs-RL-SetupRspFDD} }

RL-InformationResponseItemIEs-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-SetupRspFDD   CRITICALITY ignore   TYPE RL-InformationResponseItem-RL-SetupRspFDD   PRESENCE mandatory   }
}

RL-InformationResponseItem-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID                      RL-ID,
    rL-Set-ID                   RL-Set-ID,
    uRA-Information             URA-Information OPTIONAL,
    SAI,
    gA-Cell                     GA-Cell OPTIONAL,
    gA-AccessPointPosition      GA-AccessPointPosition OPTIONAL,
    received-total-wide-band-power Received-total-wide-band-power,
    secondary-CCPCH-Info        Secondary-CCPCH-Info OPTIONAL,
    dl-CodeInformation          FDD-DL-CodeInformation,
    diversityIndication         DiversityIndication-RL-SetupRspFDD,
    -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
    -- the tabular message format in subclause 9.1.
    ssDT-SupportIndicator       ssDT-SupportIndicator,
    maxUL-SIR                   UL-SIR,
    minUL-SIR                   UL-SIR,
    closedlooptimingadjustmentmode Closedlooptimingadjustmentmode OPTIONAL,
    maximumAllowedULTxPower     MaximumAllowedULTxPower,
    maximumDLTxPower            DL-Power,
    minimumDLTxPower            DL-Power,
    primaryScramblingCode       PrimaryScramblingCode OPTIONAL,
    uL-UARFCN                   UARFCN OPTIONAL,
    dL-UARFCN                   UARFCN OPTIONAL,
    primaryCPICH-Power          PrimaryCPICH-Power,
    dsCHInformationResponse     DSCH-InformationResponse-RL-SetupRspFDD OPTIONAL,
    neighbouring-UMTS-CellInformation Neighbouring-UMTS-CellInformation OPTIONAL,
    neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation OPTIONAL,
    pC-Preamble                 PC-Preamble,
    sRB-Delay                   SRB-Delay,
    iE-Extensions                ProtocolExtensionContainer { {RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes   CRITICALITY ignore   EXTENSION   GA-CellAdditionalShapes   PRESENCE optional }|
    { ID id-DL-PowerBalancing-ActivationIndicator   CRITICALITY ignore   EXTENSION   DL-PowerBalancing-ActivationIndicator   PRESENCE optional }|
    { ID id-HSDSCH-FDD-Information-Response   CRITICALITY ignore   EXTENSION   HSDSCH-FDD-Information-Response   PRESENCE optional }|
    { ID id-TFCI-PC-SupportIndicator   CRITICALITY ignore   EXTENSION   TFCI-PC-SupportIndicator   PRESENCE optional }|
    { ID id-HCS-Prio                  CRITICALITY ignore   EXTENSION   HCS-Prio                  PRESENCE optional }|
    { ID id-Primary-CPICH-Usage-For-Channel-Estimation   CRITICALITY ignore   EXTENSION   Primary-CPICH-Usage-For-Channel-Estimation   PRESENCE optional }|
    { ID id-Secondary-CPICH-Information   CRITICALITY ignore   EXTENSION   Secondary-CPICH-Information   PRESENCE optional },
    ...
}

```

```

}

DiversityIndication-RL-SetupRspFDD ::= CHOICE {
    combining
        Combining-RL-SetupRspFDD,
    nonCombiningOrFirstRL
        NonCombiningOrFirstRL-RL-SetupRspFDD
}
}

Combining-RL-SetupRspFDD ::= SEQUENCE {
    rL-ID
        RL-ID,
    iE-Extensions
        ProtocolExtensionContainer { { CombiningItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

CombiningItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DCH-InformationResponse      CRITICALITY ignore   EXTENSION DCH-InformationResponse      PRESENCE optional },
    ...
}

NonCombiningOrFirstRL-RL-SetupRspFDD ::= SEQUENCE {
    dCH-InformationResponse      DCH-InformationResponse,
    iE-Extensions
        ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs} } OPTIONAL,
    ...
}

NonCombiningOrFirstRLItem-RL-SetupRspFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationResponse-RL-SetupRspFDD ::= ProtocolIE-Single-Container {{ DSCH-InformationResponseIE-RL-SetupRspFDD }}
```

DSCH-InformationResponseIE-RL-SetupRspFDD RNSAP-PROTOCOL-IES ::= {
 { ID id-DSCH-FDD-InformationResponse CRITICALITY ignore TYPE DSCH-FDD-InformationResponse PRESENCE mandatory }
}

RadioLinkSetupResponseFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
 { ID id-DSCH-RNTI CRITICALITY ignore EXTENSION DSCH-RNTI PRESENCE optional }|
 { ID id-HSDSCH-RNTI CRITICALITY reject EXTENSION HSDSCH-RNTI PRESENCE optional },
 ...
}

/ partly omitted */*

```

-- ****
-- 
-- RADIO LINK SETUP FAILURE FDD
-- 
-- ****
```

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

```

}

RadioLinkSetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-D-RNTI           CRITICALITY ignore   TYPE D-RNTI           PRESENCE optional } |
  { ID id-CN-PS-DomainIdentifier   CRITICALITY ignore   TYPE CN-PS-DomainIdentifier   PRESENCE optional } |
  { ID id-CN-CS-DomainIdentifier   CRITICALITY ignore   TYPE CN-CS-DomainIdentifier   PRESENCE optional } |
  { ID id-CauseLevel-RL-SetupFailureFDD   CRITICALITY ignore   TYPE CauseLevel-RL-SetupFailureFDD   PRESENCE mandatory } |
  { ID id-UL-SIRTarget   CRITICALITY ignore   TYPE UL-SIR           PRESENCE optional } |
  { ID id-CriticalityDiagnostics   CRITICALITY ignore   TYPE CriticalityDiagnostics   PRESENCE optional },
  ...
}

CauseLevel-RL-SetupFailureFDD ::= CHOICE {
  generalCause      GeneralCauseList-RL-SetupFailureFDD,
  rLSpecificCause   RLSpecificCauseList-RL-SetupFailureFDD,
  ...
}

GeneralCauseList-RL-SetupFailureFDD ::= SEQUENCE {
  cause                  Cause,
  iE-Extensions          ProtocolExtensionContainer { { GeneralCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
  ...
}

GeneralCauseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

RLSpecificCauseList-RL-SetupFailureFDD ::= SEQUENCE {
  unsuccessful-RL-InformationRespList-RL-SetupFailureFDD   UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD,
  successful-RL-InformationRespList-RL-SetupFailureFDD     SuccessfulRL-InformationResponseList-RL-SetupFailureFDD OPTIONAL,
  iE-Extensions          ProtocolExtensionContainer { { RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs } } OPTIONAL,
  ...
}

RLSpecificCauseItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  { ID id-DSCH-RNTI         CRITICALITY ignore   EXTENSION DSCH-RNTI           PRESENCE optional } |
  { ID id-HSDSCH-RNTI        CRITICALITY reject    EXTENSION HSDSCH-RNTI           PRESENCE optional },
  ...
}

UnsuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (1..maxNrOfRLs)) OF ProtocolIE-Single-Container { {UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs} }

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  { ID id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD   CRITICALITY ignore   TYPE UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD
  PRESENCE mandatory }
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {

```

```

rL-ID                      RL-ID,
cause                      Cause,
iE-Extensions               ProtocolExtensionContainer { {UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
...
}

UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
...
}

SuccessfulRL-InformationResponseList-RL-SetupFailureFDD ::= SEQUENCE (SIZE (0..maxNrOfRLs-1)) OF ProtocolIE-Single-Container { {SuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs} }

SuccessfulRL-InformationResponse-RL-SetupFailureFDD-IEs RNSAP-PROTOCOL-IES ::= {
  ID id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD      CRITICALITY ignore  TYPE SuccessfulRL-InformationResponse-RL-SetupFailureFDD
  PRESENCE mandatory
}

SuccessfulRL-InformationResponse-RL-SetupFailureFDD ::= SEQUENCE {
  rL-ID                      RL-ID,
  rL-Set-ID                  RL-Set-ID,
  uRA-Information             URA-Information OPTIONAL,
  sAI                         SAI,
  gA-Cell                     GA-Cell OPTIONAL,
  gA-AccessPointPosition      GA-AccessPointPosition OPTIONAL,
  received-total-wide-band-power Received-total-wide-band-power,
  secondary-CCPCH-Info        Secondary-CCPCH-Info OPTIONAL,
  dl-CodeInformation           FDD-DL-CodeInformation,
  diversityIndication         DiversityIndication-RL-SetupFailureFDD,
  -- This IE represents both the Diversity Indication IE and the choice based on the diversity indication as described in
  -- the tabular message format in subclause 9.1.
  ssDT-SupportIndicator       SSDT-SupportIndicator,
  maxUL-SIR                   UL-SIR,
  minUL-SIR                   UL-SIR,
  closedlooptimingadjustmentmode Closedlooptimingadjustmentmode OPTIONAL,
  maximumAllowedULTxPower     MaximumAllowedULTxPower,
  maximumDLTxPower            DL-Power,
  minimumDLTxPower            DL-Power,
  primaryCPICH-Power          PrimaryCPICH-Power,
  primaryScramblingCode       PrimaryScramblingCode OPTIONAL,
  uL-UARFCN                   UARFCN OPTIONAL,
  dL-UARFCN                   UARFCN OPTIONAL,
  dSCH-InformationResponse-RL-SetupFailureFDD DSCH-InformationResponseList-RL-SetupFailureFDD OPTIONAL,
  neighbouring-UMTS-CellInformation Neighbouring-UMTS-CellInformation OPTIONAL,
  neighbouring-GSM-CellInformation Neighbouring-GSM-CellInformation OPTIONAL,
  pC-Preamble                 PC-Preamble,
  sRB-Delay                    SRB-Delay,
  iE-Extensions                ProtocolExtensionContainer { {SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
...
}

```

```

SuccessfulRL-InformationResponse-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes      CRITICALITY ignore EXTENSION GA-CellAdditionalShapes      PRESENCE optional }|
    { ID id-DL-PowerBalancing-ActivationIndicator   CRITICALITY ignore EXTENSION DL-PowerBalancing-ActivationIndicator   PRESENCE
optional }|
    { ID id-HSDSCH-FDD-Information-Response   CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response   PRESENCE optional }|
    { ID id-TFCI-PC-SupportIndicator   CRITICALITY ignore EXTENSION TFCI-PC-SupportIndicator   PRESENCE optional }|
    { ID id-HCS-Prio      CRITICALITY ignore EXTENSION HCS-Prio      PRESENCE optional }|
    { ID id-Primary-CPICH-Usage-For-Channel-Estimation   CRITICALITY ignore EXTENSION Primary-CPICH-Usage-For-Channel-Estimation   PRESENCE
optional }|
    { ID id-Secondary-CPICH-Information   CRITICALITY ignore EXTENSION Secondary-CPICH-Information   PRESENCE optional },
    ...
}

DiversityIndication-RL-SetupFailureFDD ::= CHOICE {
    combining           Combining-RL-SetupFailureFDD,
    nonCombiningOrFirstRL   NonCombiningOrFirstRL-RL-SetupFailureFDD
}

Combining-RL-SetupFailureFDD ::= SEQUENCE {
    rL-ID                RL-ID,
    iE-Extensions        ProtocolExtensionContainer { { CombiningItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

CombiningItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DCH-InformationResponse   CRITICALITY ignore EXTENSION DCH-InformationResponse   PRESENCE optional },
    ...
}

NonCombiningOrFirstRL-RL-SetupFailureFDD ::= SEQUENCE {
    dCH-InformationResponse       DCH-InformationResponse,
    iE-Extensions                ProtocolExtensionContainer { { NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs} } OPTIONAL,
    ...
}

NonCombiningOrFirstRLItem-RL-SetupFailureFDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DSCH-InformationResponseList-RL-SetupFailureFDD ::= ProtocolIE-Single-Container { { DSCH-InformationResponseListIEs-RL-SetupFailureFDD } }

DSCH-InformationResponseListIEs-RL-SetupFailureFDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DSCH-FDD-InformationResponse   CRITICALITY ignore TYPE DSCH-FDD-InformationResponse   PRESENCE mandatory }
}

RadioLinkSetupFailureFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

/* partly omitted */

```

```

-- ****
-- UPLINK SIGNALLING TRANSFER INDICATION FDD
--
-- ****

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

UplinkSignallingTransferIndicationFDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UC-ID           CRITICALITY ignore TYPE UC-ID           PRESENCE mandatory } |
    { ID id-SAI              CRITICALITY ignore TYPE SAI             PRESENCE mandatory } |
    { ID id-GA-Cell           CRITICALITY ignore TYPE GA-Cell         PRESENCE optional } |
    { ID id-C-RNTI           CRITICALITY ignore TYPE C-RNTI         PRESENCE mandatory } |
    { ID id-S-RNTI           CRITICALITY ignore TYPE S-RNTI         PRESENCE mandatory } |
    { ID id-D-RNTI           CRITICALITY ignore TYPE D-RNTI         PRESENCE optional } |
    { ID id-PropagationDelay CRITICALITY ignore TYPE PropagationDelay PRESENCE mandatory } |
    { ID id-STTD-SupportIndicator CRITICALITY ignore TYPE STTD-SupportIndicator PRESENCE mandatory } |
    { ID id-ClosedLoopMode1-SupportIndicator CRITICALITY ignore TYPE ClosedLoopMode1-SupportIndicator PRESENCE mandatory } |
    { ID id-ClosedLoopMode2-SupportIndicator CRITICALITY ignore TYPE ClosedLoopMode2-SupportIndicator PRESENCE mandatory } |
    { ID id-L3-Information    CRITICALITY ignore TYPE L3-Information  PRESENCE mandatory } |
    { ID id-CN-PS-DomainIdentifier CRITICALITY ignore TYPE CN-PS-DomainIdentifier PRESENCE optional } |
    { ID id-CN-CS-DomainIdentifier CRITICALITY ignore TYPE CN-CS-DomainIdentifier PRESENCE optional } |
    { ID id-URA-Information   CRITICALITY ignore TYPE URA-Information PRESENCE optional },
    ...
}

UplinkSignallingTransferIndicationFDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-GA-CellAdditionalShapes CRITICALITY ignore EXTENSION GA-CellAdditionalShapes  PRESENCE optional } |
    { ID id-DPC-Mode-Change-SupportIndicator CRITICALITY ignore EXTENSION DPC-Mode-Change-SupportIndicator  PRESENCE optional } |
    { ID id-CommonTransportChannelResourcesInitialisationNotRequired CRITICALITY ignore EXTENSION
CommonTransportChannelResourcesInitialisationNotRequired  PRESENCE optional } |
    { ID id-CellCapabilityContainer-FDD CRITICALITY ignore EXTENSION CellCapabilityContainer-FDD  PRESENCE optional } |
    { ID id-SNA-Information        CRITICALITY ignore EXTENSION SNA-Information  PRESENCE optional } |
    { ID id-CellPortionID         CRITICALITY ignore EXTENSION CellPortionID    PRESENCE optional },
    ...
}

/* partly omitted */

```

9.3.4 Information Element Definitions

```
/* partly omitted */

-- C

Cause ::= CHOICE {
    radioNetwork      CauseRadioNetwork,
    transport         CauseTransport,
    protocol          CauseProtocol,
    misc              CauseMisc,
    ...
}

CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    om-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
    ...
}

CauseProtocol ::= ENUMERATED {
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    abstract-syntax-error-falsely-constructed-message,
    ...
}

CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
    power-level-not-supported,
    ul-scrambling-code-already-in-use,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available,
    measurement-not-supported-for-the-object,
    combining-resources-not-available,
    combining-not-supported,
    reconfiguration-not-allowed,
    requested-configuration-not-supported,
    synchronisation-failure,
    requested-tx-diversity-mode-not-supported,
    measurement-temporaily-not-available,
```

```
unspecified,
invalid-CM-settings,
reconfiguration-CFN-not-elapsed,
number-of-DL-codes-not-supported,
dedicated-transport-channel-type-not-supported,
dl-shared-channel-type-not-supported,
ul-shared-channel-type-not-supported,
common-transport-channel-type-not-supported,
ul-spreading-factor-not-supported,
dl-spreading-factor-not-supported,
cm-not-supported,
transaction-not-supported-by-destination-node-b,
rl-already-activated-or-allocated,
...
number-of-UL-codes-not-supported,
cell-reserved-for-operator-use,
dpc-mode-change-not-supported,
information-temporarily-not-available,
information-provision-not-supported-for-the-object,
power-balancing-status-not-compatible,
delayed-activation-not-supported,
rl-timing-adjustment-not-supported,
unknown-RNTI
}

CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified,
    ...
}

CellCapabilityContainer-FDD ::= BIT STRING (SIZE (32))
-- First bit: Flexible Hard Split Support Indicator
-- Second bit: Delayed Activation Support Indicator
-- Third bit: HS-DSCH Support Indicator
-- Fourth bit: DSCH Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

CellCapabilityContainer-TDD ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Second bit: HS-DSCH Support Indicator
-- Third bit: DSCH Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

CellCapabilityContainer-TDD-LCR ::= BIT STRING (SIZE (32))
-- First bit: Delayed Activation Support Indicator
-- Second bit: HS-DSCH Support Indicator
-- Third bit: DSCH Support Indicator
-- Note that undefined bits are considered as a spare bit and spare bits shall be set to 0 by the transmitter and shall be ignored by the receiver.

C-ID          ::= INTEGER (0..65535)
```

```
CCTrCH-ID          ::= INTEGER (0..15)

Cell-Capacity-Class-Value ::= SEQUENCE {
    uplinkCellCapacityClassValue      INTEGER(1..100,...),
    downlinkCellCapacityClassValue    INTEGER(1..100,...)
}

CellIndividualOffset     ::= INTEGER (-20..20)

CellParameterID         ::= INTEGER (0..127,...)

CellPortionID      ::= INTEGER (0..63,...)

CFN                  ::= INTEGER (0..255)

CGI ::= SEQUENCE {
    LAI           SEQUENCE {
        pLMN-Identity   PLMN-Identity,
        LAC            LAC,
        iE-Extensions   ProtocolExtensionContainer { {LAI-ExtIEs} } OPTIONAL,
        ...
    },
    CI             CI,
    iE-Extensions   ProtocolExtensionContainer { {CGI-ExtIEs} } OPTIONAL
}

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

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

ChannelCodingType ::= ENUMERATED {
    no-codingTDD,
    convolutional-coding,
    turbo-coding,
    ...
}

ChipOffset           ::= INTEGER (0..38399)

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

ClosedLoopModel-SupportIndicator  ::= ENUMERATED {
    closedLoop-Model-Supported,
    closedLoop-Model-not-Supported
}
```

```

ClosedLoopMode2-SupportIndicator ::= ENUMERATED {
    closedLoop-Mode2-Supported,
    closedLoop-Mode2-not-Supported
}

ClosedloopTimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
    ...
}

CodeNumber ::= INTEGER (0..maxCodeNumComp-1)

CodingRate ::= ENUMERATED {
    half,
    third,
    ...
}

CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass      TUTRANGPSAccuracyClass,
    ...
}

CommonMeasurementType ::= ENUMERATED {
    uTRAN-GPS-timing-of-cell-frames-for-UE-Positioning,
    sFN-SFN-observerd-time-difference,
    load,
    transmitted-carrier-power,
    received-total-wide-band-power,
    uplink-timeslot-iscp,
    ...,
    rT-load,
    nRT-load-Information
}
-- For measurements on the Iur-g interface, only load, RT Load and NRT Load information are requested.

CommonMeasurementValue ::= CHOICE {
    tUTRANGPSMeasurementValueInformation   TUTRANGPSMeasurementValueInformation,
    sFNSFNMeasurementValueInformation     SFNSFNMeasurementValueInformation,
    loadValue                           LoadValue,
    transmittedCarrierPowerValue        INTEGER(0..100),
    receivedTotalWideBandPowerValue     INTEGER(0..621),
    uplinkTimeslotISCPValue            UL-TimeslotISCP,
    ...,
    rTLoadValue                         RTLoadValue,
    nRTLoadInformationValue            NRTLoadInformationValue
}
-- For measurements on the Iur-g interface, only load, RT Load and NRT Load values are reported.

```

```
CommonMeasurementValueInformation ::= CHOICE {
    measurementAvailable      CommonMeasurementAvailable,
    measurementnotAvailable   NULL
}

CommonMeasurementAvailable ::= SEQUENCE {
    commonMeasurementValue     CommonMeasurementValue,
    iE-Extensions             ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs} }      OPTIONAL,
    ...
}

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

CongestionCause ::= ENUMERATED {
    uTRAN-dynamic-resources,
    uTRAN-semistatic-resources,
    ...
}

CommonTransportChannelResourcesInitialisationNotRequired ::= ENUMERATED {
    not-Required
}

CoverageIndicator ::= ENUMERATED {
    overlap,
    covers,
    containedIn,
    ...
}

CRC-Size          ::= ENUMERATED {
    v0,
    v8,
    v12,
    v16,
    v24,
    ...
}

CriticalityDiagnostics ::= SEQUENCE {
    procedureID            ProcedureID      OPTIONAL,
    triggeringMessage       TriggeringMessage OPTIONAL,
    procedureCriticality   Criticality      OPTIONAL,
    transactionID          TransactionID   OPTIONAL,
    iEsCriticalityDiagnostics CriticalityDiagnostics-IE-List OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { { CriticalityDiagnostics-ExtIEs} } OPTIONAL,
    ...
}
```

```

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

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
  SEQUENCE {
    iECriticality          Criticality,
    iE-ID                  ProtocolIE-ID,
    repetitionNumber        RepetitionNumber0      OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} } OPTIONAL,
    ...
  }

CriticalityDiagnostics-IE-List-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
{   ID id-MessageStructure      CRITICALITY ignore      EXTENSION MessageStructure      PRESENCE optional  }|
{   ID id-TypeOfError          CRITICALITY ignore      EXTENSION TypeOfError        PRESENCE mandatory },
...
}

MessageStructure ::= SEQUENCE (SIZE (1..maxNrOfLevels)) OF
  SEQUENCE {
    iE-ID                  ProtocolIE-ID,
    repetitionNumber        RepetitionNumber1      OPTIONAL,
    iE-Extensions           ProtocolExtensionContainer { {MessageStructure-ExtIEs} } OPTIONAL,
    ...
  }

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

CN-CS-DomainIdentifier ::= SEQUENCE {
  pLMN-Identity          PLMN-Identity,
  lAC                     LAC,
  iE-Extensions           ProtocolExtensionContainer { {CN-CS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-CS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

CN-PS-DomainIdentifier ::= SEQUENCE {
  pLMN-Identity          PLMN-Identity,
  lAC                     LAC,
  rAC                     RAC,
  iE-Extensions           ProtocolExtensionContainer { {CN-PS-DomainIdentifier-ExtIEs} } OPTIONAL
}

CN-PS-DomainIdentifier-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```
}

CNDomainType ::= ENUMERATED {
    cs-domain,
    ps-domain,
    dont-care,
    ...
}
-- See in [16]

CQI-Feedback-Cycle ::= ENUMERATED {v0, v2, v4, v8, v10, v20, v40, v80, v160,...}

CQI-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [21] subclause 4.2.1

CQI-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1

C-RNTI ::= INTEGER (0..65535)

/* partly omitted */
```

9.3.6 Constant Definitions

```

/* partly omitted */

-- *****
-- 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-ContextGroupInfoItem-Reset   ProtocolIE-ID ::= 515
id-D-RNTI                        ProtocolIE-ID ::= 21
id-D-RNTI-ReleaseIndication    ProtocolIE-ID ::= 22
id-DCHs-to-Add-FDD              ProtocolIE-ID ::= 26
id-DCHs-to-Add-TDD              ProtocolIE-ID ::= 27
id-DCH-DeleteList-RL-ReconfPrepFDD ProtocolIE-ID ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD ProtocolIE-ID ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD ProtocolIE-ID ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD ProtocolIE-ID ::= 33
id-DCH-FDD-Information          ProtocolIE-ID ::= 34
id-DCH-TDD-Information          ProtocolIE-ID ::= 35
id-FDD-DCHs-to-Modify           ProtocolIE-ID ::= 39
id-TDD-DCHs-to-Modify           ProtocolIE-ID ::= 40
id-DCH-InformationResponse      ProtocolIE-ID ::= 43
id-DCH-Rate-InformationItem-RL-CongestInd ProtocolIE-ID ::= 38
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD ProtocolIE-ID ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD ProtocolIE-ID ::= 45
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ProtocolIE-ID ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD ProtocolIE-ID ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ProtocolIE-ID ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD ProtocolIE-ID ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD ProtocolIE-ID ::= 50
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD ProtocolIE-ID ::= 51
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ProtocolIE-ID ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD ProtocolIE-ID ::= 53
id-FDD-DL-CodeInformation       ProtocolIE-ID ::= 54
id-DL-DPCH-Information-RL-ReconfPrepFDD ProtocolIE-ID ::= 59

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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
 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

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 ProtocolIE-ID ::= 63
 ProtocolIE-ID ::= 64
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 ProtocolIE-ID ::= 2

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
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 id-RL-InformationResponseList-RL-ReconfReadyFDD
 id-RL-InformationResponseList-RL-ReconfRspFDD
 id-RL-InformationResponseList-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
 id-RL-Successful-InformationItem-DM-Fail
 id-RL-Unsuccessful-InformationItem-DM-Fail
 id-RL-Unsuccessful-InformationItem-DM-Fail-Ind
 id-ReportCharacteristics
 id-Reporting-Object-RL-FailureInd
 id-Reporting-Object-RL-RestoreInd
 id-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

ProtocolIE-ID ::= 123
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 ProtocolIE-ID ::= 174

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id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD          ProtocolIE-ID ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD            ProtocolIE-ID ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD                  ProtocolIE-ID ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD                  ProtocolIE-ID ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD                  ProtocolIE-ID ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD           ProtocolIE-ID ::= 180
id-UL-DPCH-InformationItem-RL-AdditionRspTDD             ProtocolIE-ID ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD                ProtocolIE-ID ::= 182
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD        ProtocolIE-ID ::= 183
id-UL-SIRTTarget                                         ProtocolIE-ID ::= 184
id-URA-Information                                       ProtocolIE-ID ::= 185
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD ProtocolIE-ID ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD  ProtocolIE-ID ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD  ProtocolIE-ID ::= 190
id-Active-Pattern-Sequence-Information                   ProtocolIE-ID ::= 193
id-AdjustmentRatio                                       ProtocolIE-ID ::= 194
id-CauseLevel-RL-AdditionFailureFDD                     ProtocolIE-ID ::= 197
id-CauseLevel-RL-AdditionFailureTDD                     ProtocolIE-ID ::= 198
id-CauseLevel-RL-ReconfFailure                         ProtocolIE-ID ::= 199
id-CauseLevel-RL-SetupFailureFDD                       ProtocolIE-ID ::= 200
id-CauseLevel-RL-SetupFailureTDD                       ProtocolIE-ID ::= 201
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD    ProtocolIE-ID ::= 205
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD    ProtocolIE-ID ::= 206
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD     ProtocolIE-ID ::= 207
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD    ProtocolIE-ID ::= 208
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD    ProtocolIE-ID ::= 209
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD     ProtocolIE-ID ::= 210
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD       ProtocolIE-ID ::= 212
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD    ProtocolIE-ID ::= 213
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD    ProtocolIE-ID ::= 214
id-DSCHs-to-Add-TDD                                     ProtocolIE-ID ::= 215
id-DSCHs-to-Add-FDD                                     ProtocolIE-ID ::= 216
id-DSCH-DeleteList-RL-ReconfPrepTDD                    ProtocolIE-ID ::= 217
id-DSCH-Delete-RL-ReconfPrepFDD                        ProtocolIE-ID ::= 218
id-DSCH-FDD-Information                                ProtocolIE-ID ::= 219
id-DSCH-InformationListIE-RL-AdditionRspTDD           ProtocolIE-ID ::= 220
id-DSCH-InformationListIEs-RL-SetupRspTDD              ProtocolIE-ID ::= 221
id-DSCH-TDD-Information                                ProtocolIE-ID ::= 222
id-DSCH-FDD-InformationResponse                      ProtocolIE-ID ::= 223
id-DSCH-Information-RL-SetupRqstFDD                  ProtocolIE-ID ::= 226
id-DSCH-ModifyList-RL-ReconfPrepTDD                 ProtocolIE-ID ::= 227
id-DSCH-Modify-RL-ReconfPrepFDD                      ProtocolIE-ID ::= 228
id-DSCH-Specific-FDD-Additional-List                ProtocolIE-ID ::= 324
id-DSCHsToBeAddedOrModified-FDD                     ProtocolIE-ID ::= 229
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD    ProtocolIE-ID ::= 230
id-EnhancedDSCHPC                                      ProtocolIE-ID ::= 29
id-EnhancedDSCHPCIndicator                           ProtocolIE-ID ::= 225
id-GA-Cell                                           ProtocolIE-ID ::= 232
id-GA-CellAdditionalShapes                          ProtocolIE-ID ::= 3
id-SSDT-CellIDforEDSCHPC                           ProtocolIE-ID ::= 246
id-Transmission-Gap-Pattern-Sequence-Information   ProtocolIE-ID ::= 255
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD      ProtocolIE-ID ::= 256
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD       ProtocolIE-ID ::= 257

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id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 258
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 259
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 260
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 261
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 262
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 263
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 264
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD	ProtocolIE-ID ::= 265
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD	ProtocolIE-ID ::= 266
id-USCHs-to-Add	ProtocolIE-ID ::= 267
id-USCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 268
id-USCH-InformationListIE-RL-AdditionRspTDD	ProtocolIE-ID ::= 269
id-USCH-InformationListIES-RL-SetupRspTDD	ProtocolIE-ID ::= 270
id-USCH-Information	ProtocolIE-ID ::= 271
id-USCH-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 272
id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD	ProtocolIE-ID ::= 273
id-DL-Physical-Channel-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 274
id-UL-Physical-Channel-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 275
id-ClosedLoopModel-SupportIndicator	ProtocolIE-ID ::= 276
id-ClosedLoopMode2-SupportIndicator	ProtocolIE-ID ::= 277
id-STTD-SupportIndicator	ProtocolIE-ID ::= 279
id-CFNReportingIndicator	ProtocolIE-ID ::= 14
id-CNoriginatedPage-PagingRqst	ProtocolIE-ID ::= 23
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 24
id-PropagationDelay	ProtocolIE-ID ::= 25
id-RxTimingDeviationForTA	ProtocolIE-ID ::= 36
id-timeSlot-ISCP	ProtocolIE-ID ::= 37
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 15
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 16
id-CommonMeasurementAccuracy	ProtocolIE-ID ::= 280
id-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 281
id-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 282
id-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 283
id-CommonMeasurementType	ProtocolIE-ID ::= 284
id-CongestionCause	ProtocolIE-ID ::= 18
id-SFN	ProtocolIE-ID ::= 285
id-SFNReportingIndicator	ProtocolIE-ID ::= 286
id-InformationExchangeID	ProtocolIE-ID ::= 287
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 288
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 289
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 290
id-InformationReportCharacteristics	ProtocolIE-ID ::= 291
id-InformationType	ProtocolIE-ID ::= 292
id-neighbouring-LCR-TDD-CellInformation	ProtocolIE-ID ::= 58
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 65
id-RL-LCR-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 66
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 75
id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 76
id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD	ProtocolIE-ID ::= 78
id-DSCH-LCR-InformationListIES-RL-SetupRspTDD	ProtocolIE-ID ::= 79
id-USCH-LCR-InformationListIES-RL-SetupRspTDD	ProtocolIE-ID ::= 80
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 81

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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
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
ProtocolIE-ID ::= 86
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ProtocolIE-ID ::= 314

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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-HSDSCHMacdFlowSpecificInformationList-RL-PreemptRequiredInd
 id-HSDSCHMacdFlowSpecificInformationItem-RL-PreemptRequiredInd
 id-HSDSCH-RNTI
 id-HSDSCH-TDD-Information
 id-HSDSCH-TDD-Information-Response
 id-HSDSCH-TDD-Information-Response-LCR
 id-HSDSCH-TDD-Information-to-Add
 id-HSDSCH-TDD-Information-to-Delete
 id-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
 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-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD
 id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD
 id-UL-CCTrCH-InformationItem-RL-AdditionRqstTDD
 id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD
 id-DL-CCTrCH-InformationItem-RL-AdditionRqstTDD
 id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD
 id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD
 id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD
 id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD
 id-UL-TimingAdvanceCtrl-LCR
 id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD
 id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD
 id-HS-SICH-Reception-Quality
 id-HS-SICH-Reception-Quality-Measurement-Value
 id-HSSICH-Info-DM-Rprt
 id-HSSICH-Info-DM-Rqst
 id-HSSICH-Info-DM-Rsp

ProtocolIE-ID ::= 315
 ProtocolIE-ID ::= 316
 ProtocolIE-ID ::= 251
 ProtocolIE-ID ::= 150
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 ProtocolIE-ID ::= 451
 ProtocolIE-ID ::= 452
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 ProtocolIE-ID ::= 497
 ProtocolIE-ID ::= 498
 ProtocolIE-ID ::= 499

id-CCTrCH-Maximum-DL-Power-RL-SetupRspTDD	ProtocolIE-ID ::= 500
id-CCTrCH-Minimum-DL-Power-RL-SetupRspTDD	ProtocolIE-ID ::= 501
id-CCTrCH-Maximum-DL-Power-RL-AdditionRspTDD	ProtocolIE-ID ::= 502
id-CCTrCH-Minimum-DL-Power-RL-AdditionRspTDD	ProtocolIE-ID ::= 503
id-CCTrCH-Maximum-DL-Power-RL-ReconfReadyTDD	ProtocolIE-ID ::= 504
id-CCTrCH-Minimum-DL-Power-RL-ReconfReadyTDD	ProtocolIE-ID ::= 505
id-Maximum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD	ProtocolIE-ID ::= 506
id-Minimum-DL-Power-TimeslotLCR-InformationModifyItem-RL-ReconfReadyTDD	ProtocolIE-ID ::= 507
id-DL-CCTrCH-InformationList-RL-ReconfRspTDD	ProtocolIE-ID ::= 508
id-DL-DPCH-InformationModifyItem-LCR-RL-ReconfRspTDD	ProtocolIE-ID ::= 509
id-Maximum-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 510
id-Minimum-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 511
id-TDD-Support-8PSK	ProtocolIE-ID ::= 512
id-TDD-maxNrDLPhysicalchannels	ProtocolIE-ID ::= 513
id-ExtendedGSMCellIndividualOffset	ProtocolIE-ID ::= 514
id-RL-ParameterUpdateIndicationFDD-RL-InformationList	ProtocolIE-ID ::= 518
id-Primary-CPICH-Usage-For-Channel-Estimation	ProtocolIE-ID ::= 519
id-Secondary-CPICH-Information	ProtocolIE-ID ::= 520
id-Secondary-CPICH-Information-Change	ProtocolIE-ID ::= 521
id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation	ProtocolIE-ID ::= 522
id-UE-Support-Of-Dedicated-Pilots-For-Channel-Estimation-Of-HS-DSCH	ProtocolIE-ID ::= 523
id-RL-ParameterUpdateIndicationFDD-RL-Information-Item	ProtocolIE-ID ::= 524
id-Phase-Reference-Update-Indicator	ProtocolIE-ID ::= 525
id-Unidirectional-DCH-Indicator	ProtocolIE-ID ::= 526
id-CellPortionID	ProtocolIE-ID ::= xxx

END

3GPP TSG-RAN Meeting #22
Hawaii, USA, 9th – 12th, December 2003

Tdoc #RP-03xxxx

CR-Form-v7

CHANGE REQUEST

#

25.425 CR 064

#rev

1

Current version: **5.5.0**

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

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

Title:	# Signalling Support for Beamforming Enhancement	
Source:	# Nokia	
Work item code:	RANimp-BFE	Date: # 17/11/2003
Category:	<input checked="" type="checkbox"/> B Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u> .	Release: # Rel-6 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)

Reason for change: # Beamforming Enhancement WI has been worked out by RAN1 in the past and consequently it is required for RAN3 to provide proper signalling.
 This CR provides necessary signalling to support beamforming enhancement.

Summary of change: # Rev 1:
 - Updated based on agreed new Spare Extension Mechanism.

Rev 0:
 - Cell Portion ID IE is added to RACH Data Frame to inform the best cell portion to SRNC.
 - Explanation of Cell Portion IE is added.

Consequences if not approved: # Beamforming Enhancement will not be completed.

Impact Analysis:
 Impact assessment towards the previous version of the specification (same release):
 This CR has no impact on the previous version of the specification because the functionality is introduced in backward compatible way.
 Impact assessment towards the previous release of the specification:
 This CR has no impact on previous releases because the functionality is introduced in backward compatible way.

Clauses affected:		⌘ 6.2.1, new 6.2.5.xx, new 6.2.5.xy					
Other specs	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td style="text-align: center;">Y</td><td style="text-align: center;">N</td></tr> <tr><td style="text-align: center;"><input checked="" type="checkbox"/></td><td style="text-align: center;"></td></tr> </table>		Y	N	<input checked="" type="checkbox"/>		Other core specifications ⌘ CR145 TS 25.215 v5.4.0 CR887 TS 25.423 v5.7.0 CR935 TS 25.433 v5.6.0 CR106 TS 25.435 v5.5.0 CR067 TS 25.425 v5.5.0 R3-031770(CR- TS25.921 v5.2.0)
	Y	N					
<input checked="" type="checkbox"/>							
affected:	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td style="text-align: center;"></td><td style="text-align: center;"><input checked="" type="checkbox"/></td></tr> <tr><td style="text-align: center;"></td><td style="text-align: center;"><input checked="" type="checkbox"/></td></tr> </table>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	Test specifications O&M Specifications
	<input checked="" type="checkbox"/>						
	<input checked="" type="checkbox"/>						
Other comments: ⌘ This CR is based on R3-031714.							

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.

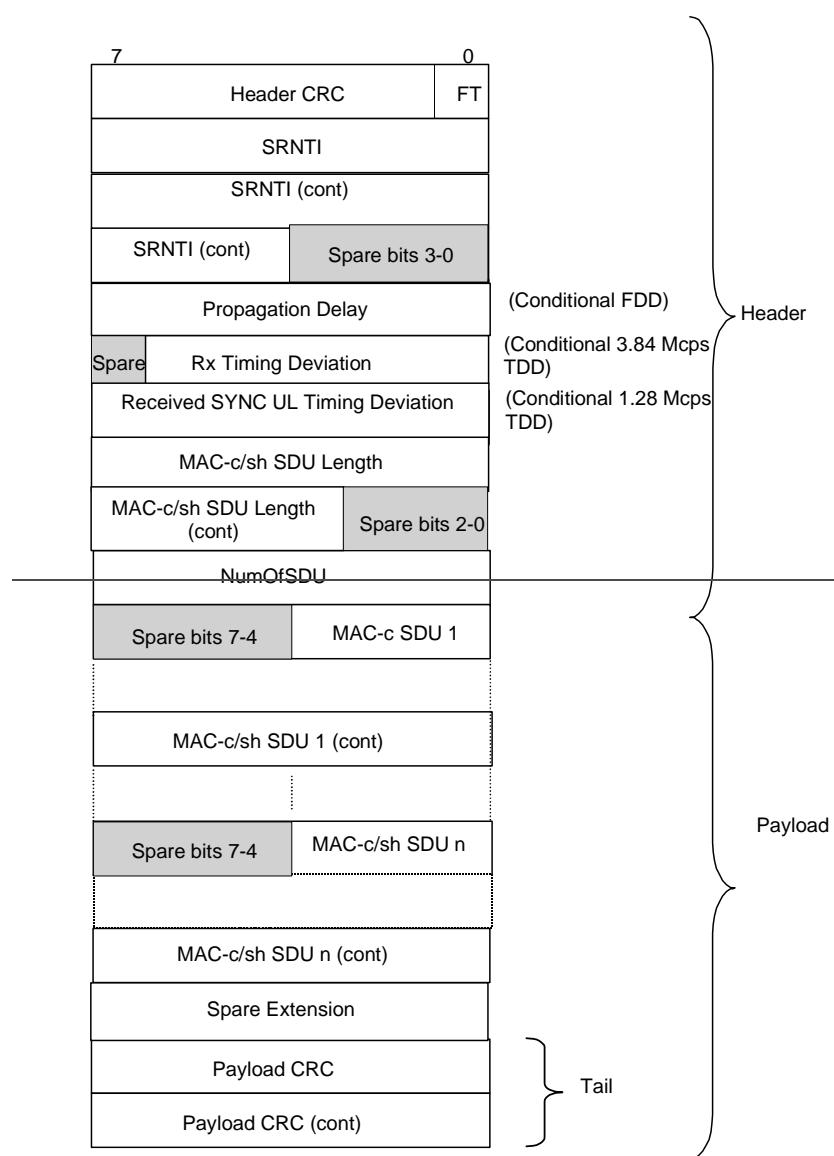
6.2 Data Frame structure

6.2.1 RACH/CPCH[FDD] Channels

RACH/CPCH[FDD] Iur data stream corresponds to the data stream of one specific UE. The used transport bearer for the transport of FACH/RACH or FACH/CPCH[FDD] is bi-directional.

The RACH/CPCH[FDD]/FACH FP does not facilitate multiplexing of data streams from different UEs onto the same data frame, but does allow multiple UEs to share the same transport bearer.

The RACH DATA FRAME structure is defined as common for FDD and TDD with conditional fields, and CPCH[FDD] DATA FRAME structure is defined as common for FDD only.



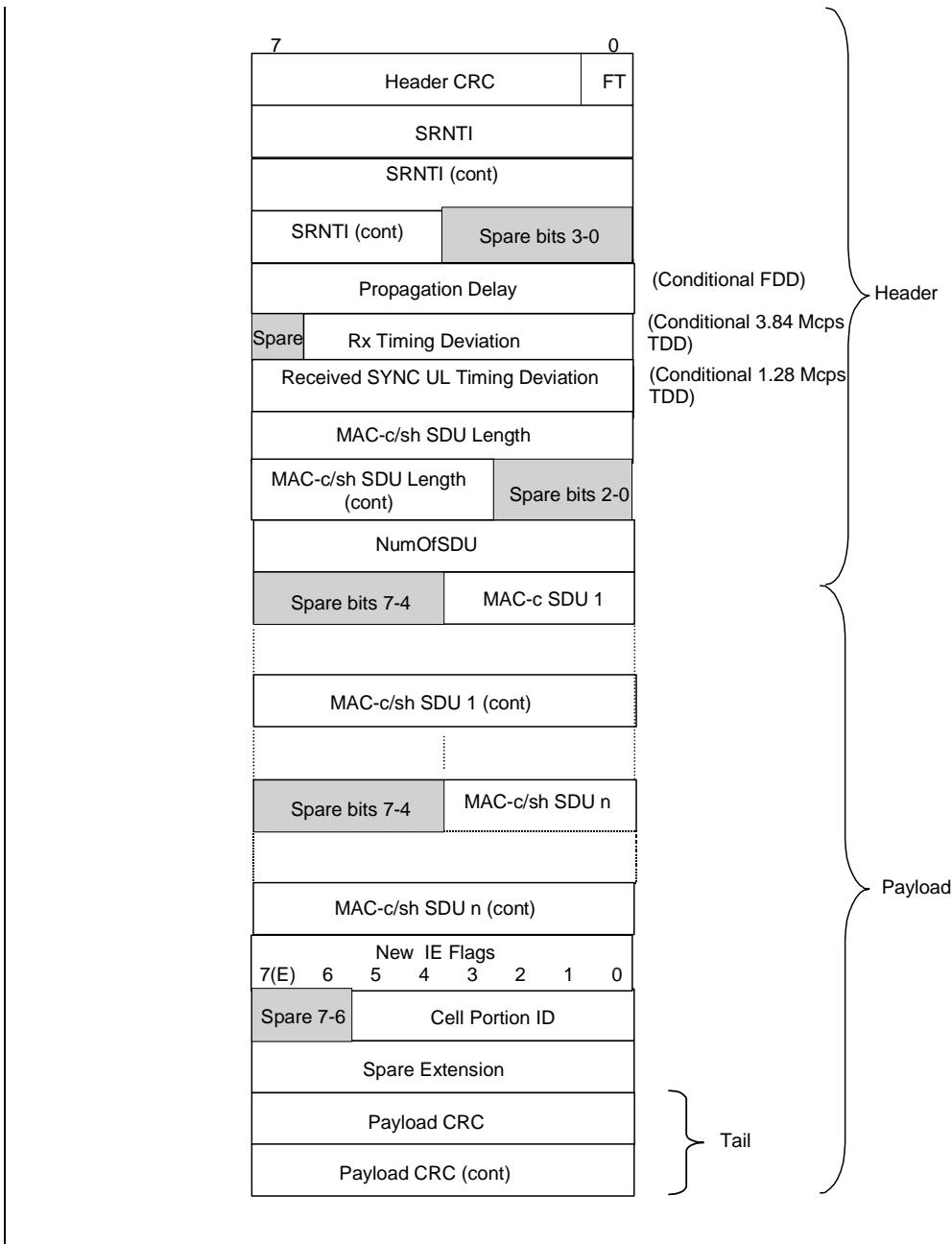


Figure 9: RACH/CPCH[FDD] DATA FRAME structure

Propagation delay is a conditional Information Element which is only present when the Cell supporting the RACH/CPCH[FDD] Transport Channel is a FDD Cell.

Rx Timing Deviation is a conditional Information Element which is only present when the Cell supporting the RACH Transport Channel is a 3.84 Mcps TDD Cell.

Received SYNC UL Timing Deviation is a conditional Information Element which is only present when the Cell supporting the RACH Transport Channel is a 1.28 Mcps TDD Cell.

[FDD- Bit 0 of New IE Flags in RACH DATA FRAME indicates if the 1st byte (bits 0-5) following the *New IE Flags* IE contains a valid Cell Portion ID (1) or not (0).]

[FDD - Field length of *Spare Extension* IE in RACH DATA FRAME is 0-30 octets.]

6.2.5.xx Cell Portion ID [FDD]

Description: Cell Portion ID indicates the cell portion with highest SIR during RACH access. Cell Portion ID is configured by O&M.

Value range: {0-63}.

Field Length: 6 bits

6.2.7.xy New IE Flags

Description: Contains flags indicating which information is valid in the fields following the *New IE Flags* IE. The last bit position of the *New IE Flags* IE is used as the Extension Flag to allow the extension of the *New IE Flags* IE in the future

Value range:

Bit 0-6: Indicates if the bytes following the *New IE Flags* IE contains a valid data (1) or not (0). The meaning of each bit is explained in the corresponding DATA FRAME subclause;

Bit7 : Indicates if the 1st byte following the *New IE Flags* IE and the corresponding IEs has additional *New IE Flags* IE (1) or not (0).

Field length: 8 bits.

3GPP TSG-RAN Meeting #22
Hawaii, USA, 9th – 12th, December 2003

Tdoc #RP-03xxxx

CR-Form-v7

CHANGE REQUEST

#

25.433 CR 935

#rev

2

Current version: **5.6.0**

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

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

Title:	# Signalling Support for Beamforming Enhancement	
Source:	# Nokia	
Work item code:	RANimp-BFE	Date: # 17/11/2003
Category:	# B Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u> .	
	Release: # Rel-6 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)	

Reason for change: # Beamforming Enhancement WI has been worked out by RAN1 in the past and consequently it is required for RAN3 to provide proper signalling.
 This CR provides necessary signalling to support beamforming enhancement.

Summary of change: #	<p>Rev 2 :</p> <ul style="list-style-type: none"> - Explanation regarding Cell portion Measurements in case Report Characteristics IE is set to "On Demand" was added. - Some editorial corrections were made. - Wrong Reference in 9.2.1.43 and 9.2.1.44 was deleted. - ASN.1 error was corrected. - Criticality column in 9.2.1.12 was modified. - Semantics Descriptions in 9.2.1.43 and 9.2.1.44 were modified. <p>Rev 1 :</p> <ul style="list-style-type: none"> - Event measurement(A,B,C,D,E,F) were added in the Common measurement for the Cell portion measurement (Received Total Wide Band Power for Cell Portion, Transmitted Carrier Power for Cell Portion, Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion). - Corresponding ASN.1 changes were made. <p>Rev 0 :</p> <ul style="list-style-type: none"> - Cell Setup includes Cell Portion mapping information. - New measurement types were added in the Common measurement for the Cell portion measurement (Received Total Wide Band Power for Cell Portion,
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	<p>Transmitted Carrier Power for Cell Portion, Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion</p> <ul style="list-style-type: none"> - Explanation in Common Measurement procedure was added to explain that the measurement reports for these new measurements shall report for all the cell portions under the cell. - Secondary CPICH Information IE is added to RL Setup Request. - Corresponding ASN.1 changes were made. New Protocol IE-Ids are yet to be assigned. 				
Consequences if not approved:	<p>⌘ Beamforming Enhancement will not be completed.</p> <p><u>Impact Analysis:</u></p> <p>Impact assessment towards the previous version of the specification (same release):</p> <p>This CR has no impact on the previous version of the specification because the functionality is introduced in backward compatible way.</p> <p>Impact assessment towards the previous release of the specification:</p> <p>This CR has no impact on previous releases because the functionality is introduced in backward compatible way.</p>				
Clauses affected:	<p>⌘ 8.2.8.2, 8.2.8.4, 8.2.9.2, 8.2.17.2, 9.1.24.1, 9.1.36.1, 9.2.1.11, 9.2.1.12, 9.2.1.43, 9.2.1.44, 9.3.3, 9.3.4, 9.3.6</p>				
Other specs	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td></td> </tr> </table> <p>Other core specifications</p>	Y	N	<input checked="" type="checkbox"/>	
Y	N				
<input checked="" type="checkbox"/>					
Affected:	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td></td> <td style="text-align: center;">X</td> </tr> </table> <p>Test specifications O&M Specifications</p> <p>⌘ CR145 TS 25.215 v5.4.0 CR887 TS 25.423 v5.7.0 CR064 TS 25.425 v5.5.0 CR106 TS 25.435 v5.5.0</p>	X	X		X
X	X				
	X				
Other comments:	<p>⌘</p>				

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

8.2.8 Common Measurement Initiation

8.2.8.2 Successful Operation

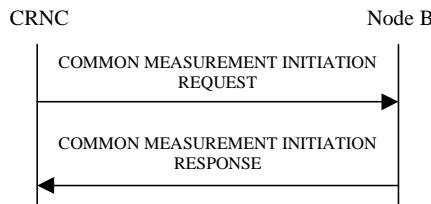


Figure 11: Common Measurement Initiation procedure, Successful Operation

The procedure is initiated with a COMMON MEASUREMENT INITIATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall initiate the requested measurement according to the parameters given in the request. Unless specified below, the meaning of the parameters are given in other specifications.

[TDD - If the [3.84Mcps TDD - Time Slot IE] [1.28Mcps TDD - Time Slot LCR IE] is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to the requested time slot individually.]

[FDD - If the *Spreading Factor* IE is present in the COMMON MEASUREMENT INITIATION REQUEST message, the measurement request shall apply to the PCPCHs whose minimum allowed spreading factor (Min UL Channelisation Code Length) is equal to the value of the *Spreading Factor* IE.]

If the *Common Measurement Type* IE is not set to "SFN-SFN Observed Time Difference" and the *SFN Reporting Indicator* IE is set to "FN Reporting Required", the *SFN* IE shall be included in the COMMON MEASUREMENT REPORT message or in the COMMON MEASUREMENT RESPONSE message, the latter only in the case the *Report Characteristics* IE is set to "On Demand". The reported SFN shall be the SFN at the time when the measurement value was reported by the layer 3 filter, referred to as point C in the measurement model [25]. If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference" and the *SFN Reporting Indicator* IE is ignored.

Common measurement type:

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", then the Node B shall initiate the SFN-SFN Observed Time Difference measurements between the reference cell identified by *C-ID* IE and the neighbouring cells identified by the *UTRAN Cell Identifier(UC-Id)* IE in the *Neighbouring Cell Measurement Information* IE.

If the *Common Measurement Type* IE is set to "Received Total Wide Band Power for Cell Portion", "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion", the Node B shall initiate the corresponding measurements for all the cell portions which are configured under the cell indicated by *C-ID* IE in the COMMON MEASUREMENT INITIATION REQUEST message.

Report characteristics:

The *Report Characteristics* IE indicates how the reporting of the measurement shall be performed. See also Annex B.

If the *Report Characteristics* IE is set to "On Demand" and if the *SFN* IE is not provided, the Node B shall return the result of the requested measurement immediately. If the *SFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics* IE is set to "Periodic", the Node B shall periodically initiate a Common Measurement Reporting procedure for this measurement, with the requested report frequency. If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", all the available measurement results shall be reported in the *Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement*

Value Information IE and the Node B shall indicate in the *Unsuccessful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information IE* all the remaining neighbouring cells with no measurement result available in the Common Measurement Reporting procedure. If the *SFN IE* is provided, it indicates the frame for which the first measurement value of a periodic reporting shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25].

If the *Report Characteristics IE* is set to "Event A", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the requested threshold and stays there for the requested hysteresis time. If the *Measurement Hysteresis Time IE* is not included, the Node B shall use the value zero for the hysteresis time. If the *Common Measurement Type IE* is set to "Received Total Wide Band Power for Cell Portion", "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.

If the *Report Characteristics IE* is set to "Event B", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the requested threshold and stays there for the requested hysteresis time. If the *Measurement Hysteresis Time IE* is not included, the Node B shall use the value zero for the hysteresis time. If the *Common Measurement Type IE* is set to "Received Total Wide Band Power for Cell Portion", "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.

If the *Report Characteristics IE* is set to "Event C", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next C event reporting for the same measurement cannot be initiated before the rising time specified by the *Measurement Change Time IE* has elapsed since the previous event reporting. If the *Common Measurement Type IE* is set to "Received Total Wide Band Power for Cell Portion", "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.

If the *Report Characteristics IE* is set to "Event D", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls by an amount greater than the requested threshold within the requested time. After having reported this type of event, the next D event reporting for the same measurement cannot be initiated before the falling time specified by the *Measurement Change Time IE* has elapsed since the previous event reporting. If the *Common Measurement Type IE* is set to "Received Total Wide Band Power for Cell Portion", "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.

If the *Report Characteristics IE* is set to "Event E", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity rises above the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity IE* is provided, the Node B shall initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity falls below the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If the *Measurement Threshold 2 IE* is not present, the Node B shall use the value of the *Measurement Threshold 1 IE* instead. If the *Measurement Hysteresis Time IE* is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B. If the *Common Measurement Type IE* is set to "Received Total Wide Band Power for Cell Portion", "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.

If the *Report Characteristics IE* is set to "Event F", the Node B shall initiate the Common Measurement Reporting procedure when the measured entity falls below the 'Measurement Threshold 1' and stays there for the 'Measurement Hysteresis Time' (Report A). When the conditions for Report A are met and the *Report Periodicity IE* is provided the Node B shall also initiate the Common Measurement Reporting procedure periodically. If the conditions for Report A have been met and the measured entity rises above the 'Measurement Threshold 2' and stays there for the 'Measurement Hysteresis Time', the Node B shall initiate the Common Measurement Reporting procedure (Report B) as well as terminating any corresponding periodic reporting. If the *Measurement Threshold 2 IE* is not present, the Node B shall use the value of the *Measurement Threshold 1 IE* instead. If the *Measurement Hysteresis Time IE* is not included, the Node B shall use the value zero as hysteresis times for both Report A and Report B. If the *Common Measurement Type IE* is set to "Received Total Wide Band Power for Cell Portion", "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion", the measurement entity to be considered is the corresponding measurement for each cell portion.

If the *Report Characteristics* IE is set to "On Modification" and if the *SFN* IE is not provided, the Node B shall report the result of the requested measurement immediately. If the *SFN* IE is provided, it indicates the frame for which the measurement value shall be provided. The provided measurement value shall be the one reported by the layer 3 filter, referred to as point C in the measurement model [25]. Then, the Node B shall initiate the Common Measurement Reporting procedure in accordance to the following conditions:

1. If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning":

- If the *T_{UTRAN-GPS} Change Limit* IE is included in the *T_{UTRAN-GPS} Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of T_{UTRAN-GPS} value (F_n). The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when the absolute value of F_n rises above the threshold indicated by the *T_{UTRAN-GPS} Change Limit* IE. The change of T_{UTRAN-GPS} value (F_n) is calculated according to the following:

$$F_n = 0 \text{ for } n=0$$

$$F_n = (M_n - M_{n-1}) \bmod 37152912000000 - ((SFN_n - SFN_{n-1}) \bmod 4096) * 10^3 * 3.84 * 10^3 * 16 + F_{n-1}$$

$$\text{for } n > 0$$

F_n is the change of the T_{UTRAN-GPS} value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_{n-1} is the previous measurement result received after point C in the measurement model [25], measured at SFN_{n-1}.

M₁ is the first measurement result received after point C in the measurement model [25], after the first Common Measurement Reporting at initiation or after the last event was triggered.

M₀ is equal to the value reported in the first Common Measurement Reporting at initiation or in the Common Measurement Reporting when the event was triggered.

- If the *Predicted T_{UTRAN-GPS} Deviation Limit* IE is included in the *T_{UTRAN-GPS} Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n. The Node B shall initiate the Common Measurement Reporting procedure and set n equal to zero when F_n rises above the threshold indicated by the *Predicted T_{UTRAN-GPS} Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n = b \text{ for } n=0$$

$$P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100 + ((SFN_n - SFN_{n-1}) \bmod 4096) * 10^3 * 3.84 * 10^3 * 16 + P_{n-1}) \bmod 37158912000000 \quad \text{for } n > 0$$

$$F_n = \min((M_n - P_n) \bmod 37158912000000, (P_n - M_n) \bmod 37158912000000) \quad \text{for } n > 0$$

P_n is the predicted T_{UTRAN-GPS} value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported T_{UTRAN-GPS} Drift Rate value.

b is the last reported T_{UTRAN-GPS} value.

F_n is the deviation of the last measurement result from the predicted T_{UTRAN-GPS} value (P_n) when n measurements have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M₁ is the first measurement result received after point C in the measurement model [25], after the first Common Measurement Reporting at initiation or after the last event was triggered.

The T_{UTRAN-GPS} Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

2. If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference":

- If the *SFN-SFN Change Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], calculate the change of SFN-SFN value (F_n). The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when F_n rises above the threshold indicated by the *SFN-SFN Change Limit* IE. The change of the SFN-SFN value is calculated according to the following:

$$F_n=0 \quad \text{for } n=0$$

$$[\text{FDD} - F_n = (M_n - a) \bmod 614400 \quad \text{for } n>0]$$

$$[\text{TDD} - F_n = (M_n - a) \bmod 40960 \quad \text{for } n>0]$$

F_n is the change of the SFN-SFN value expressed in unit [1/16 chip] when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN.

M_n is the latest measurement result received after point C in the measurement model [25], measured at SFN_n.

M_1 is the first measurement result received after point C in the measurement model [25] after the first Common Measurement Reporting at initiation or after the last event was triggered.

- If the *Predicted SFN-SFN Deviation Limit* IE is included in the *SFN-SFN Measurement Threshold Information* IE, the Node B shall each time a new measurement result is received after point C in the measurement model [25], update the P_n and F_n. The Node B shall initiate the Common Measurement Reporting procedure in order to report the particular SFN-SFN measurement which has triggered the event and set n equal to zero when the F_n rises above the threshold indicated by the *Predicted SFN-SFN Deviation Limit* IE. The P_n and F_n are calculated according to the following:

$$P_n=b \text{ for } n=0$$

$$[\text{FDD} - P_n = ((a/16) * ((SFN_n - SFN_{n-1}) \bmod 4096)/100 + P_{n-1}) \bmod 614400 \quad \text{for } n>0]$$

$$[\text{FDD} - F_n = \min((M_n - P_n) \bmod 614400, (P_n - M_n) \bmod 614400) \quad \text{for } n>0]$$

$$[\text{TDD} - P_n = ((a/16) * (15*(SFN_n - SFN_{n-1}) \bmod 4096 + (TS_n - TS_{n-1})/1500) + P_{n-1}) \bmod 40960 \quad \text{for } n>0]$$

$$[\text{TDD} - F_n = \min((M_n - P_n) \bmod 40960, (P_n - M_n) \bmod 40960) \quad \text{for } n>0]$$

P_n is the predicted SFN-SFN value when n measurement results have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

a is the last reported SFN-SFN Drift Rate value.

b is the last reported SFN-SFN value.

abs denotes the absolute value.

F_n is the deviation of the last measurement result from the predicted SFN-SFN value (P_n) when n measurements have been received after the first Common Measurement Reporting at initiation or after the last event was triggered.

M_n is the latest measurement result received after point C in the measurement model [25], measured at [TDD - the Time Slot TS_n of] the Frame SFN_n.

M_1 is the first measurement result received after point C in the measurement model [25] after the first Common Measurement Reporting at initiation or after the last event was triggered.

The SFN-SFN Drift Rate is determined by the Node B in an implementation-dependent way after point B in the measurement model [26].

If the *Report Characteristics* IE is not set to "On Demand", the Node B is required to perform reporting for a common measurement object, in accordance with the conditions provided in the COMMON MEASUREMENT INITIATION

REQUEST message, as long as the object exists. If no common measurement object(s) for which a measurement is defined exists anymore, the Node B shall terminate the measurement locally, i.e. without reporting this to the CRNC.

If at the start of the measurement, the reporting criteria are fulfilled for any of Event A, Event B, Event E or Event F, the Node B shall initiate the Common Measurement Reporting procedure immediately, and then continue with the measurements as specified in the COMMON MEASUREMENT INITIATION REQUEST message.

Higher layer filtering:

The *Measurement Filter Coefficient* IE indicates how filtering of the measurement values shall be performed before measurement event evaluation and reporting.

The averaging shall be performed according to the following formula.

$$F_n = (1 - a) \cdot F_{n-1} + a \cdot M_n$$

The variables in the formula are defined as follows:

F_n is the updated filtered measurement result

F_{n-1} is the old filtered measurement result

M_n is the latest received measurement result from physical layer measurements, the unit used for M_n is the same unit as the reported unit in the COMMON MEASUREMENT INITIATION RESPONSE, COMMON MEASUREMENT REPORT messages or the unit used in the event evaluation (i.e. same unit as for F_n)

$a = 1/2^{(k/2)}$, where k is the parameter received in the *Measurement Filter Coefficient* IE. If the *Measurement Filter Coefficient* IE is not present, a shall be set to 1 (no filtering)

In order to initialise the averaging filter, F_0 is set to M_1 when the first measurement result from the physical layer measurement is received.

Common measurement accuracy:

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning", then the Node B shall use the *UTRAN GPS Timing Measurement Accuracy Class* IE included in the *Common Measurement Accuracy* IE according to the following:

- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class A", then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes A, B and C.
- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class B", then the Node B shall perform the measurement with highest supported accuracy within the accuracy classes B and C.
- If the *UTRAN GPS Timing Measurement Accuracy Class* IE indicates "Class C", then the Node B shall perform the measurements with the accuracy according to class C.

Response message:

If the Node B was able to initiate the measurement requested by the CRNC, it shall respond with the COMMON MEASUREMENT INITIATION RESPONSE message sent over the Node B Control Port. The message shall include the same Measurement ID that was used in the measurement request. Only in the case where the *Report Characteristics* IE is set to "On Demand" or "On Modification", the COMMON MEASUREMENT INITIATION RESPONSE message shall contain the measurement result and also the *Common Measurement Achieved Accuracy* IE if the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning".

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference" and the *Report Characteristics* IE is set to "On Demand" or "On Modification", all the available measurement results shall be reported in the *Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE in the *SFN-SFN Measurement Value Information* IE and the Node B shall indicate in the *Unsuccessful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE all the remaining neighbouring cells with no measurement result available in the COMMON MEASUREMENT INITIATION RESPONSE message. For all available measurement results, the Node B shall include in the *Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE the *SFN-SFN Quality* IE and the *SFN-SFN Drift Rate Quality* IE, if available.

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning" and the *Report Characteristics* IE is set to "On Demand" or "On Modification", the Node B shall include in the $T_{UTRAN-GPS}$ *Measurement Value Information* IE the $T_{UTRAN-GPS}$ *Quality* IE and the $T_{UTRAN-GPS}$ *Drift Rate Quality* IE, if available.

If the *Common Measurement Type* IE is set to "Received Total Wide Band Power for Cell Portion", "Transmitted Carrier Power for Cell Portion" or "Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion" and the *Report Characteristics* IE is set to "On Demand", all the available measurement results for each cell portion shall be included in the COMMON MEASUREMENT INITIATION RESPONSE message.

8.2.8.3 Unsuccessful Operation

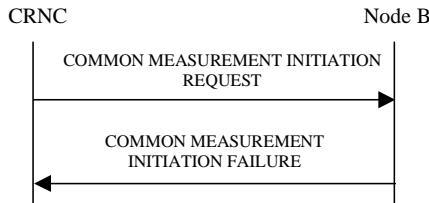


Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

If the requested measurement cannot be initiated, the Node B shall send a COMMON MEASUREMENT INITIATION FAILURE message over the Node B Control Port. The message shall include the same Measurement ID that was used in the COMMON MEASUREMENT INITIATION REQUEST message and the *Cause* IE set to an appropriate value.

Typical cause values are as follows:

Radio Network Layer Cause:

- Measurement not supported for the object.
- Measurement Temporarily not Available

8.2.8.4 Abnormal Conditions

If the Common Measurement Type received in the *Common Measurement Type* IE, except for the "HS-DSCH Required Power" and the "HS-DSCH Provided Bit Rate", is not defined in ref. [4] or [5] to be measured on the Common Measurement Object Type received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

[TDD - If the Common Measurement Type requires the Time Slot Information but the [3.84Mcps TDD - *Time Slot* IE] [1.28Mcps TDD - *Time Slot LCR* IE] is not present in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.]

If the COMMON MEASUREMENT INITIATION REQUEST message contains the *SFN-SFN Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the COMMON MEASUREMENT INITIATION REQUEST message contains the $T_{UTRAN-GPS}$ *Measurement Threshold Information* IE (in the *Measurement Threshold* IE contained in the *Report Characteristics* IE) and it does not contain at least one IE, the Node B shall reject the procedure using the COMMON MEASUREMENT INITIATION FAILURE message.

If the *Common Measurement Type* IE is set to "SFN-SFN Observed Time Difference", but the *Neighbouring Cell Measurement Information* IE is not received in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

If the *Common Measurement Type* IE is set to "UTRAN GPS Timing of Cell Frames for UE Positioning", but the $T_{UTRAN-GPS}$ *Measurement Accuracy Class* IE in the *Common Measurement Accuracy* IE is not received in the COMMON

MEASUREMENT INITIATION REQUEST message, the Node B shall regard the Common Measurement Initiation procedure as failed.

The allowed combinations of the Common Measurement Type and Report Characteristics Type are shown in the table below marked with "X". For not allowed combinations, the Node B shall regard the Common Measurement Initiation procedure as failed.

Table 4: Allowed Common Measurement Type and Report Characteristics Type combinations

Common Measurement Type	Report Characteristics Type								
	On Demand	Periodic	Event A	Event B	Event C	Event D	Event E	Event F	On Modification
Received Total Wide Band Power	X	X	X	X	X	X	X	X	
Transmitted Carrier Power	X	X	X	X	X	X	X	X	
Acknowledged PRACH Preambles	X	X	X	X	X	X	X	X	
UL Timeslot ISCP	X	X	X	X	X	X	X	X	
Acknowledged PCPCH Access Preambles	X	X	X	X	X	X	X	X	
Detected PCPCH Access Preambles	X	X	X	X	X	X	X	X	
UTRAN GPS Timing of Cell Frames for UE Positioning	X	X							X
SFN-SFN Observed Time Difference	X	X							X
Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission	X	X	X	X	X	X	X	X	
HS-DSCH Required Power	X	X	X	X			X	X	
HS-DSCH Provided Bit Rate	X	X	X	X			X	X	
Received Total Wide Band Power for Cell Portion	X	X	X	X	X	X	X	X	
Transmitted Carrier Power for Cell Portion	X	X	X	X	X	X	X	X	
Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion	X	X	X	X	X	X	X	X	

If the *SFN* IE is included in the COMMON MEASUREMENT INITIATION REQUEST message and the *Report Characteristics* IE is other than "Periodic", "On Demand" or "On Modification", the Node B shall regard the Common Measurement Initiation procedure as failed.

8.2.9 Common Measurement Reporting

8.2.9.1 General

This procedure is used by the Node B to report the result of measurements requested by the CRNC with the Common Measurement Initiation procedure.

8.2.9.2 Successful Operation



Figure 13: Common Measurement Reporting procedure, Successful Operation

If the requested measurement reporting criteria are met, the Node B shall initiate the Common Measurement Reporting procedure. The COMMON MEASUREMENT REPORT message shall use the Node B Control Port.

The *Measurement ID* IE shall be set to the Measurement ID provided by the CRNC when initiating the measurement with the Common Measurement Initiation procedure.

If the achieved measurement accuracy does not fulfil the given accuracy requirement (see ref.[22] and [23]), the *Common Measurement Value Information* IE shall indicate Measurement not Available.

For measurements included in the *Successful Neighbouring Cell SFN-SFN Observed Time Difference Measurement Information* IE, the Node B shall include the *SFN-SFN Quality* IE and the *SFN-SFN Drift Rate Quality* IE if available.

If the Common Measurement Type provided by RNC when initiating the measurement with the Common Measurement Initiation procedure was "UTRAN GPS Timing of Cell Frames for UE Positioning", then the Node B shall include in the *T_{UTRAN-GPS} Measurement Value Information* IE the *T_{UTRAN-GPS} Quality* IE and the *T_{UTRAN-GPS} Drift Rate Quality* IE, if available.

For Received Total Wide Band Power for Cell Portion, Transmitted Carrier Power for Cell Portion, Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion measurements, all the available measurement results for each cell portion shall be included in the COMMON MEASUREMENT REPORT message.

8.2.9.3 Abnormal Conditions

-
/* partly omitted */

8.2.17 Radio Link Setup

8.2.17.2 Successful Operation

/ partly omitted */*

Physical Channels Handling:

[FDD - Compressed Mode]:

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

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

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

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

[FDD - DL Code Information]:

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

[TDD - PDSCH RL ID]:

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

[FDD – Phase Reference Handling]:

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Primary CPICH Usage For Channel Estimation* IE and has the value "Primary CPICH shall not be used", the Node B shall assume that the UE is not using the Primary CPICH for channel estimation. If the RADIO LINK SETUP REQUEST message does not include the *Primary CPICH Usage For Channel Estimation* IE or includes the *Primary CPICH Usage For Channel Estimation* IE and has the value "Primary CPICH may be used", the Node B shall assume that the UE may use the Primary CPICH for channel estimation.]

[FDD – If the RADIO LINK SETUP REQUEST message includes the *Secondary CPICH Information* IE, the Node B shall assume that the UE may use the Secondary CPICH indicated by the *Common Physical Channel ID* IE for channel estimation.]

General:

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

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

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

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

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

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

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

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

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

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

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

DL Power Control:

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

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

[3.84 Mcps TDD - The Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall start any DL transmission on each DCH type CCTrCH using the initial CCTrCH DL power, as determined above, on each DL DPCH and on each Time Slot of the CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power

shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

[3.84 Mcps TDD - The Node B shall determine the maximum DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE.]

[3.84 Mcps TDD - The Node B shall determine the minimum DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE.]

[3.84Mcps TDD - The initial power, maximum power, and minimum power for DSCH type CCTrCH shall be determined as follows:

- If the DSCH type CCTrCH is paired with an uplink CCTrCH(s) for inner loop power control, the minimum, maximum and initial power for each PDSCH is determined in the same way as described above for DCH type CCTrCHs.
- If the DSCH type CCTrCH is not paired with an uplink CCTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CCTrCHs. The minimum and initial powers, however, are subject to control by the CRNC via the frame protocol].

[1.28 Mcps TDD - The Node B shall determine the initial DL power for each timeslot within the DCH type CCTrCH by the following rule: If the *Initial DL Transmission Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the Initial DL Power and ignore the *DL Time Slot ISCP info LCR* IE, otherwise the initial DL Power is the *Initial DL Transmission Power* IE included in the *RL Information* IE and if *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall start any DL transmission on each timeslot within each DCH type CCTrCH using the initial DL power, as determined above, on each DL DPCH and on each timeslot of the CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

[1.28 Mcps TDD - The Node B shall determine the maximum DL power for each timeslot within the DCH type CCTrCH by the following rule: If the *Maximum DL Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power* IE included in the *RL Information* IE.]

[1.28 Mcps TDD - The Node B shall determine the minimum DL power for each timeslot within the DCH type CCTrCH by the following rule: If the *Minimum DL Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power* IE included in the *RL Information* IE.]

[1.28Mcps TDD – The Node B shall determine the initial power for each timeslot within the DSCH type CCTrCH by the following rule: If both the *CCTrCH Initial DL Transmission Power* IE, included in the *DL CCTrCH Information* IE, and the *DL Time Slot ISCP Info LCR* IE, included in the *RL Information* IE, are included then the Node B shall use that power for the PDSCH and ignore the *Initial DL Transmission Power* IE included in the *RL Information* IE, otherwise the initial DL Power is the *Initial DL Transmission Power* IE included in the *RL Information* IE and if *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall start any DL transmission on each timeslot within each DSCH type CCTrCH using the initial DL power, as determined above, on each DL PDSCH and on each timeslot of the CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner

loop power control (see ref.[21], subclause 5.1.2.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

[1.28 Mcps TDD - The Node B shall determine the maximum DL power for each timeslot within the DSCH type CCTrCH by the following rule: If the *CCTrCH Maximum DL Transmission Power IE*, included in the *DL CCTrCH Information IE*, is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power IE* included in the *RL Information IE*.]

[1.28 Mcps TDD - The Node B shall determine the minimum DL power for each timeslot within the DSCH type CCTrCH by the following rule: If the *CCTrCH Minimum DL Transmission Power IE*, included in the *DL CCTrCH Information IE*, is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power IE* included in the *RL Information IE*.]

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

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

[FDD - If the RADIO LINK SETUP REQUEST message includes the *DL Power Balancing Information IE* and the *Power Adjustment Type IE* is set to "Common" or "Individual", the Node B shall activate the power balancing, if activation of power balancing by the RADIO LINK SETUP REQUEST message is supported, according to subclause 8.3.7, using the *DL Power Balancing Information IE*. If the Node B starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing, i.e. P_{init} shall be set to the power level indicated by the *Initial DL Transmission Power IE*.]

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

[1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:

[1.28Mcps TDD - If the RADIO LINK SETUP REQUEST message contains the *Uplink Synchronisation Parameters LCR IE*, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize IE* and *Uplink Synchronisation Frequency IE* when evaluating the timing of the UL synchronisation.]

General:

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

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

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

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

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

split mode is supported, the primary/secondary status determination in the enhanced DSCH power control is also applied to the TFCI power control in DSCH hard split mode.]

The Node B shall start reception on the new RL(s) after the RLs are successfully established.

/* partly omitted */

9.1.24 CELL SETUP REQUEST

9.1.24.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		—	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		—	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
T Cell	M		9.2.2.49		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nu [14]	YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nd [14]	YES	reject

Maximum Transmission Power	M		9.2.1.40		YES	reject
Closed Loop Timing Adjustment Mode	O		9.2.2.2A		YES	reject
Primary Scrambling Code	M		9.2.2.34		YES	reject
Synchronisation Configuration		1			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
DL TPC Pattern 01 Count	M		9.2.2.13A		YES	reject
Primary SCH Information		1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Primary SCH Power	M		DL Power 9.2.1.21		–	
>TSTD Indicator	M		9.2.1.64		–	
Secondary SCH Information		1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Secondary SCH Power	M		DL Power 9.2.1.21		–	
>TSTD Indicator	M		9.2.1.64		–	
Primary CPICH Information		1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>Primary CPICH power	M		9.2.2.33		–	
>Transmit Diversity Indicator	M		9.2.2.53		–	
Secondary CPICH Information		0..<maxS CPICHCell >			EACH	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>DL Scrambling Code	M		9.2.2.13		–	
>FDD DL Channelisation Code Number	M		9.2.2.14		–	
>Secondary CPICH Power	M		DL Power 9.2.1.21		–	
>Transmit Diversity Indicator	M		9.2.2.53		–	
Primary CCPCH Information		1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
BCH Information		1			–	
>>Common Transport Channel ID	M		9.2.1.14		–	
>>BCH Power	M		DL Power 9.2.1.21		–	
>STTD Indicator	M		9.2.2.48		–	
Limited Power Increase Information		1			YES	reject
>Power_Raise_Limit	M		9.2.2.29A		–	
>DL_power_averaging_win_dow_size	M		9.2.2.12A		–	
IPDL Parameter Information		0..1			YES	reject
>IPDL FDD Parameters	M		9.2.2.18C		–	
>IPDL Indicator	M		9.2.1.36F		–	
PDSCH information		0..1			YES	reject
>Maximum PDSCH Power	O		9.2.2.21A		–	
Cell Portion Information		0..<maxno ofCellPorti ons>			EACH	reject
>Cell Portion ID	M		9.2.2.1Ca		–	
>Associated Secondary	M		Common		–	

<u>CPICH</u>			<u>Physical Channel ID</u> 9.2.1.13			
--------------	--	--	--	--	--	--

Range Bound	Explanation
<i>MaxSCPICHCell</i>	Maximum number of Secondary CPICHs that can be defined in a Cell.

9.1.36 RADIO LINK SETUP REQUEST

9.1.36.1 FDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	reject
UL DPCCH Information		1			YES	reject
>UL Scrambling Code	M		9.2.2.59		–	
>Min UL Channelisation Code Length	M		9.2.2.22		–	
>Max Number of UL DPDCHs	C-CodeLen		9.2.2.21		–	
>Puncture Limit	M		9.2.1.50	For UL	–	
>TFCS	M		9.2.1.58	For UL	–	
>UL DPCCH Slot Format	M		9.2.2.57		–	
> UL SIR Target	M		UL SIR 9.2.1.67A		–	
>Diversity Mode	M		9.2.2.9		–	
>SSDT Cell ID Length	O		9.2.2.45		–	
>S Field Length	O		9.2.2.40		–	
>DPC Mode	O		9.2.2.13C		YES	reject
DL DPCH Information		1			YES	reject
>TFCS	M		9.2.1.58	For DL	–	
>DL DPCH Slot Format	M		9.2.2.10		–	
>TFCI Signalling Mode	M		9.2.2.50		–	
>TFCI Presence	C-SlotFormat		9.2.1.57		–	
>Multiplexing Position	M		9.2.2.23		–	
>PDSCH RL ID	C-DSCH		RL ID 9.2.1.53		–	
>PDSCH Code Mapping	C-DSCH		9.2.2.25		–	
>Power Offset Information		1			–	
>>PO1	M		Power Offset 9.2.2.29	Power offset for the TFCI bits	–	
>>PO2	M		Power Offset 9.2.2.29	Power offset for the TPC bits	–	
>>PO3	M		Power Offset 9.2.2.29	Power offset for the pilot bits	–	
>FDD TPC DL Step Size	M		9.2.2.16		–	
>Limited Power Increase	M		9.2.2.18A		–	
>Inner Loop DL PC Status	M		9.2.2.18B		–	
DCH Information	M		DCH FDD Information 9.2.2.4D		YES	reject
DSCH Information	O		DSCH FDD Information 9.2.2.13B		YES	reject
TFCI2 bearer information		0..1			YES	ignore
>ToAWS	M		9.2.1.61		–	

>ToAWE	M		9.2.1.60		—	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
RL Information		<i>1..<maxno ofRLs></i>			EACH	notify
>RL ID	M		9.2.1.53		—	
>C-ID	M		9.2.1.9		—	
>First RLS Indicator	M		9.2.2.16A		—	
>Frame Offset	M		9.2.1.31		—	
>Chip Offset	M		9.2.2.2		—	
>Propagation Delay	O		9.2.2.35		—	
>Diversity Control Field	C- NotFirstRL		9.2.1.25		—	
>DL Code Information	M		FDD DL Code Information 9.2.2.14A		—	
>Initial DL Transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	—	
>Maximum DL Power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	—	
>Minimum DL Power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	—	
>SSDT Cell Identity	O		9.2.2.44		—	
>Transmit Diversity Indicator	C-Diversity mode		9.2.2.53		—	
>SSDT Cell Identity For EDSCHPC	C- EDSCHPC		9.2.2.44A		YES	ignore
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
>Delayed Activation	O		9.2.1.24C		YES	reject
>Qth Parameter	O		9.2.2.36A		YES	ignore
>Primary CPICH Usage For Channel Estimation	O		9.2.2.33A		YES	ignore
> <u>Secondary CPICH Information</u>	O		<u>Common Physical Channel ID</u> 9.2.1.13		<u>YES</u>	<u>ignore</u>
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
Active Pattern Sequence Information	O		9.2.2.A		YES	reject
DSCH Common Information	O		DSCH FDD Common Information 9.2.2.13D		YES	ignore
DL Power Balancing Information	O		9.2.2.12B		YES	ignore
HS-DSCH Information	O		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH-RNTI	C-		9.2.1.31J		YES	reject

	InfoHSDS CH					
HS-PDSCH RL ID	C- InfoHSDS CH		RL ID 9.2.1.53		YES	reject

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

Range Bound	Explanation
MaxnoofRLs	Maximum number of RLs for one UE

9.2.1.11 Common Measurement Type

The Common Measurement Type identifies which measurement that shall be performed.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
Common Measurement Type			ENUMERATED (Received Total Wide Band Power, Transmitted Carrier Power, Acknowledged PRACH Preambles, UL Timeslot ISCP, Acknowledged PCPCH Access Preambles, Detected PCPCH Access Preambles, ..., UTRAN GPS Timing of Cell Frames for UE Positioning, SFN-SFN Observed Time Difference, Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission, HS-DSCH Required Power, HS-DSCH Provided Bit Rate, <u>Received Total Wide Band Power for Cell Portion</u> , <u>Transmitted Carrier Power for Cell Portion</u> , Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission for Cell Portion)	"UL Timeslot ISCP" is used by TDD only, "Acknowledged PRACH Preambles", 'Acknowledged PCPCH Access Preambles', 'Detected PCPCH Access Preambles' are used by FDD only

9.2.1.12 Common Measurement Value

The Common Measurement Value shall be the most recent value for this measurement, for which the reporting criteria were met.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
CHOICE Common Measurement Value					–	
>Transmitted Carrier Power					–	
>>Transmitted Carrier Power Value	M		INTEGER (0..100)	According to mapping in [22] and [23]	–	
>Received Total Wide Band Power					–	
>>Received Total Wide Band Power Value	M		INTEGER (0..621)	According to mapping in [22] and [23]	–	
>Acknowledged PRACH Preambles				FDD Only	–	
>>Acknowledged PRACH Preamble Value	M		INTEGER (0..240,...)	According to mapping in [22]	–	
>UL Timeslot ISCP				TDD Only	–	
>>UL Timeslot ISCP	M		INTEGER (0..127)	According to mapping in [23]	–	
>Acknowledged PCPCH Access Preambles				FDD Only	–	
>>Acknowledged PCPCH Access Preambles	M		INTEGER (0..15,...)	According to mapping in [22]	–	
>Detected PCPCH Access Preambles				FDD Only	–	
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	–	
>Additional Common Measurement Values					–	
>>UTRAN GPS Timing of Cell Frames for UE Positioning					–	
>>>UTRAN-GPS Measurement Value Information	M		9.2.1.64A		YES	Ignore
>>SFN-SFN Observed Time Difference					–	
>>SFN-SFN Measurement Value Information	M		9.2.1.53E		YES	Ignore
>>Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission					–	
>>Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission Value	M		INTEGER (0..100)	According to mapping in [22] and [23]	YES	Ignore
>>HS-DSCH Required Power					–	
>>HS-DSCH Required Power Value Information	M		9.2.1.31lc		YES	Ignore
>>HS-DSCH Provided Bit Rate					–	

>>>HS-DSCH Provided Bit Rate	M		9.2.1.31lb		YES	Ignore
>> <u>Transmitted Carrier Power For Cell Portion</u>					=	
>>> <u>Transmitted Carrier Power For Cell Portion Value</u>		<u>1..< maxNrO fCellPor tions></u>		FDD Only	GLOBAL	ignore
>>>>Cell Portion ID	M		<u>9.2.2.1Ca</u>		=	
>>>>Transmitte d Carrier Power Value	M		<u>INTEGER (0..100)</u>	According to mapping in [22]	=	
>> <u>Received Total Wide Band Power For Cell Portion</u>					=	
>>> <u>Received Total Wide Band Power Value</u>		<u>1..< maxNrO fCellPor tions></u>		FDD Only	GLOBAL	ignore
>>>>Cell Portion ID	M		<u>9.2.2.1Ca</u>		=	
>>>>Received Total Wide Band Power Value	M		<u>INTEGER (0..621)</u>	According to mapping in [22]	=	
>> <u>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission For Cell Portion</u>					=	
>>> <u>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Or HS- SCCH Transmission For Cell Portion Value</u>		<u>1..< maxNrO fCellPor tions></u>		FDD Only	GLOBAL	ignore
>>>>Cell Portion ID	M		<u>9.2.2.1Ca</u>		=	
>>>>Transmitte d Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission Value	M		<u>INTEGER (0..100)</u>	According to mapping in [22]	=	

Range Bound	Explanation
<u>MaxNrOfCellPortions</u>	Maximum number of Cell Portions in a cell

9.2.1.43 Measurement Increase/Decrease Threshold

The Measurement Increase/Decrease Threshold defines the threshold that shall trigger Event C or D.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
<i>CHOICE Measurement Increase/Decrease Threshold</i>					–	
> <i>Received Total Wide Band Power</i>					–	
>>Received Total Wide Band Power	M		INTEGER (0..620)	Unit: dB Range: 0..62 dB Step: 0.1 dB	–	
> <i>Transmitted Carrier Power</i>					–	
>>Transmitted Carrier Power	M		INTEGER (0..100)	According to mapping in [22] and [23]	–	
> <i>Acknowledged PRACH Preambles</i>				FDD only	–	
>>Acknowledged PRACH Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	–	
> <i>UL Timeslot ISCP</i>				TDD only	–	
>>UL Timeslot ISCP	M		INTEGER (0..126)	Unit: dB Range: 0..63 dB Step: 0.5 dB	–	
> <i>SIR</i>					–	
>>SIR	M		INTEGER (0..62)	Unit: dB Range: 0..31 dB Step: 0.5 dB	–	
> <i>SIR Error</i>				FDD only	–	
>>SIR Error	M		INTEGER (0..124)	Unit: dB Range: 0..62 dB Step: 0.5 dB	–	
> <i>Transmitted Code Power</i>					–	
>>Transmitted Code Power	M		INTEGER (0..112,...)	Unit: dB Range: 0..56 dB Step: 0.5 dB	–	
> <i>RSCP</i>				TDD only	–	
>>RSCP	M		INTEGER (0..126)	Unit: dB Range: 0..63 dB Step: 0.5 dB	–	
> <i>Round Trip Time</i>				FDD only	–	
>>Round Trip Time	M		INTEGER (0..32766)	Unit: chips Range: 0 .. 2047.875 chips Step: 0.625 chips	–	
> <i>Acknowledged PCPCH Access Preambles</i>				FDD only	–	
>>Acknowledged PCPCH Access Preambles	M		INTEGER (0..15,...)	According to mapping in [22]	–	
> <i>Detected PCPCH Access Preambles</i>				FDD only	–	
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	–	
> <i>Additional Measurement Thresholds</i>					–	
>> Transmitted carrier power of all codes not					–	

<i>used for HS-PDSCH or HS-SCCH transmission</i>						
>>>Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission	M		INTEGER (0..100)	According to mapping in [22] and [23]	YES	Reject
<i>>>Transmitted Carrier Power For Cell Portion</i>				<u>FDD only</u>	=	
<i>>>Transmitted Carrier Power For Cell Portion</i>	M		INTEGER (0..100)	<u>Mapping identical to the one for Transmitted Carrier Power measurement in [22]</u>	YES	<u>reject</u>
<i>>>Received Total Wide Band Power For Cell Portion</i>				<u>FDD only</u>	=	
<i>>>Received Total Wide Band Power For Cell Portion</i>	M		INTEGER (0..620)	Unit: dB Range: 0..62 dB Step: 0.1 dB	YES	<u>reject</u>
<i>>>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission For Cell Portion</i>				<u>FDD only</u>	=	
<i>>>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission For Cell Portion</i>	M		INTEGER (0..100)	<u>Mapping identical to the one for Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission measurement in [22]</u>	YES	<u>reject</u>

9.2.1.44 Measurement Threshold

The Measurement Threshold defines which threshold that shall trigger Event A, B, E, F or On Modification.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
<i>CHOICE Measurement Threshold</i>					—	
> <i>Received Total Wide Band Power</i>					—	
>>Received Total Wide Band Power	M		INTEGER (0..621)	According to mapping in [22] and [23]	—	
> <i>Transmitted Carrier Power</i>					—	
>>Transmitted Carrier Power	M		INTEGER (0..100)	According to mapping in [22] and [23]	—	
> <i>Acknowledged PRACH Preambles</i>				FDD only	—	
>>Acknowledged PRACH Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	—	
> <i>UL Timeslot ISCP</i>				TDD only	—	
>>UL Timeslot ISCP	M		INTEGER (0..127)	According to mapping in [23]	—	
> <i>SIR</i>					—	
>>SIR	M		INTEGER (0..63)	According to mapping in [22] and [23]	—	
> <i>SIR Error</i>				FDD only	—	
>>SIR Error	M		INTEGER (0..125)	According to mapping in [22]	—	
> <i>Transmitted Code Power</i>					—	
>>Transmitted Code Power	M		INTEGER (0..127)	According to mapping in [22] and [23]	—	
> <i>RSCP</i>				TDD only	—	
>>RSCP	M		INTEGER (0..127)	According to mapping in [23]	—	
> <i>Rx Timing Deviation</i>				Applicable to 3.84Mcps TDD only	—	
>>Rx Timing Deviation	M		INTEGER (0..8191)	According to mapping in [23]	—	
> <i>Round Trip Time</i>				FDD only	—	
>>Round Trip Time	M		INTEGER (0..32767)	According to mapping in [22]	—	
> <i>Acknowledged PCPCH Access Preambles</i>				FDD only	—	
>>Acknowledged PCPCH Access Preambles	M		INTEGER (0..15,...)	According to mapping in [22]	—	
> <i>Detected PCPCH Access Preambles</i>				FDD only	—	
>>Detected PCPCH Access Preambles	M		INTEGER (0..240,...)	According to mapping in [22]	—	
> <i>Additional Measurement Thresholds</i>					—	
>> <i>UTRAN GPS Timing of Cell Frames for UE Positioning</i>					—	
>>> <i>T_{UTRAN-GPS} Measurement Threshold Information</i>	M		9.2.1.64B		YES	reject
>> <i>SFN-SFN Observed Time Difference</i>					—	
>>> <i>SFN-SFN Measurement Threshold</i>	M		9.2.1.53C		YES	reject

Information						
>> <i>Rx Timing Deviation LCR</i>				Applicable to 1.28Mcps TDD Only	—	
>> <i>Rx Timing Deviation LCR</i>	M		INTEGER (0..255)	According to mapping in [23]	YES	reject
>> <i>Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission</i>					—	
>> <i>Transmitted carrier power of all codes not used for HS-PDSCH or HS-SCCH transmission</i>	M		INTEGER (0..100)	According to mapping in [22] and [23]	YES	reject
>> <i>HS-SICH reception quality</i>				Applicable to TDD Only	—	
>> <i>HS-SICH reception quality</i>	M		INTEGER (0..20)	According to mapping in [23]	YES	reject
>> <i>HS-DSCH Required Power</i>					—	
>> <i>HS-DSCH Required Power Value Information</i>	M		9.2.1.31lc		YES	reject
>> <i>HS-DSCH Provided Bit Rate</i>					—	
>> <i>HS-DSCH Provided Bit Rate Value Information</i>	M		9.2.1.31lb		YES	reject
>> <i>Transmitted Carrier Power For Cell Portion</i>				FDD only	—	
>> <i>Transmitted Carrier Power For Cell Portion</i>	M		INTEGER (0..100)	Mapping identical to the one for Transmitted Carrier Power measurement in [22]	YES	reject
>> <i>Received Total Wide Band Power For Cell Portion</i>				FDD only	—	
>> <i>Received Total Wide Band Power For Cell Portion</i>	M		INTEGER (0..621)	Mapping identical to the one for Received Total Wide Band Power measurement in [22]	YES	reject
>> <i>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission For Cell Portion</i>				FDD only	—	
>> <i>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission Value For Cell Portion</i>	M		INTEGER (0..100)	Mapping identical to the one for <u>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission</u> measurement in [22]	YES	reject

9.3.3 PDU Definitions

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

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

-- ****
-- IE parameter types from other modules.
--
-- ****
IMPORTS
    Active-Pattern-Sequence-Information,
    AddorDeleteIndicator,
    AICH-Power,
    AICH-TransmissionTiming,
    AllocationRetentionPriority,
    APPreambleSignature,
    APSubChannelNumber,
    AvailabilityStatus,
    BCCH-ModificationTime,
    BindingID,
    BlockingPriorityIndicator,
    SCTD-Indicator,
    Cause,
    CCTrCH-ID,
    CDSubChannelNumbers,
    CellParameterID,
    CellPortionID,
    CellSyncBurstCode,
    CellSyncBurstCodeShift,
    CellSyncBurstRepetitionPeriod,
    CellSyncBurstSIR,
    CellSyncBurstTiming,
    CellSyncBurstTimingThreshold,
    CFN,
    Channel-Assignment-Indication,
    ChipOffset,
    C-ID,
    ClosedloopTimingadjustmentmode,
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CommonChannelsCapacityConsumptionLaw,
Compressed-Mode-Deactivation-Flag,
CommonMeasurementAccuracy,
CommonMeasurementType,
CommonMeasurementValue,
CommonMeasurementValueInformation,
CommonPhysicalChannelID,
Common-PhysicalChannel-Status-Information,
Common-TransportChannel-Status-Information,
CommonTransportChannelID,
CommonTransportChannel-InformationResponse,
CommunicationControlPortID,
ConfigurationGenerationID,
ConstantValue,
CriticalityDiagnostics,
CPCH-Allowed-Total-Rate,
CPCHScramblingCodeNumber,
CPCH-UL-DPCCH-SlotFormat,
CRNC-CommunicationContextID,
CSBMeasurementID,
CSBTransmissionID,
DCH-FDD-Information,
DCH-InformationResponse,
DCH-ID,
FDD-DCHs-to-Modify,
TDD-DCHs-to-Modify,
DCH-TDD-Information,
DedicatedChannelsCapacityConsumptionLaw,
DedicatedMeasurementType,
DedicatedMeasurementValue,
DedicatedMeasurementValueInformation,
DelayedActivation,
DelayedActivationUpdate,
DiversityControlField,
DiversityMode,
DL-DPCH-SlotFormat,
DL-DPCH-TimingAdjustment,
DL-or-Global-CapacityCredit,
DL-Power,
DL-PowerBalancing-Information,
DL-PowerBalancing-ActivationIndicator,
DLPowerAveragingWindowSize,
DL-PowerBalancing-UpdatedIndicator,
DL-ScramblingCode,
DL-TimeslotISCP,
DL-Timeslot-Information,
DL-TimeslotLCR-Information,
DL-TimeslotISCPInfo,
DL-TimeslotISCPInfoLCR,
DL-TPC-Pattern01Count,
DPC-Mode,
DPCH-ID,
DSCH-ID,

DSCH-FDD-Common-Information,
DSCH-FDD-Information,
DSCH-InformationResponse,
DSCH-TDD-Information,
DwPCH-Power,
End-Of-Audit-Sequence-Indicator,
EnhancedDSCHPC,
EnhancedDSCHPCCounter,
EnhancedDSCHPCIndicator,
EnhancedDSCHPCWnd,
EnhancedDSCHPowerOffset,
FDD-DL-ChannelisationCodeNumber,
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FPACH-Power,
FrameAdjustmentValue,
FrameHandlingPriority,
FrameOffset,
HS-PDSCH-FDD-Code-Information,
HS-SCCH-ID,
HS-SCCH-FDD-Code-Information,
HS-SICH-ID,
IB-OC-ID,
IB-SG-DATA,
IB-SG-POS,
IB-SG-REP,
IB-Type,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
InnerLoopDLPCTStatus,
IPDL-FDD-Parameters,
IPDL-TDD-Parameters,
IPDL-Indicator,
IPDL-TDD-Parameters-LCR,
LimitedPowerIncrease,
Local-Cell-ID,
MaximumDL-PowerCapability,
Maximum-PDSCH-Power,
MaximumTransmissionPower,
Max-Number-of-PCPCHes,
MaxNrOfUL-DPDCHs,
MaxPRACH-MidambleShifts,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumDL-PowerCapability,
MinSpreadingFactor,

```
MinUL-ChannelisationCodeLength,  
MultiplexingPosition,  
NEOT,  
NCyclesPerSFNPeriod,  
NFmax,  
NRepetitionsPerCyclePeriod,  
N-INSYNC-IND,  
N-OUTSYNC-IND,  
NeighbouringCellMeasurementInformation,  
NeighbouringFDDCellMeasurementInformation,  
NeighbouringTDDCellMeasurementInformation,  
NodeB-CommunicationContextID,  
NumberOfReportedCellPortion,  
NStartMessage,  
NSubCyclesPerCyclePeriod,  
PagingIndicatorLength,  
PayloadCRC-PresenceIndicator,  
PCCPCH-Power,  
PCP-Length,  
PDSCH-CodeMapping,  
PDSCHSet-ID,  
PDSCH-ID,  
PICH-Mode,  
PICH-Power,  
PowerAdjustmentType,  
PowerOffset,  
PowerRaiseLimit,  
PRACH-Midamble,  
PreambleSignatures,  
PreambleThreshold,  
PredictedSFNSFNDeviationLimit,  
PredictedUTRANGPSDeviationLimit,  
PrimaryCPICH-Power,  
Primary-CPICH-Usage-for-Channel-Estimation,  
PrimaryScramblingCode,  
PropagationDelay,  
SCH-TimeSlot,  
PunctureLimit,  
PUSCHSet-ID,  
PUSCH-ID,  
QE-Selector,  
Qth-Parameter,  
RACH-SlotFormat,  
RACH-SubChannelNumbers,  
ReferenceClockAvailability,  
ReferenceSFNoffset,  
RepetitionLength,  
RepetitionPeriod,  
ReportCharacteristics,  
RequestedDataValue,  
RequestedDataValueInformation,  
ResourceOperationalState,  
RL-Set-ID,
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RL-ID,
RL-Specific-DCH-Info,
Received-total-wide-band-power-Value,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
RNC-ID,
ScramblingCodeNumber,
Secondary-CPICH-Information-Change,
SecondaryCCPCH-SlotFormat,
Segment-Type,
S-FieldLength,
SFN,
SFNSFNChangeLimit,
SFNSFNDriftRate,
SFNSFNDriftRateQuality,
SFNSFNQuality,
ShutdownTimer,
SIB-Originator,
SpecialBurstsScheduling,
SignallingBearerRequestIndicator,
SSDT-Cell-Identity,
SSDT-CellID-Length,
SSDT-Indication,
Start-Of-Audit-Sequence-Indicator,
STD-Indicator,
SSDT-SupportIndicator,
SyncCase,
SYNCDlCodeId,
SyncFrameNumber,
SynchronisationReportCharacteristics,
SynchronisationReportType,
T-Cell,
T-RLFAILURE,
TDD-ChannelisationCode,
TDD-ChannelisationCodeLCR,
TDD-DL-Code-LCR-Information,
TDD-DPCHOffset,
TDD-TPC-DownlinkStepSize,
TDD-PhysicalChannelOffset,
TDD-UL-Code-LCR-Information,
TFCI2-BearerInformationResponse,
TFCI2BearerRequestIndicator,
TFCI-Coding,
TFCI-Presence,
TFCI-SignallingMode,
TFCS,
TimeSlot,
TimeSlotLCR,
TimeSlotDirection,
TimeSlotStatus,
TimingAdjustmentValue,
TimingAdvanceApplied,

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ToAWE,  
ToAWS,  
TransmissionDiversityApplied,  
TransmitDiversityIndicator,  
TransmissionGapPatternSequenceCodeInformation,  
Transmission-Gap-Pattern-Sequence-Information,  
TransportBearerRequestIndicator,  
TransportFormatSet,  
TransportLayerAddress,  
TSTD-Indicator,  
TUTRANGPS,  
TUTRANGPSChangeLimit,  
TUTRANGPSDriftRate,  
TUTRANGPSDriftRateQuality,  
TUTRANGPSQuality,  
UARFCN,  
UC-Id,  
USCH-Information,  
USCH-InformationResponse,  
UL-CapacityCredit,  
UL-DPCCH-SlotFormat,  
UL-SIR,  
UL-FP-Mode,  
UL-PhysCH-SF-Variation,  
UL-ScramblingCode,  
UL-Timeslot-Information,  
UL-TimeslotLCR-Information,  
UL-TimeSlot-ISCP-Info,  
UL-TimeSlot-ISCP-LCR-Info,  
UL-TimeslotISCP-Value,  
UL-TimeslotISCP-Value-IncrDecrThres,  
USCH-ID,  
HSDSCH-FDD-Information,  
HSDSCH-FDD-Information-Response,  
HSDSCH-Information-to-Modify,  
HSDSCH-MACdFlow-ID,  
HSDSCH-RNTI,  
HSDSCH-TDD-Information,  
HSDSCH-TDD-Information-Response,  
PrimaryCCPCH-RSCP,  
HSDSCH-FDD-Update-Information,  
HSDSCH-TDD-Update-Information,  
UL-Synchronisation-Parameters-LCR,  
TDD-DL-DPCH-TimeSlotFormat-LCR,  
TDD-UL-DPCH-TimeSlotFormat-LCR,  
TDD-TPC-UplinkStepSize-LCR  
FROM NBAP-IES  
  
PrivateIE-Container{},  
ProtocolExtensionContainer{},  
ProtocolIE-Container{},  
ProtocolIE-Single-Container{},
```

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ProtocolIE-ContainerList{},
NBAP-PRIVATE-IES,
NBAP-PROTOCOL-IES,
NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers

id-Active-Pattern-Sequence-Information,
id-AdjustmentRatio,
id-AICH-Information,
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-AP-AICH-Information,
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-BCH-Information,
id-BCCH-ModificationTime,
id-bindingID,
id-BlockingPriorityIndicator,
id-Cause,
id-CauseLevel-PSCH-ReconfFailure,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CauseLevel-SyncAdjustmntFailureTDD,
id-CCP-InformationItem-AuditRsp,
id-CCP-InformationList-AuditRsp,
id-CCP-InformationItem-ResourceStatusInd,
id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD,
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD,
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD,
id-Cell-InformationItem-AuditRsp,
id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CellPortion-InformationItem-Cell-SetupRqstFDD,
id-CellPortion-InformationList-Cell-SetupRqstFDD,
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
```

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id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rgst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-DCH-RearrangeList-Bearer-RearrangeInd,
id-DSCH-RearrangeList-Bearer-RearrangeInd,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rgst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
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id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-TimingAdjustment,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DL-PowerBalancing-UpdatedIndicator,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-IndicationType-ResourceStatusInd,
id-InformationExchangeID,
id-InformationExchangeObjectType-InfEx-Rqst,
id-InformationExchangeObjectType-InfEx-Rsp,
id-InformationExchangeObjectType-InfEx-Rprt,
id-InformationReportCharacteristics,
id-InformationType,
id-InitDL-Power,
id-InnerLoopDLPCTStatus,

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id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRqstFDD,
id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRqstTDD,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRqstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,
id-NCyclesPerSFNPeriod,
id-NeighbouringCellMeasurementInformation,
id-NodeB-CommunicationContextID,
id-NRepetitionsPerCyclePeriod,
id-NumberOfReportedCellPortion,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-Cell-SetupRqstFDD,
id-PDSCH-Information-Cell-ReconfRqstFDD,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCH-RL-ID,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-Power-Local-Cell-Group-InformationItem-AuditRsp,
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id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList-AuditRsp,
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd,
id-Power-Local-Cell-Group-ID,
id-PRACH-Information,
id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-Primary-CPICH-Usage-for-Channel-Estimation,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-Qth-Parameter,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,

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id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-RL-Specific-DCH-Info,
id-S-CCPCH-Information,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-Secondary-CPICH-Information,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-Secondary-CPICH-Information-Change,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SignallingBearerRequestIndicator,
id-SSDT-CellIDforEDSCHPC,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
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id-T-Cell,
id-TargetCommunicationControlPortID,
id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2BearerRequestIndicator,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TransmissionDiversityApplied,
id-transportlayeraddress,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,

/* partly omitted */

maxNrOfCCTrCHs,
maxNrOfCellSyncBursts,
maxNrOfCodes,
maxNrOfCPCHs,
maxNrOfDCHs,
maxNrOfDLTSS,
maxNrOfDLTSLCRs,
maxNrOfDPCHs,
maxNrOfDSCHs,
maxNrOfFACHs,
maxNrOfRLs,
maxNrOfRLs-1,
maxNrOfRLs-2,
maxNrOfRLSets,
maxNrOfPCPCHs,
maxNrOfPDSCHs,
maxNrOfPUSCHs,
maxNrOfPRACHLCRs,
maxNrOfPDSCHSets,
maxNrOfPUSCHSets,
maxNrOfReceiptsPerSyncFrame,
maxNrOfSCCPCHs,
maxNrOfSCCPCHLCRs,
maxNrOfULTSS,
maxNrOfULTSLCRs,
maxNrOfUSCHs,
maxAPSigNum,
maxCPCHCell,
maxFACHCell,
maxFPACHCell,
maxNoofLen,
maxRACHCell,
maxPCPCHCell,
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maxPRACHCell,
maxSCCPCHCell,
maxSCPICHCell,
maxCellinNodeB,
maxCCPinNodeB,
maxCommunicationContext,
maxLocalCellinNodeB,
maxNrOfSlotFormatsPRACH,
maxIB,
maxIBSEG,
maxNrOfCellPortionsPerCell,
maxNrOfHSSCCCs,
maxNrOfHSSICCs,
maxNrOfHSPDSCHs,
maxNrOfSyncFramesLCR,
maxNrOfReceptionsperSyncFrameLCR,
maxNrOfSyncDLCodesLCR,
maxNrOfMACdFlows
FROM NBAP-Constants;

/* partly omitted */

-- *****
-- CELL SETUP REQUEST FDD
-- *****

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

CellSetupRequestFDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-Local-Cell-ID
        PRESENCE mandatory }|
    { ID id-C-ID
        PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID
        PRESENCE mandatory }|
    { ID id-T-Cell
        PRESENCE mandatory }|
    { ID id-UARFCNforNu
        PRESENCE mandatory }|
    { ID id-UARFCNforNd
        PRESENCE mandatory }|
    { ID id-MaximumTransmissionPower
        PRESENCE mandatory }|
    { ID id-Closed-Loop-Timing-Adjustment-Mode
        Closedloopoptimingadjustmentmode
        PRESENCE optional }|
    { ID id-PrimaryScramblingCode
        PRESENCE mandatory }|
}

```

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```

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{ ID id-Synchronisation-Configuration-Cell-SetupRqst      CRITICALITY reject
Configuration-Cell-SetupRqst          PRESENCE mandatory }| TYPE Synchronisation-
{ ID id-DL-TPC-Pattern01Count      CRITICALITY reject
  PRESENCE mandatory }| TYPE DL-TPC-Pattern01Count
{ ID id-PrimarySCH-Information-Cell-SetupRqstFDD      CRITICALITY reject
Cell-SetupRqstFDD          PRESENCE mandatory }| TYPE PrimarySCH-Information-
{ ID id-SecondarySCH-Information-Cell-SetupRqstFDD      CRITICALITY reject
Cell-SetupRqstFDD          PRESENCE mandatory }| TYPE SecondarySCH-Information-
{ ID id-PrimaryCPICH-Information-Cell-SetupRqstFDD      CRITICALITY reject
Cell-SetupRqstFDD          PRESENCE mandatory }| TYPE PrimaryCPICH-Information-
{ ID id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD      CRITICALITY reject
InformationList-Cell-SetupRqstFDD    PRESENCE optional }| TYPE SecondaryCPICH-
{ ID id-PrimaryCCPCH-Information-Cell-SetupRqstFDD      CRITICALITY reject
Cell-SetupRqstFDD          PRESENCE mandatory }| TYPE PrimaryCCPCH-Information-
{ ID id-Limited-power-increase-information-Cell-SetupRqstFDD      CRITICALITY reject
information-Cell-SetupRqstFDD      PRESENCE mandatory },
...
}

CellSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  {ID id-IPDLPParameter-Information-Cell-SetupRqstFDD      CRITICALITY reject      EXTENSION
Cell-SetupRqstFDD          PRESENCE optional }| IPDLParameter-Information-
  {ID id-PDSCH-Information-Cell-SetupRqstFDD      CRITICALITY reject      EXTENSION
SetupRqstFDD          PRESENCE optional }| PDSCH-Information-Cell-
  {ID id-CellPortion-InformationList-Cell-SetupRqstFDD      CRITICALITY reject      EXTENSION      CellPortion-
InformationList-Cell-SetupRqstFDD    PRESENCE optional },
...
}

Synchronisation-Configuration-Cell-SetupRqst ::= SEQUENCE {
  n-INSYNC-IND           N-INSYNC-IND,
  n-OUTSYNC-IND          N-OUTSYNC-IND,
  t-RLFAILURE             T-RLFAILURE,
  iE-Extensions           ProtocolExtensionContainer { { Synchronisation-Configuration-Cell-SetupRqst-ExtIEs} } OPTIONAL,
...
}

Synchronisation-Configuration-Cell-SetupRqst-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PrimarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  primarySCH-Power            DL-Power,
  tSTD-Indicator              TSTD-Indicator,
  iE-Extensions                ProtocolExtensionContainer { { PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

PrimarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

```

SecondarySCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID,
        CommonPhysicalChannelID,
    secondarySCH-Power,
        DL-Power,
    tSTD-Indicator,
        TSTD-Indicator,
    iE-Extensions
        ProtocolExtensionContainer { { SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

SecondarySCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimaryCPICH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID,
        CommonPhysicalChannelID,
    primaryCPICH-Power,
        PrimaryCPICH-Power,
    transmitDiversityIndicator,
        TransmitDiversityIndicator,
    iE-Extensions
        ProtocolExtensionContainer { { PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

PrimaryCPICH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

SecondaryCPICH-InformationList-Cell-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxSCPICHCell)) OF ProtocolIE-Single-Container{ { SecondaryCPICH-
InformationItemIE-Cell-SetupRqstFDD } }

SecondaryCPICH-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {
    { ID      id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD      CRITICALITY      reject
      TYPE SecondaryCPICH-
InformationItem-Cell-SetupRqstFDD      PRESENCE      mandatory}
    ...
}

SecondaryCPICH-InformationItem-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID,
        CommonPhysicalChannelID,
    dl-ScramblingCode,
        DL-ScramblingCode,
    fDD-DL-ChannelisationCodeNumber,
        FDD-DL-ChannelisationCodeNumber,
    secondaryCPICH-Power,
        DL-Power,
    transmitDiversityIndicator,
        TransmitDiversityIndicator,
    iE-Extensions
        ProtocolExtensionContainer { { SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

SecondaryCPICH-InformationItem-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PrimaryCCPCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
    commonPhysicalChannelID,
        CommonPhysicalChannelID,
    bCH-information
        BCH-Information-Cell-SetupRqstFDD,
    sTSD-Indicator,
        STSD-Indicator,
    iE-Extensions
        ProtocolExtensionContainer { { PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

```

```

PrimaryCCPCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

BCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
  commonTransportChannelID           CommonTransportChannelID,
  bCH-Power                         DL-Power,
  iE-Extensions                      ProtocolExtensionContainer { { BCH-Information-Cell-SetupRqstFDD-ExtIEs} }    OPTIONAL,
  ...
}

BCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Limited-power-increase-information-Cell-SetupRqstFDD ::= SEQUENCE {
  powerRaiseLimit                     PowerRaiseLimit,
  dLPowerAveragingWindowSize         DLPowerAveragingWindowSize,
  iE-Extensions                      ProtocolExtensionContainer { { Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs} }    OPTIONAL,
  ...
}

Limited-power-increase-information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

IPDLParameter-Information-Cell-SetupRqstFDD ::= SEQUENCE {
  iPDL-FDD-Parameters               IPDL-FDD-Parameters,
  iPDL-Indicator                    IPDL-Indicator,
  iE-Extensions                      ProtocolExtensionContainer { { IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs} }    OPTIONAL,
  ...
}

IPDLParameter-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

PDSCH-Information-Cell-SetupRqstFDD ::= SEQUENCE {
  maximum-PDSCH-Power              Maximum-PDSCH-Power,
  iE-Extensions                      ProtocolExtensionContainer { { PDSCH-Information-Cell-SetupRqstFDD-ExtIEs} }    OPTIONAL,
  ...
}

PDSCH-Information-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

CellPortion-InformationList-Cell-SetupRqstFDD ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF ProtocolIE-Single-Container{{ Cell-Portion-InformationItemIE-Cell-SetupRqstFDD }}

CellPortion-InformationItemIE-Cell-SetupRqstFDD NBAP-PROTOCOL-IES ::= {

```

```

{ ID id-CellPortion-InformationItem-Cell-SetupRqstFDD           CRITICALITY reject          TYPE CellPortion-
InformationItem-Cell-SetupRqstFDD      PRESENCE mandatory}
}

CellPortion-InformationItem-Cell-SetupRqstFDD ::= SEQUENCE {
    cellPortionID           CellPortionID,
    associatedSecondaryCPICH CommonPhysicalChannelID,
    iE-Extensions           ProtocolExtensionContainer { { CellPortion-InformationItem-Cell-SetupRqstFDD-ExtIEs} } OPTIONAL,
    ...
}

CellPortion-InformationItem-Cell-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

/* partly omitted */

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

RadioLinkSetupRequestFDD ::= SEQUENCE {
    protocolIEs          ProtocolIE-Container {{RadioLinkSetupRequestFDD-IES}},
    protocolExtensions   ProtocolExtensionContainer {{RadioLinkSetupRequestFDD-Extensions}}          OPTIONAL,
    ...
}

RadioLinkSetupRequestFDD-IES NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID           CRITICALITY reject          TYPE CRNC-CommunicationContextID
        PRESENCE mandatory }|
    { ID id-UL-DPCH-Information-RL-SetupRqstFDD   CRITICALITY reject          TYPE UL-DPCH-Information-RL-
SetupRqstFDD      PRESENCE mandatory }|
    { ID id-DL-DPCH-Information-RL-SetupRqstFDD   CRITICALITY reject          TYPE DL-DPCH-Information-RL-
SetupRqstFDD      PRESENCE mandatory }|
    { ID id-DCH-FDD-Information           CRITICALITY reject          TYPE DCH-FDD-Information
        PRESENCE mandatory }|
    { ID id-DSCH-FDD-Information         CRITICALITY reject          TYPE DSCH-FDD-Information
        PRESENCE optional }|
    { ID id-TFCI2-Bearer-Information-RL-SetupRqstFDD   CRITICALITY ignore          TYPE TFCI2-Bearer-Information-RL-
SetupRqstFDD      PRESENCE optional }|
    { ID id-RL-InformationList-RL-SetupRqstFDD   CRITICALITY notify          TYPE RL-InformationList-RL-
SetupRqstFDD      PRESENCE mandatory }|
    { ID id-Transmission-Gap-Pattern-Sequence-Information   CRITICALITY reject          TYPE Transmission-Gap-Pattern-Sequence-Information
        PRESENCE optional }|
    { ID id-Active-Pattern-Sequence-Information           CRITICALITY reject          TYPE Active-Pattern-Sequence-Information      PRESENCE
        optional },
    ...
}

RadioLinkSetupRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DSCH-FDD-Common-Information           CRITICALITY ignore      EXTENSION DSCH-FDD-Common-Information      PRESENCE optional
    }|
    { ID id-DL-PowerBalancing-Information         CRITICALITY ignore      EXTENSION DL-PowerBalancing-Information      PRESENCE optional }|
}

```

```

{ ID id-HSDSCH-FDD-Information           CRITICALITY reject EXTENSION HSDSCH-FDD-Information
{ ID id-HSDSCH-RNTI                     CRITICALITY reject EXTENSION HSDSCH-RNTI
-- The IE shall be present if HS-DSCH Information IE is present
{ ID id-HSPDSCH-RL-ID                   CRITICALITY reject EXTENSION RL-ID
-- The IE shall be present if HS-DSCH Information IE is present
...
}

UL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    ul-ScramblingCode,
    minUL-ChannelisationCodeLength,
    maxNrOfUL-DPDCHs           OPTIONAL,
    -- This IE shall be present if Min UL Channelisation Code length IE is set to 4 --
    ul-PunctureLimit            PunctureLimit,
    tFCs,
    ul-DPCCH-SlotFormat,
    ul-SIR-Target,
    diversityMode,
    SSDT-CellID-Length         OPTIONAL,
    s-FieldLength               OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { { UL-DPCH-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
...
}

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

DL-DPCH-Information-RL-SetupRqstFDD ::= SEQUENCE {
    tFCs,
    dl-DPCH-SlotFormat,
    tFCI-SignallingMode,
    tFCI-Presence           OPTIONAL,
    -- this IE shall be present if the DL DPCH slot format IE is set to any of the values from 12 to 16 --
    multiplexingPosition     MultiplexingPosition,
    pDSCH-RL-ID              OPTIONAL,
    -- This IE shall be present if the DSCH Information IE is present --
    pDSCH-CodeMapping         PDSCH-CodeMapping       OPTIONAL,
    -- This IE shall be present if the DSCH Information IE is present --
    powerOffsetInformation    PowerOffsetInformation-RL-SetupRqstFDD,
    fdd-TPC-DownlinkStepSize  FDD-TPC-DownlinkStepSize,
    limitedPowerIncrease      LimitedPowerIncrease,
    innerLoopDLPcStatus       InnerLoopDLPcStatus,
    iE-Extensions              ProtocolExtensionContainer { { DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs } } OPTIONAL,
...
}

DL-DPCH-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

PowerOffsetInformation-RL-SetupRqstFDD ::= SEQUENCE {

```

```

p01-ForTFCI-Bits          PowerOffset,
p02-ForTPC-Bits           PowerOffset,
p03-ForPilotBits          PowerOffset,
iE-Extensions              ProtocolExtensionContainer { { PowerOffsetInformation-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

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

TFCI2-Bearer-Information-RL-SetupRqstFDD ::= SEQUENCE {
  toAWS                  ToAWS,
  toAWE                  ToAWE,
  iE-Extensions          ProtocolExtensionContainer { { TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

TFCI2-Bearer-Information-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-bindingID      CRITICALITY ignore      EXTENSION BindingID      PRESENCE optional } |
  { ID id-transportlayeraddress CRITICALITY ignore      EXTENSION TransportLayerAddress PRESENCE optional },
...
}

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

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

```

RL-InformationItem-RL-SetupRqstFDD ::= SEQUENCE {
  rL-ID                  RL-ID,
  c-ID                   C-ID,
  firstRLS-indicator    FirstRLS-Indicator,
  frameOffset            FrameOffset,
  chipOffset             ChipOffset,
  propagationDelay       PropagationDelay      OPTIONAL,
  diversityControlField  DiversityControlField OPTIONAL,
  -- This IE shall be present if the RL is not the first one in the RL Information IE
  dl-CodeInformation     FDD-DL-CodeInformation,
  initialDL-transmissionPower DL-Power,
  maximumDL-power        DL-Power,
  minimumDL-power        DL-Power,
  ssdt-Cell-Identity    SSDT-Cell-Identity   OPTIONAL,
  transmitDiversityIndicator TransmitDiversityIndicator OPTIONAL,
  -- This IE shall be present if Diversity Mode IE in UL DPCH Information group is not set to "none"
  iE-Extensions          ProtocolExtensionContainer { { RL-InformationItem-RL-SetupRqstFDD-ExtIEs} } OPTIONAL,
...
}

RL-InformationItem-RL-SetupRqstFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
```

```
{ ID id-SSDT-CellIDforEDSCHPC CRITICALITY ignore EXTENSION SSDT-Cell-Identity PRESENCE conditional }|
-- This IE shall be present if Enhanced DSCH PC IE is present in the DSCH Common Information IE.
{ ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
{ ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional }|
{ ID id-Qth-Parameter CRITICALITY ignore EXTENSION Qth-Parameter PRESENCE optional }|
{ ID id-Primary-CPICH-Usage-for-Channel-Estimation CRITICALITY ignore EXTENSION Primary-CPICH-Usage-for-Channel-Estimation PRESENCE
optional }|
{ ID id-Secondary-CPICH-Information CRITICALITY ignore EXTENSION CommonPhysicalChannelID PRESENCE optional },
...
}

/* partly omitted */
```

9.3.4 Information Elements Definitions

```
--*****
-- Information Element Definitions
--*****
NBAP-IES {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-IEs (2) }

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    maxNrOfRLs,
    maxNrOfTFCs,
    maxNrOfErrors,
    maxCTFC,
    maxNrOfTFs,
    maxTTI-count,
    maxRateMatching,
    maxCodeNrComp-1,
    maxHS-PDSCHCodeNrComp-1,
    maxHS-SCCHCodeNrComp-1,
    maxNrOfCellSyncBursts,
    maxNrOfCodeGroups,
    maxNrOfMeasNCell,
    maxNrOfMeasNCell-1,
    maxNrOfReceiptsPerSyncFrame,
    maxNrOfTFCIGroups,
    maxNrOfTFCI1Combs,
    maxNrOfTFCI2Combs,
    maxNrOfTFCI2Combs-1,
    maxNrOfSF,
    maxTGPS,
    maxNrOfUSCHs,
    maxNrOfULTSS,
    maxNrOfULTSLCRs,
    maxNrOfDPCHs,
    maxNrOfDPCHLCRs,
    maxNrOfCodes,
    maxNrOfDSCHs,
    maxNrOfDLTSS,
    maxNrOfDLTSLCRs,
    maxNrOfDCChs,
    maxNrOfLevels,
    maxNoGPSItems,
    maxNoSat,
    maxNrOfCellPortionsPerCell,
```

```
maxNrOfCellPortionsPerCell-1,  
maxNrOfHSSCCHs,  
maxNrOfHSSCCHCodes,  
maxNrOfMACdFlows,  
maxNrOfMACdFlows-1,  
maxNrOfMACdPDUIndexes,  
maxNrOfMACdPDUIndexes-1,  
maxNrOfPriorityQueues,  
maxNrOfPriorityQueues-1,  
maxNrOfHARQProcesses,  
maxNrOfSyncDLCodesLCR,  
maxNrOfSyncFramesLCR,  
maxNrOfContextsOnUeList,  
  
id-MessageStructure,  
id-ReportCharacteristicsType-OnModification,  
id-Rx-Timing-Deviation-Value-LCR,  
id-SFNSFNMeasurementValueInformation,  
id-SFNSFNMeasurementThresholdInformation,  
id-TUTRANGPSMeasurementValueInformation,  
id-TUTRANGPSMeasurementThresholdInformation,  
id-TypeOfError,  
id-transportlayeraddress,  
id-bindingID,  
id-Angle-Of-Arrival-Value-LCR,  
id-SyncDLCodeIdThreInfoLCR,  
id-neighbouringTDDCellMeasurementInformationLCR,  
id-HS-SICH-Reception-Quality,  
id-HS-SICH-Reception-Quality-Measurement-Value,  
id-Initial-DL-Power-TimeslotLCR-InformationItem,  
id-Maximum-DL-Power-TimeslotLCR-InformationItem,  
id-Minimum-DL-Power-TimeslotLCR-InformationItem,  
id-Received-total-wide-band-power-For-CellPortion,  
id-Received-total-wide-band-power-For-CellPortion-Value,  
id-Transmitted-Carrier-Power-For-CellPortion,  
id-Transmitted-Carrier-Power-For-CellPortion-Value,  
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission,  
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortion,  
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue,  
id-HS-DSCHRequiredPower,  
id-HS-DSCHProvidedBitRate,  
id-HS-DSCHRequiredPowerValue,  
id-HS-DSCHProvidedBitRateValue,  
id-Best-Cell-Portions-Value,  
id-Unidirectional-DCH-Indicator  
FROM NBAP-Constants  
  
Criticality,  
ProcedureID,  
ProtocolIE-ID,  
TransactionID,  
TriggeringMessage  
FROM NBAP-CommonDataTypes
```

```
NBAP-PROTOCOL-IES,
ProtocolExtensionContainer{},
ProtocolIE-Single-Container{},
NBAP-PROTOCOL-EXTENSION
FROM NBAP-Containers;

/* partly omitted */

-- =====
-- C
-- =====

Cause ::= CHOICE {
    radioNetwork      CauseRadioNetwork,
    transport         CauseTransport,
    protocol          CauseProtocol,
    misc              CauseMisc,
    ...
}

CauseMisc ::= ENUMERATED {
    control-processing-overload,
    hardware-failure,
    oam-intervention,
    not-enough-user-plane-processing-resources,
    unspecified,
    ...
}

CauseProtocol ::= ENUMERATED {
    transfer-syntax-error,
    abstract-syntax-error-reject,
    abstract-syntax-error-ignore-and-notify,
    message-not-compatible-with-receiver-state,
    semantic-error,
    unspecified,
    abstract-syntax-error-falsely-constructed-message,
    ...
}

CauseRadioNetwork ::= ENUMERATED {
    unknown-C-ID,
    cell-not-available,
    power-level-not-supported,
    dl-radio-resources-not-available,
    ul-radio-resources-not-available,
    rl-already-ActivatedOrAllocated,
    nodeB-Resources-unavailable,
    measurement-not-supported-for-the-object,
    combining-resources-not-available,
    requested-configuration-not-supported,
    synchronisation-failure,
```

```
priority-transport-channel-established,
SIB-Originat ion-in-Node-B-not-Supported,
requested-tx-diversity-mode-not-supported,
unspecified,
BCCH-scheduling-error,
measurement-temporarily-not-available,
invalid-CM-settings,
reconfiguration-CFN-not-elapsed,
number-of-DL-codes-not-supported,
s-cipch-not-supported,
combining-not-supported,
ul-sf-not-supported,
dl-SF-not-supported,
common-transport-channel-type-not-supported,
dedicated-transport-channel-type-not-supported,
downlink-shared-channel-type-not-supported,
uplink-shared-channel-type-not-supported,
cm-not-supported,
tx-diversity-no-longer-supported,
unknown-Local-Cell-ID,
...
number-of-UL-codes-not-supported,
information-temporarily-not-available,
information-provision-not-supported-for-the-object,
cell-synchronisation-not-supported,
cell-synchronisation-adjustment-not-supported,
dpc-mode-change-not-supported,
iPDL-already-activated,
iPDL-not-supported,
iPDL-parameters-not-available,
frequency-acquisition-not-supported,
power-balancing-status-not-compatible,
requested-typeofbearer-re-arrangement-not-supported,
signalling-Bearer-Re-arrangement-not-supported,
bearer-Re-arrangement-needed,
delayed-activation-not-supported,
rl-timing-adjustment-not-supported
}

CauseTransport ::= ENUMERATED {
    transport-resource-unavailable,
    unspecified,
    ...
}

CCTrCH-ID ::= INTEGER (0..15)

CDSubChannelNumbers ::= BIT STRING {
    subCh11(0),
    subCh10(1),
    subCh9(2),
    subCh8(3),
    subCh7(4),
```

```

        subCh6(5),
        subCh5(6),
        subCh4(7),
        subCh3(8),
        subCh2(9),
        subCh1(10),
        subCh0(11)
    } (SIZE (12))

CellParameterID ::= INTEGER (0..127,...)

CellPortionID ::= INTEGER (0..maxNrOfCellPortionsPerCell-1,...)

CellSyncBurstCode ::= INTEGER(0..7, ...)

CellSyncBurstCodeShift ::= INTEGER(0..7)

CellSyncBurstRepetitionPeriod ::= INTEGER (0..4095)

CellSyncBurstSIR ::= INTEGER (0..31)

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

CellSyncBurstTimingThreshold ::= INTEGER(0..254)

CFN ::= INTEGER (0..255)

Channel-Assignment-Indication ::= ENUMERATED {
    CA-Active,
    CA-Inactive
}

ChipOffset ::= INTEGER (0..38399)
-- Unit Chip

C-ID ::= INTEGER (0..65535)

ClosedloopTimingadjustmentmode ::= ENUMERATED {
    adj-1-slot,
    adj-2-slot,
    ...
}

CommonChannelsCapacityConsumptionLaw ::= SEQUENCE (SIZE(1..maxNrOfSF)) OF
SEQUENCE {
    dl-Cost      INTEGER (0..65535),
    ul-Cost      INTEGER (0..65535),
    iE-Extensions ProtocolExtensionContainer { { CommonChannelsCapacityConsumptionLaw-ExtIEs } }
} OPTIONAL,
...
}
```

```

CommonChannelsCapacityConsumptionLaw-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonMeasurementAccuracy ::= CHOICE {
    tUTRANGPSMeasurementAccuracyClass           TUTRANGPSAccuracyClass,
    ...
}

CommonMeasurementType ::= ENUMERATED {
    received-total-wide-band-power,
    transmitted-carrier-power,
    acknowledged-prach-preambles,
    ul-timeslot-iscp,
    acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles,
    ...,
    uTRAN-GPS-Timing-of-Cell-Frames-for-UE-Positioning,
    sFN-SFN-Observed-Time-Difference,
    transmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission,
    hS-DSCH-Required-Power,
    hS-DSCH-Provided-Bit-Rate,
    received-total-wide-band-power-for-cellPortion,
    transmitted-carrier-power-for-cellPortion,
    transmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission-for-cellPortion
}
}

CommonMeasurementValue ::= CHOICE {
    transmitted-carrier-power          Transmitted-Carrier-Power-Value,
    received-total-wide-band-power     Received-total-wide-band-power-Value,
    acknowledged-prach-preambles      Acknowledged-PRACH-preambles-Value,
    uL-TimeslotISCP                  UL-TimeslotISCP-Value,
    acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
    detected-PCPCH-access-preambles   Detected-PCPCH-access-preambles,
    ...,
    extension-CommonMeasurementValue Extension-CommonMeasurementValue
}
}

Extension-CommonMeasurementValue ::= ProtocolIE-Single-Container {{ Extension-CommonMeasurementValueIE }}
```

Extension-CommonMeasurementValueIE NBAP-PROTOCOL-IES ::= {

- { ID id-TUTRANGPSMeasurementValueInformation CRITICALITY ignore TYPE TUTRANGPSMeasurementValueInformation PRESENCE mandatory }|
- { ID id-SFNSFNMeasurementValueInformation CRITICALITY ignore TYPE SFNSFNMeasurementValueInformation PRESENCE mandatory }|
- { ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission CRITICALITY ignore TYPE TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue PRESENCE mandatory }|
- { ID id-HS-DSCHRequiredPower CRITICALITY ignore TYPE HS-DSCHRequiredPower PRESENCE mandatory }|
- { ID id-HS-DSCHProvidedBitRate CRITICALITY ignore TYPE HS-DSCHProvidedBitRate PRESENCE mandatory }|
- { ID id-Transmitted-Carrier-Power-For-CellPortion-Value CRITICALITY ignore TYPE Transmitted-Carrier-Power-For-CellPortion-Value PRESENCE mandatory }|
- { ID id-Received-total-wide-band-power-For-CellPortion-Value CRITICALITY ignore TYPE Received-total-wide-band-power-For-CellPortion-Value PRESENCE mandatory }|

```
{ ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue CRITICALITY ignore      TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue          PRESENCE mandatory }

CommonMeasurementValueInformation ::= CHOICE {
    measurementAvailable      CommonMeasurementAvailable,
    measurementnotAvailable   CommonMeasurementnotAvailable
}

CommonMeasurementAvailable ::= SEQUENCE {
    commonmeasurementValue      CommonMeasurementValue,
    ie-Extensions               ProtocolExtensionContainer { { CommonMeasurementAvailableItem-ExtIEs } }           OPTIONAL,
    ...
}

CommonMeasurementAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonMeasurementnotAvailable ::= NULL

CommonPhysicalChannelID ::= INTEGER (0..255)

Common-PhysicalChannel-Status-Information ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    resourceOperationalState     ResourceOperationalState,
    availabilityStatus           AvailabilityStatus,
    ie-Extensions                ProtocolExtensionContainer { { Common-PhysicalChannel-Status-Information-ExtIEs } }   OPTIONAL,
    ...
}

Common-PhysicalChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommonTransportChannelID ::= INTEGER (0..255)

CommonTransportChannel-InformationResponse ::= SEQUENCE {
    commonTransportChannelID      CommonTransportChannelID,
    bindingID                     BindingID           OPTIONAL,
    transportLayerAddress         TransportLayerAddress OPTIONAL,
    ie-Extensions                 ProtocolExtensionContainer { { CommonTransportChannel-InformationResponse-ExtIEs } }   OPTIONAL,
    ...
}

CommonTransportChannel-InformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
Common-TransportChannel-Status-Information ::= SEQUENCE {
    commonTransportChannelID           CommonTransportChannelID,
    resourceOperationalState          ResourceOperationalState,
    availabilityStatus                AvailabilityStatus,
    IE-Extensions                     ProtocolExtensionContainer { { Common-TransportChannel-Status-Information-ExtIEs } } OPTIONAL,
    ...
}

Common-TransportChannel-Status-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CommunicationControlPortID ::= INTEGER (0..65535)

Compressed-Mode-Deactivation-Flag ::= ENUMERATED {
    deactivate,
    maintain-Active
}

ConfigurationGenerationID ::= INTEGER (0..255)
-- Value '0' means "No configuration"

ConstantValue ::= INTEGER (-10..10,...)
-- -10 dB - +10 dB
-- unit dB
-- step 1 dB

CPCH-Allowed-Total-Rate ::= ENUMERATED {
    v15,
    v30,
    v60,
    v120,
    v240,
    v480,
    v960,
    v1920,
    v2880,
    v3840,
    v4800,
    v5760,
    ...
}

CPCHScramblingCodeNumber ::= INTEGER (0..79)

CPCH-UL-DPCCH-SlotFormat ::= INTEGER (0..2,...)

CQI-Feedback-Cycle ::= ENUMERATED {v0, v2, v4, v8, v10, v20, v40, v80, v160,...}

CQI-Power-Offset ::= INTEGER (0..8,...)
-- According to mapping in ref. [9] subclause 4.2.1
```

```

CQI-RepetitionFactor ::= INTEGER (1..4,...)
-- Step: 1

CriticalityDiagnostics ::= SEQUENCE {
    procedureID          ProcedureID      OPTIONAL,
    triggeringMessage     TriggeringMessage OPTIONAL,
    procedureCriticality Criticality       OPTIONAL,
    transactionID        TransactionID   OPTIONAL,
    iEsCriticalityDiagnostics CriticalityDiagnostics-IE-List OPTIONAL,
    iE-Extensions         ProtocolExtensionContainer { {CriticalityDiagnostics-ExtIEs} }           OPTIONAL,
    ...
}

CriticalityDiagnostics-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

CriticalityDiagnostics-IE-List ::= SEQUENCE (SIZE (1..maxNrOfErrors)) OF
SEQUENCE {
    iECriticality      Criticality,
    iE-ID               ProtocolIE-ID,
    repetitionNumber0  RepetitionNumber0 OPTIONAL,
    iE-Extensions       ProtocolExtensionContainer { {CriticalityDiagnostics-IE-List-ExtIEs} }           OPTIONAL,
    ...
}

CriticalityDiagnostics-IE-List-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-MessageStructure CRITICALITY ignore EXTENSION MessageStructure PRESENCE optional } |
    { ID id-TypeOfError      CRITICALITY ignore EXTENSION TypeOfError    PRESENCE mandatory } ,
    ...
}

CRNC-CommunicationContextID ::= INTEGER (0..1048575)

CSBMeasurementID ::= INTEGER (0..65535)

CSBTransmissionID ::= INTEGER (0..65535)

/* partly omitted */

-- =====
-- R
-- =====

RACH-SlotFormat ::= ENUMERATED {
    v0,
    v1,
    v2,
    v3,
    ...
}

```

```
RACH-SubChannelNumbers ::= BIT STRING {
    subCh11(0),
    subCh10(1),
    subCh9(2),
    subCh8(3),
    subCh7(4),
    subCh6(5),
    subCh5(6),
    subCh4(7),
    subCh3(8),
    subCh2(9),
    subCh1(10),
    subCh0(11)
} (SIZE (12))

RL-Specific-DCH-Info ::= SEQUENCE (SIZE (1..maxNrOfDCHs)) OF RL-Specific-DCH-Info-Item

RL-Specific-DCH-Info-Item ::= SEQUENCE {
    dCH-id          DCH-ID,
    bindingID       BindingID                               OPTIONAL,
    transportlayeraddress TransportLayerAddress           OPTIONAL,
    iE-Extensions   ProtocolExtensionContainer { { RL-Specific-DCH-Info-Item-ExtIEs } } OPTIONAL,
    ...
}

RL-Specific-DCH-Info-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

Range-Correction-Rate ::= INTEGER (-127..127)
-- scaling factor 0.032 m/s

ReferenceClockAvailability ::= ENUMERATED {
    available,
    notAvailable
}

ReferenceSFNoffset ::= INTEGER (0..255)

RepetitionLength ::= INTEGER (1..63)

RepetitionPeriod ::= ENUMERATED {
    v1,
    v2,
    v4,
    v8,
    v16,
    v32,
    v64,
    ...
}

RepetitionNumber0 ::= INTEGER (0..255)
```

```

RepetitionNumber1 ::= INTEGER (1..256)

RefTFCNNumber ::= INTEGER (0..3)

ReportCharacteristics ::= CHOICE {
    onDemand           NULL,
    periodic            ReportCharacteristicsType-ReportPeriodicity,
    event-a             ReportCharacteristicsType-EventA,
    event-b             ReportCharacteristicsType-EventB,
    event-c             ReportCharacteristicsType-EventC,
    event-d             ReportCharacteristicsType-EventD,
    event-e             ReportCharacteristicsType-EventE,
    event-f             ReportCharacteristicsType-EventF,
    ...
    extension-ReportCharacteristics   Extension-ReportCharacteristics
}

Extension-ReportCharacteristics ::= ProtocolIE-Single-Container {{ Extension-ReportCharacteristicsIE }}
```

Extension-ReportCharacteristicsIE NBAP-PROTOCOL-IES ::= {

```

{ ID id-ReportCharacteristicsType-OnModification     CRITICALITY reject    TYPE ReportCharacteristicsType-OnModification    PRESENCE mandatory }
```

ReportCharacteristicsType-EventA ::= SEQUENCE {

```

measurementThreshold      ReportCharacteristicsType-MeasurementThreshold,
measurementHysteresisTime ReportCharacteristicsType-ScaledMeasurementHysteresisTime
iE-Extensions             ProtocolExtensionContainer { { ReportCharacteristicsType-EventA-ExtIEs} }          OPTIONAL,
...
}
```

ReportCharacteristicsType-EventA-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

...
}
```

ReportCharacteristicsType-EventB ::= SEQUENCE {

```

measurementThreshold      ReportCharacteristicsType-MeasurementThreshold,
measurementHysteresisTime ReportCharacteristicsType-ScaledMeasurementHysteresisTime
iE-Extensions             ProtocolExtensionContainer { { ReportCharacteristicsType-EventB-ExtIEs} }          OPTIONAL,
...
}
```

ReportCharacteristicsType-EventB-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

...
}
```

ReportCharacteristicsType-EventC ::= SEQUENCE {

```

measurementIncreaseThreshold ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
measurementChangeTime       ReportCharacteristicsType-ScaledMeasurementChangeTime,
iE-Extensions               ProtocolExtensionContainer { { ReportCharacteristicsType-EventC-ExtIEs} }          OPTIONAL,
...
}
```

```
ReportCharacteristicsType-EventC-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventD ::= SEQUENCE {
    measurementDecreaseThreshold      ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold,
    measurementChangeTime             ReportCharacteristicsType-ScaledMeasurementChangeTime,
    iE-Extensions                     ProtocolExtensionContainer { { ReportCharacteristicsType-EventD-ExtIEs} }           OPTIONAL,
    ...
}

ReportCharacteristicsType-EventD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventE ::= SEQUENCE {
    measurementThreshold1            ReportCharacteristicsType-MeasurementThreshold,
    measurementThreshold2            ReportCharacteristicsType-MeasurementThreshold           OPTIONAL,
    measurementHysteresisTime        ReportCharacteristicsType-ScaledMeasurementHysteresisTime   OPTIONAL,
    reportPeriodicity                ReportCharacteristicsType-ReportPeriodicity          OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { ReportCharacteristicsType-EventE-ExtIEs} }           OPTIONAL,
    ...
}

ReportCharacteristicsType-EventE-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-EventF ::= SEQUENCE {
    measurementThreshold1            ReportCharacteristicsType-MeasurementThreshold,
    measurementThreshold2            ReportCharacteristicsType-MeasurementThreshold           OPTIONAL,
    measurementHysteresisTime        ReportCharacteristicsType-ScaledMeasurementHysteresisTime   OPTIONAL,
    reportPeriodicity                ReportCharacteristicsType-ReportPeriodicity          OPTIONAL,
    iE-Extensions                   ProtocolExtensionContainer { { ReportCharacteristicsType-EventF-ExtIEs} }           OPTIONAL,
    ...
}

ReportCharacteristicsType-EventF-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-OnModification ::= SEQUENCE {
    measurementThreshold            ReportCharacteristicsType-MeasurementThreshold,
    iE-Extensions                   ProtocolExtensionContainer { { ReportCharacteristicsType-OnModification-ExtIEs} }           OPTIONAL,
    ...
}

ReportCharacteristicsType-OnModification-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold ::= CHOICE {
    received-total-wide-band-power      Received-total-wide-band-power-Value-IncrDecrThres,
```

```

transmitted-carrier-power      Transmitted-Carrier-Power-Value,
acknowledged-prach-preambles Acknowledged-PRACH-preambles-Value,
ul-TimeslotISCP               UL-TimeslotISCP-Value-IncrDecrThres,
sir                           SIR-Value-IncrDecrThres,
sir-error                     SIR-Error-Value-IncrDecrThres,
transmitted-code-power        Transmitted-Code-Power-Value-IncrDecrThres,
rscp                          RSCP-Value-IncrDecrThres,
round-trip-time               Round-Trip-Time-IncrDecrThres,
acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
detected-PCPCH-access-preambles Detected-PCPCH-access-preambles,
...
extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThreshold Extension-ReportCharacteristicsType-
MeasurementIncreaseDecreaseThreshold
}

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

Extension-ReportCharacteristicsType-MeasurementIncreaseDecreaseThresholdIE NBAP-PROTOCOL-IES ::= {
{ ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue PRESENCE mandatory }|
{ ID id-Transmitted-Carrier-Power-For-CellPortion CRITICALITY reject TYPE Transmitted-Carrier-Power-Value PRESENCE mandatory }|
{ ID id-Received-total-wide-band-power-For-CellPortion CRITICALITY reject TYPE Received-total-wide-band-power-Value-IncrDecrThres PRESENCE
mandatory }|
{ ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortion CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue PRESENCE mandatory }
}

ReportCharacteristicsType-MeasurementThreshold ::= CHOICE {
  received-total-wide-band-power           Received-total-wide-band-power-Value,
  transmitted-carrier-power              Transmitted-Carrier-Power-Value,
  acknowledged-prach-preambles          Acknowledged-PRACH-preambles-Value,
  ul-TimeslotISCP                      UL-TimeslotISCP-Value,
  sir                           SIR-Value,
  sir-error                     SIR-Error-Value,
  transmitted-code-power             Transmitted-Code-Power-Value,
  rscp                          RSCP-Value,
  rx-timing-deviation               Rx-Timing-Deviation-Value,
  round-trip-time                  Round-Trip-Time-Value,
  acknowledged-PCPCH-access-preambles Acknowledged-PCPCH-access-preambles,
  detected-PCPCH-access-preambles   Detected-PCPCH-access-preambles,
...
extension-ReportCharacteristicsType-MeasurementThreshold Extension-ReportCharacteristicsType-MeasurementThreshold
}

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

Extension-ReportCharacteristicsType-MeasurementThresholdIE NBAP-PROTOCOL-IES ::= {
{ ID id-TUTRANGPSMeasurementThresholdInformation CRITICALITY reject TYPE TUTRANGPSMeasurementThresholdInformation PRESENCE mandatory }|
{ ID id-SFNSFNMeasurementThresholdInformation CRITICALITY reject TYPE SFNSFNMeasurementThresholdInformation PRESENCE mandatory }|
{ ID id-Rx-Timing-Deviation-Value-LCR CRITICALITY reject TYPE Rx-Timing-Deviation-Value-LCR PRESENCE mandatory }|
{ ID id-HS-SICH-Reception-Quality-Measurement-Value CRITICALITY reject TYPE HS-SICH-Reception-Quality-Measurement-Value PRESENCE mandatory }|
}

```

```

{ ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission CRITICALITY reject
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue PRESENCE mandatory }|
{ ID id-HS-DSCHRequiredPowerValue CRITICALITY reject TYPE HS-DSCHRequiredPowerValue PRESENCE mandatory }|
{ ID id-HS-DSCHProvidedBitRateValue CRITICALITY reject TYPE HS-DSCHProvidedBitRateValue PRESENCE mandatory }|
{ ID id-Transmitted-Carrier-Power-For-CellPortion CRITICALITY reject TYPE Transmitted-Carrier-Power-Value PRESENCE mandatory }|
{ ID id-Received-total-wide-band-power-For-CellPortion CRITICALITY reject TYPE Received-total-wide-band-power-Value PRESENCE mandatory }|
{ ID id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortion CRITICALITY reject TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue PRESENCE mandatory }|
}

ReportCharacteristicsType-ScaledMeasurementChangeTime ::= CHOICE {
    msec           MeasurementChangeTime-Scaledmsec,
    ...
}

MeasurementChangeTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementChangeTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

ReportCharacteristicsType-ScaledMeasurementHysteresisTime ::= CHOICE {
    msec           MeasurementHysteresisTime-Scaledmsec,
    ...
}

MeasurementHysteresisTime-Scaledmsec ::= INTEGER (1..6000,...)
-- MeasurementHysteresisTime-Scaledmsec = Time * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

ReportCharacteristicsType-ReportPeriodicity ::= CHOICE {
    msec           ReportPeriodicity-Scaledmsec,
    min            ReportPeriodicity-Scaledmin,
    ...
}

ReportPeriodicity-Scaledmsec ::= INTEGER (1..6000,...)
-- ReportPeriodicity-msec = ReportPeriodicity * 10
-- Unit ms, Range 10ms .. 60000ms(1min), Step 10ms

ReportPeriodicity-Scaledmin ::= INTEGER (1..60,...)
-- Unit min, Range 1min .. 60min(hour), Step 1min

ReportPeriodicity-Scaledhour ::= INTEGER (1..24,...)
-- Unit hour, Range 1hour .. 24hours(day), Step 1hour

ResourceOperationalState ::= ENUMERATED {
    enabled,
    disabled
}

RL-ID ::= INTEGER (0..31)

RL-Set-ID      ::= INTEGER (0..31)

```

```
Round-Trip-Time-IncrDecrThres ::= INTEGER(0..32766)
```

```
RNC-ID ::= INTEGER (0..4095)
```

```
Round-Trip-Time-Value ::= INTEGER(0..32767)
-- According to mapping in [22]
```

```
RSCP-Value ::= INTEGER (0..127)
-- According to mapping in [23]
```

```
RSCP-Value-IncrDecrThres ::= INTEGER (0..126)
```

```
Received-total-wide-band-power-For-CellPortion-Value ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Received-total-wide-band-power-For-CellPortion-Value-Item
```

```
Received-total-wide-band-power-For-CellPortion-Value-Item ::= SEQUENCE{
    cellPortionID           CellPortionID,
    received-total-wide-band-power-value   Received-total-wide-band-power-Value,
    ie-Extensions          ProtocolExtensionContainer { { Received-total-wide-band-power-For-CellPortion-Value-Item-ExtIEs } }
    OPTIONAL,
    ...
}
```

```
Received-total-wide-band-power-For-CellPortion-Value-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
Received-total-wide-band-power-Value ::= INTEGER(0..621)
-- According to mapping in [22]/[23]
```

```
Received-total-wide-band-power-Value-IncrDecrThres ::= INTEGER (0..620)
```

```
RequestedDataValueInformation ::= CHOICE {
    informationAvailable      InformationAvailable,
    informationnotAvailable   InformationnotAvailable
}
```

```
InformationAvailable ::= SEQUENCE {
    requesteddataValue      RequestedDataValue,
    ie-Extensions          ProtocolExtensionContainer { { InformationAvailableItem-ExtIEs } }
                                OPTIONAL,
    ...
}
```

```
InformationAvailableItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```

```
InformationnotAvailable ::= NULL
```

```
RequestedDataValue ::= SEQUENCE {
    dgps-corrections      DGPSCorrections  OPTIONAL,
    gps-navandrecovery    GPS-NavigationModel-and-TimeRecovery  OPTIONAL,
    gps-ionos-model       GPS-Ionospheric-Model  OPTIONAL,
    gps-utc-model         GPS-UTC-Model    OPTIONAL,
    gps-almanac           GPS-Almanac        OPTIONAL,
    gps-rt-integrity      GPS-RealTime-Integrity  OPTIONAL,
    gprsrxpos             GPS-RX-POS        OPTIONAL,
    ...
}

Rx-Timing-Deviation-Value ::= INTEGER (0..8191)
-- According to mapping in [23]

Rx-Timing-Deviation-Value-LCR ::= INTEGER (0..511)
-- According to mapping in [23]

/* partly omitted */

-- =====
-- T
-- =====

T1 ::= ENUMERATED {v10,v20,v30,v40,v50,v60,v70,v80,v90,v100,v120,v140,v160,v200,v300,v400,...}

T-Cell ::= ENUMERATED {
    v0,
    v1,
    v2,
    v3,
    v4,
    v5,
    v6,
    v7,
    v8,
    v9
}

T-RLFAILURE ::= INTEGER (0..255)
-- Unit seconds, Range 0s .. 25.5s, Step 0.1s

TDD-AckNack-Power-Offset ::= INTEGER (-7..8,...)
-- Unit dB, Range -7dB .. +8dB, Step 1dB

TDD-ChannelisationCode ::= ENUMERATED {
    chCode1div1,
    chCode2div1,
    chCode2div2,
    chCode4div1,
    chCode4div2,
    chCode4div3,
    chCode4div4,
```

```
chCode8div1,
chCode8div2,
chCode8div3,
chCode8div4,
chCode8div5,
chCode8div6,
chCode8div7,
chCode8div8,
chCode16div1,
chCode16div2,
chCode16div3,
chCode16div4,
chCode16div5,
chCode16div6,
chCode16div7,
chCode16div8,
chCode16div9,
chCode16div10,
chCode16div11,
chCode16div12,
chCode16div13,
chCode16div14,
chCode16div15,
chCode16div16,
...
}

TDD-ChannelisationCodeLCR ::= SEQUENCE {
    tDD-ChannelisationCode          TDD-ChannelisationCode,
    modulation                      Modulation, -- Modulation options for 1.28Mcps TDD in contrast to 3.84Mcps TDD
    iE-Extensions                   ProtocolExtensionContainer { { TDD-ChannelisationCodeLCR-ExtIEs} }           OPTIONAL,
    ...
}

TDD-ChannelisationCodeLCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-DL-Code-InformationItem

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

TDD-DL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-DL-Code-LCR-InformationItem
```

```

TDD-DL-Code-LCR-InformationItem ::= SEQUENCE {
    dPCH-ID                               DPCH-ID,
    tdd-ChannelisationCodeLCR             TDD-ChannelisationCodeLCR,
    tdd-DL-DPCH-TimeSlotFormat-LCR       TDD-DL-DPCH-TimeSlotFormat-LCR,
    iE-Extensions                          ProtocolExtensionContainer { { TDD-DL-Code-LCR-InformationItem-ExtIEs } }      OPTIONAL,
    ...
}

TDD-DL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TDD-DL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
    qPSK                                QPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    eightPSK                             EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR,
    ...
}

QPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)

EightPSK-DL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)

TDD-DPCHOffset ::= CHOICE {
    initialOffset           INTEGER (0..255),
    noinitialOffset        INTEGER (0..63)
}
TDD-PhysicalChannelOffset ::= INTEGER (0..63)

TDD-TPC-DownlinkStepSize ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
    ...
}

TDD-TPC-UplinkStepSize-LCR ::= ENUMERATED {
    step-size1,
    step-size2,
    step-size3,
    ...
}

TransportFormatCombination-Beta ::= CHOICE {
    signalledGainFactors      SEQUENCE {
        gainFactor            CHOICE {
            fdd                  SEQUENCE {
                betaC               BetaCD,
                betaD               BetaCD,
                iE-Extensions        ProtocolExtensionContainer { { GainFactorFDD-ExtIEs } }      OPTIONAL,
                ...
            },
            tdd                  BetaCD,
        }
    }
}

```

```

    ...
},
refTFCNumber          OPTIONAL,
iE-Extensions        ProtocolExtensionContainer { { SignalledGainFactors-ExtIEs } }
                                OPTIONAL,
...
},
computedGainFactors   RefTFCNumber,
...
}

GainFactorFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

SignalledGainFactors-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TDD-UL-Code-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHs)) OF TDD-UL-Code-InformationItem

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

TDD-UL-Code-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TDD-UL-Code-LCR-Information ::= SEQUENCE (SIZE (1..maxNrOfDPCHLCRs)) OF TDD-UL-Code-LCR-InformationItem

TDD-UL-Code-LCR-InformationItem ::= SEQUENCE {
  dPCH-ID,                               DPCH-ID,
  tdd-ChannelisationCodeLCR,              TDD-ChannelisationCodeLCR,
  tdd-UL-DPCH-TimeSlotFormat-LCR,        TDD-UL-DPCH-TimeSlotFormat-LCR,
  iE-Extensions,                         ProtocolExtensionContainer { { TDD-UL-Code-LCR-InformationItem-ExtIEs } }      OPTIONAL,
...
}

TDD-UL-Code-LCR-InformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TDD-UL-DPCH-TimeSlotFormat-LCR ::= CHOICE {
  qPSK,                                 QPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
  eightPSK,                             EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR,
...
}

QPSK-UL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..69,...)

```

```
EightPSK-UL-DPCH-TimeSlotFormatTDD-LCR ::= INTEGER(0..24,...)

TFCI-Coding ::= ENUMERATED {
    v4,
    v8,
    v16,
    v32,
    ...
}

TFCI-Presence ::= ENUMERATED {
    present,
    not-present
}

TFCI-SignallingMode ::= SEQUENCE {
    tFCI-SignallingOption      TFCI-SignallingMode-TFCI-SignallingOption,
    splitType                  TFCI-SignallingMode-SplitType          OPTIONAL,
    -- This IE shall be present if the TFCI signalling option is split --
    lengthOfTFCI2             TFCI-SignallingMode-LengthOfTFCI2        OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { { TFCI-SignallingMode-ExtIEs} }           OPTIONAL,
    ...
}

TFCI-SignallingMode-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI-SignallingMode-LengthOfTFCI2 ::= INTEGER (1..10)

TFCI-SignallingMode-SplitType ::= ENUMERATED {
    hard,
    logical
}

TFCI-SignallingMode-TFCI-SignallingOption ::= ENUMERATED {
    normal,
    split
}

TFCI2-BearerInformationResponse ::= SEQUENCE {
    bindingID,
    transportLayerAddress,
    iE-Extensions
    ProtocolExtensionContainer { { TFCI2-BearerInformationResponse-ExtIEs} }   OPTIONAL,
    ...
}

TFCI2-BearerInformationResponse-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TFCI2BearerRequestIndicator ::= ENUMERATED {newBearerRequested}
```

```
TGD ::= INTEGER (0|15..269)
-- 0 = Undefined, only one transmission gap in the transmission gap pattern sequence

TGPRC ::= INTEGER (0..511)
-- 0 = infinity

TGPSID ::= INTEGER (1.. maxTGPS)

TGSN ::= INTEGER (0..14)

TimeSlot ::= INTEGER (0..14)

TimeSlotDirection ::= ENUMERATED {
    ul,
    dl,
    ...
}

TimeSlotLCR ::= INTEGER (0..6)

TimeSlotStatus ::= ENUMERATED {
    active,
    not-active,
    ...
}

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

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

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

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

Transmission-Gap-Pattern-Sequence-Information ::= SEQUENCE (SIZE (1..maxTGPS)) OF
SEQUENCE {
    tGPSID      TGPSID,
```

```

tGSN          TGSN,
tGL1          GapLength,
tGL2          GapLength    OPTIONAL,
tGD           TGD,
tGPL1         GapDuration,
tGPL2         GapDuration OPTIONAL,
uL-DL-mode   UL-DL-mode,
downlink-Compressed-Mode-Method   Downlink-Compressed-Mode-Method    OPTIONAL,
-- This IE shall be present if the UL/DL mode IE is set to "DL only" or "UL/DL"
uplink-Compressed-Mode-Method   Uplink-Compressed-Mode-Method    OPTIONAL,
-- This IE shall be present if the UL/DL mode IE is set to "UL only" or "UL/DL"
dL-FrameType  DL-FrameType,
delta-SIR1    DeltaSIR,
delta-SIR-after1  DeltaSIR,
delta-SIR2    DeltaSIR    OPTIONAL,
delta-SIR-after2  DeltaSIR    OPTIONAL,
iE-Extensions ProtocolExtensionContainer { {Transmission-Gap-Pattern-Sequence-Information-ExtIEs} } OPTIONAL,
...
}

Transmission-Gap-Pattern-Sequence-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

TransmissionGapPatternSequenceCodeInformation ::= ENUMERATED{
  code-change,
  nocode-change
}

TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue-Item

TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue-Item ::= SEQUENCE{
  cellPortionID      CellPortionID,
  transmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue  TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-
SCCHTransmissionValue,
  iE-Extensions      ProtocolExtensionContainer { { TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-
SCCHTransmissionValue -Item-ExtIEs} }    OPTIONAL,
...
}

TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
...
}

```

TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue ::= INTEGER(0..100)
-- According to mapping in [22] and [23]

Transmitted-Carrier-Power-For-CellPortion-Value ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF Transmitted-Carrier-Power-For-CellPortion-Value-Item

```

Transmitted-Carrier-Power-For-CellPortion-Value-Item ::= SEQUENCE{
    cellPortionID                  CellPortionID,
    transmitted-Carrier-Power-Value Transmitted-Carrier-Power-Value,
    iE-Extensions                 ProtocolExtensionContainer { { Transmitted-Carrier-Power-For-CellPortion-Value-Item-ExtIEs } }
    OPTIONAL,
    ...
}

```

```
Transmitted-Carrier-Power-For-CellPortion-Value-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {  
    ...  
}
```

Transmitted-Carrier-Power-Value ::= INTEGER(0..100)
-- According to mapping in [22]/[23]

Transmitted-Code-Power-Value ::= INTEGER (0..127)
-- According to mapping in [22]/[23]

Transmitted-Code-Power-Value-IncrDecrThres ::= INTEGER (0..112,...)

```
TransmissionDiversityApplied ::= BOOLEAN  
-- true: applied, false: not applied
```

```
TransmitDiversityIndicator ::= ENUMERATED {  
    active,  
    inactive  
}
```

```

TFCS ::= SEQUENCE {
  tFCSSvalues           CHOICE {
    no-Split-in-TFCI      TFCS-TFCSList,
    split-in-TFCI         SEQUENCE {
      transportFormatCombination-DCH   TFCS-DCHList,
      signallingMethod          CHOICE {
        tFCI-Range            TFCS-MapingOnDSCHList,
        explicit              TFCS-DSCHList,
        ...
      },
      iE-Extensions          ProtocolExtensionContainer { { Split-in-TFCI-ExtIEs } }
    OPTIONAL,
    ...
  },
  iE-Extensions          ProtocolExtensionContainer { { TFCS-ExtIEs} }
}

```

```

Split-in-TFCI-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCS-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCS-TFCSList ::= SEQUENCE (SIZE (1..maxNrOfTFCs)) OF
SEQUENCE {
  cTFC          TFCS-CTFC,
  tFC-Beta      TransportFormatCombination-Beta      OPTIONAL,
  -- The IE shall be present if the TFCS concerns a UL DPCH or PRACH channel [FDD - or PCPCH channel].
  iE-Extensions ProtocolExtensionContainer { { TFCS-TFCSList-ExtIEs} }      OPTIONAL,
  ...
}

TFCS-TFCSList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCS-CTFC ::= CHOICE {
  ctfc2bit           INTEGER (0..3),
  ctfc4bit           INTEGER (0..15),
  ctfc6bit           INTEGER (0..63),
  ctfc8bit           INTEGER (0..255),
  ctfc12bit          INTEGER (0..4095),
  ctfc16bit          INTEGER (0..65535),
  ctfcmaxbit         INTEGER (0..maxCTFC)
}

TFCS-DCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI1Combs)) OF
SEQUENCE {
  cTFC          TFCS-CTFC,
  iE-Extensions ProtocolExtensionContainer { { TFCS-DCHList-ExtIEs} }      OPTIONAL,
  ...
}

TFCS-DCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TFCS-MapingOnDSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCIGroups)) OF
SEQUENCE {
  maxTFCI-field2-Value      TFCS-MaxTFCI-field2-Value,
  cTFC-DSCH                TFCS-CTFC,
  iE-Extensions             ProtocolExtensionContainer { { TFCS-MapingOnDSCHList-ExtIEs} }      OPTIONAL,
  ...
}

TFCS-MapingOnDSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```
}

TFCS-MaxTFCI-field2-Value ::= INTEGER (1..maxNrOfTFCI2Combs-1)

TFCS-DSCHList ::= SEQUENCE (SIZE (1..maxNrOfTFCI2Combs)) OF
  SEQUENCE {
    CTFC-DSCH,           TFCS-CTFC,
    iE-Extensions        ProtocolExtensionContainer { { TFCS-DSCHList-ExtIEs} }      OPTIONAL,
    ...
  }

TFCS-DSCHList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportBearerRequestIndicator ::= ENUMERATED {
  bearerRequested,
  bearerNotRequested,
  ...
}

TransportFormatSet ::= SEQUENCE {
  dynamicParts          TransportFormatSet-DynamicPartList,
  semi-staticPart        TransportFormatSet-Semi-staticPart,
  iE-Extensions         ProtocolExtensionContainer { { TransportFormatSet-ExtIEs} }      OPTIONAL,
  ...
}

TransportFormatSet-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TransportFormatSet-DynamicPartList ::= SEQUENCE (SIZE (1..maxNrOfTFs)) OF
  SEQUENCE {
    nrOfTransportBlocks   TransportFormatSet-NrOfTransportBlocks,
    transportBlockSize     TransportFormatSet-TransportBlockSize      OPTIONAL,
    -- This IE shall be present if the Number of Transport Blocks IE is set to a value greater than 0
    mode                  TransportFormatSet-ModeDP,
    iE-Extensions         ProtocolExtensionContainer { { TransportFormatSet-DynamicPartList-ExtIEs} }      OPTIONAL,
    ...
  }

TransportFormatSet-DynamicPartList-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

TDD-TransportFormatSet-ModeDP ::= SEQUENCE {
  transmissionTimeIntervalInformation TransmissionTimeIntervalInformation      OPTIONAL,
  -- This IE shall be present if the Transmission Time Interval IE in the Semi-static Transport Format Information IE is set to "dynamic"
  iE-Extensions                 ProtocolExtensionContainer { { TDD-TransportFormatSet-ModeDP-ExtIEs} } OPTIONAL,
  ...
}
```

```
TDD-TransportFormatSet-ModeDP-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransmissionTimeIntervalInformation ::= SEQUENCE (SIZE (1..maxTTI-count)) OF
    SEQUENCE {
        transmissionTimeInterval          TransportFormatSet-TransmissionTimeIntervalDynamic,
        iE-Extensions                   ProtocolExtensionContainer { { TransmissionTimeIntervalInformation-ExtIEs } }      OPTIONAL,
        ...
    }

TransmissionTimeIntervalInformation-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-Semi-staticPart ::= SEQUENCE {
    transmissionTimeInterval          TransportFormatSet-TransmissionTimeIntervalSemiStatic,
    channelCoding                    TransportFormatSet-ChannelCodingType,
    codingRate                       TransportFormatSet-CodingRate           OPTIONAL,
    -- This IE shall be present if the Type of channel coding IE is set to 'convolutional' or 'turbo'
    rateMatchingAttribute           TransportFormatSet-RateMatchingAttribute,
    cRC-Size                         TransportFormatSet-CRC-Size,
    mode                            TransportFormatSet-ModeSSP,
    iE-Extensions                   ProtocolExtensionContainer { { TransportFormatSet-Semi-staticPart-ExtIEs } }      OPTIONAL,
    ...
}

TransportFormatSet-Semi-staticPart-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TransportFormatSet-ChannelCodingType ::= ENUMERATED {
    no-codingTDD,
    convolutional-coding,
    turbo-coding,
    ...
}

TransportFormatSet-CodingRate ::= ENUMERATED {
    half,
    third,
    ...
}

TransportFormatSet-CRC-Size ::= ENUMERATED {
    v0,
    v8,
    v12,
    v16,
    v24,
    ...
}
```

```
TransportFormatSet-ModeDP ::= CHOICE {
    tdd                  TDD-TransportFormatSet-ModeDP,
    notApplicable        NULL,
    ...
}

TransportFormatSet-ModeSSP ::= CHOICE {
    tdd                  TransportFormatSet-SecondInterleavingMode,
    notApplicable        NULL,
    ...
}

TransportFormatSet-NrOfTransportBlocks ::= INTEGER (0..512)

TransportFormatSet-RateMatchingAttribute ::= INTEGER (1..maxRateMatching)

TransportFormatSet-SecondInterleavingMode ::= ENUMERATED {
    frame-related,
    timeSlot-related,
    ...
}

TransportFormatSet-TransmissionTimeIntervalDynamic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    ...
}

TransportFormatSet-TransmissionTimeIntervalSemiStatic ::= ENUMERATED {
    msec-10,
    msec-20,
    msec-40,
    msec-80,
    dynamic,
    ...,
    msec-5
}

TransportFormatSet-TransportBlockSize ::= INTEGER (0..5000)

TransportLayerAddress ::= BIT STRING (SIZE (1..160, ...))

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

TUTRANGPS ::= SEQUENCE {
    ms-part    INTEGER (0..16383),
    ls-part    INTEGER (0..4294967295)
}
```

```

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

TUTRANGPSDriftRate ::= INTEGER (-50..50)
-- Unit chip/s, Step 1/256 chip/s, Range -50/256..+50/256 chip/s

TUTRANGPSDriftRateQuality ::= INTEGER (0..50)
-- Unit chip/s, Step 1/256 chip/s, Range 0..50/256 chip/s

TUTRANGPSAccuracyClass ::= ENUMERATED {
    accuracy-class-A,
    accuracy-class-B,
    accuracy-class-C,
    ...
}

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

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

TUTRANGPSMeasurementValueInformation ::= SEQUENCE {
    tUTRANGPS,                      TUTRANGPS,
    tUTRANGPSQuality,                TUTRANGPSQuality           OPTIONAL,
    tUTRANGPSDriftRate,              TUTRANGPSDriftRate,          OPTIONAL,
    tUTRANGPSDriftRateQuality,       TUTRANGPSDriftRateQuality   OPTIONAL,
    iE-Extensions,                  ProtocolExtensionContainer { {TUTRANGPSMeasurementValueInformationItem-ExtIEs} }   OPTIONAL,
    ...
}

TUTRANGPSMeasurementValueInformationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

TypeOfError ::= ENUMERATED {
    not-understood,
    missing,
    ...
}

/* partly omitted */

```

9.3.6 Constant Definitions

```
-- ****
-- Constant definitions
--
-- ****
NBAP-Constants {
itu-t (0) identified-organization (4) etsi (0) mobileDomain (0)
umts-Access (20) modules (3) nbap (2) version1 (1) nbap-Constants (4)}

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

IMPORTS
    ProcedureCode,
    ProtocolIE-ID
FROM NBAP-CommonDataTypes;

-- ****
-- Elementary Procedures
--
-- ****
id-audit                               ProcedureCode ::= 0
id-auditRequired                        ProcedureCode ::= 1
id-blockResource                         ProcedureCode ::= 2
id-cellDeletion                          ProcedureCode ::= 3
id-cellReconfiguration                   ProcedureCode ::= 4
id-cellSetup                             ProcedureCode ::= 5
id-cellSynchronisationInitiation        ProcedureCode ::= 45
id-cellSynchronisationReconfiguration   ProcedureCode ::= 46
id-cellSynchronisationReporting         ProcedureCode ::= 47
id-cellSynchronisationTermination       ProcedureCode ::= 48
id-cellSynchronisationFailure          ProcedureCode ::= 49
id-commonMeasurementFailure            ProcedureCode ::= 6
id-commonMeasurementInitiation         ProcedureCode ::= 7
id-commonMeasurementReport             ProcedureCode ::= 8
id-commonMeasurementTermination        ProcedureCode ::= 9
id-commonTransportChannelDelete        ProcedureCode ::= 10
id-commonTransportChannelReconfigure   ProcedureCode ::= 11
id-commonTransportChannelSetup          ProcedureCode ::= 12
id-compressedModeCommand               ProcedureCode ::= 14
id-dedicatedMeasurementFailure        ProcedureCode ::= 16
id-dedicatedMeasurementInitiation     ProcedureCode ::= 17
id-dedicatedMeasurementReport          ProcedureCode ::= 18
id-dedicatedMeasurementTermination    ProcedureCode ::= 19
```

```

id-downlinkPowerControl           ProcedureCode ::= 20
id-downlinkPowerTimeslotControl   ProcedureCode ::= 38
id-errorIndicationForCommon      ProcedureCode ::= 35
id-errorIndicationForDedicated    ProcedureCode ::= 21
id-informationExchangeFailure     ProcedureCode ::= 40
id-informationExchangeInitiation  ProcedureCode ::= 41
id-informationExchangeTermination ProcedureCode ::= 42
id-informationReporting          ProcedureCode ::= 43
id-BearerRearrangement          ProcedureCode ::= 50
id-physicalSharedChannelReconfiguration ProcedureCode ::= 37
id-privateMessageForCommon       ProcedureCode ::= 36
id-privateMessageForDedicated     ProcedureCode ::= 22
id-radioLinkAddition            ProcedureCode ::= 23
id-radioLinkDeletion             ProcedureCode ::= 24
id-radioLinkFailure              ProcedureCode ::= 25
id-radioLinkPreemption           ProcedureCode ::= 39
id-radioLinkRestoration          ProcedureCode ::= 26
id-radioLinkSetup                ProcedureCode ::= 27
id-reset                         ProcedureCode ::= 13
id-resourceStatusIndication      ProcedureCode ::= 28
id-cellSynchronisationAdjustment ProcedureCode ::= 44
id-synchronisedRadioLinkReconfigurationCancellation ProcedureCode ::= 29
id-synchronisedRadioLinkReconfigurationCommit    ProcedureCode ::= 30
id-synchronisedRadioLinkReconfigurationPreparation ProcedureCode ::= 31
id-systemInformationUpdate       ProcedureCode ::= 32
id-unblockResource               ProcedureCode ::= 33
id-unSynchronisedRadioLinkReconfiguration ProcedureCode ::= 34
id-radioLinkActivation           ProcedureCode ::= 51
id-radioLinkParameterUpdate      ProcedureCode ::= 52

```

```

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

```

```

maxNrOfCodes                      INTEGER ::= 10
maxNrOfDLTSS                       INTEGER ::= 15
maxNrOfDLTSLCRs                     INTEGER ::= 6
maxNrOfErrors                        INTEGER ::= 256
maxNrOfTFFs                          INTEGER ::= 32
maxNrOfTFCs                          INTEGER ::= 1024
maxNrOfRLs                           INTEGER ::= 16
maxNrOfRLs-1                         INTEGER ::= 15 -- maxNrOfRLs - 1
maxNrOfRLs-2                         INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfRLSets                        INTEGER ::= maxNrOfRLs
maxNrOfDPCHs                         INTEGER ::= 240
maxNrOfDPCHLCRs                      INTEGER ::= 240
maxNrOfSCCPCHs                       INTEGER ::= 8
maxNrOfCPCHs                          INTEGER ::= 16
maxNrOfPCPCHs                        INTEGER ::= 64
maxNrOfFDCHs                         INTEGER ::= 128
maxNrOfDSCHs                          INTEGER ::= 32

```

```

maxNrOfFACHs           INTEGER ::= 8
maxNrOfCCTrCHs         INTEGER ::= 16
maxNrOfPDSCHs          INTEGER ::= 256
maxNrOfHSPDSCHs        INTEGER ::= 16
maxNrOfPUSCHs          INTEGER ::= 256
maxNrOfPDSCHSets       INTEGER ::= 256
maxNrOfPRACHLCRs       INTEGER ::= 8
maxNrOfPUSCHSets       INTEGER ::= 256
maxNrOfSCCPCHLCRs      INTEGER ::= 8
maxNrOfULTSS           INTEGER ::= 15
maxNrOfULTSLCRs        INTEGER ::= 6
maxNrOfUSCHs            INTEGER ::= 32
maxAPSigNum             INTEGER ::= 16
maxNrOfSlotFormatsPRACH INTEGER ::= 8
maxCellInNodeB          INTEGER ::= 256
maxCCPInNodeB           INTEGER ::= 256
maxCPCHCell              INTEGER ::= maxNrOfCPCHs
maxCTFC                  INTEGER ::= 16777215
maxLocalCellInNodeB     INTEGER ::= maxCellInNodeB
maxNoofLen               INTEGER ::= 7
maxFPACHCell             INTEGER ::= 8
maxRACHCell              INTEGER ::= maxPRACHCell
maxPRACHCell             INTEGER ::= 16
maxPCPCHCell             INTEGER ::= 64
maxSCCPCHCell            INTEGER ::= 32
maxSCPICHCell            INTEGER ::= 32
maxTTI-count              INTEGER ::= 4
maxIBSEG                 INTEGER ::= 16
maxIB                    INTEGER ::= 64
maxFACHCell               INTEGER ::= 256 -- maxNrOfFACHs * maxSCCPCHCell
maxRateMatching           INTEGER ::= 256
maxCodeNrComp-1           INTEGER ::= 256
maxHS-PDSCHCodeNrComp-1  INTEGER ::= 15
maxHS-SCCHCodeNrComp-1   INTEGER ::= 127
maxNrOfCellSyncBursts    INTEGER ::= 10
maxNrOfCodeGroups         INTEGER ::= 256
maxNrOfReceptsPerSyncFrame INTEGER ::= 16
maxNrOfMeasNCell          INTEGER ::= 96
maxNrOfMeasNCell-1        INTEGER ::= 95 -- maxNrOfMeasNCell - 1
maxNrOfTFCIGroups         INTEGER ::= 256
maxNrOfTFCI1Combs         INTEGER ::= 512
maxNrOfTFCI2Combs         INTEGER ::= 1024
maxNrOfTFCI2Combs-1       INTEGER ::= 1023
maxNrOfSF                 INTEGER ::= 8
maxTGPS                  INTEGER ::= 6
maxCommunicationContext   INTEGER ::= 1048575
maxNrOfLevels              INTEGER ::= 256
maxNoSat                  INTEGER ::= 16
maxNoGPSItems              INTEGER ::= 8
maxNrOfHSSCCHs             INTEGER ::= 32
maxNrOfHSSICHs              INTEGER ::= 4
maxNrOfSyncFramesLCR       INTEGER ::= 512
maxNrOfReceptionsperSyncFrameLCR INTEGER ::= 8

```

```

maxNrOfSyncDLCodesLCR           INTEGER ::= 32
maxNrOfHSSCCHCodes             INTEGER ::= 4
maxNrOfMACdFlows                INTEGER ::= 8
maxNrOfMACdFlows-1              INTEGER ::= 7    -- maxNrOfMACdFlows - 1
maxNrOfMACdPDUIndexes            INTEGER ::= 8
maxNrOfMACdPDUIndexes-1          INTEGER ::= 7    -- maxNoOfMACdPDUIndexes - 1
maxNrOfPriorityQueues            INTEGER ::= 8
maxNrOfPriorityQueues-1          INTEGER ::= 7    -- maxNoOfPriorityQueues - 1
maxNrOfHARQProcesses             INTEGER ::= 8
maxNrOfContextsOnUeList          INTEGER ::= 16
maxNrOfCellPortionsPerCell       INTEGER ::= 64
maxNrOfCellPortionsPerCell-1     INTEGER ::= 63

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

id-AICH-Information               ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 1
id-BCH-Information                 ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 8
id-BCCH-ModificationTime           ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator       ProtocolIE-ID ::= 10
id-Cause                           ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp    ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp    ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp   ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp   ProtocolIE-ID ::= 19
id-CellParameterID                 ProtocolIE-ID ::= 23
id-CFN                             ProtocolIE-ID ::= 24
id-C-ID                            ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy      ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst  ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp   ProtocolIE-ID ::= 33
id-CommonMeasurementType           ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID         ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD ProtocolIE-ID ::= 37
id-CommunicationControlPortID      ProtocolIE-ID ::= 40
id-ConfigurationGenerationID       ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID    ProtocolIE-ID ::= 44
id-CriticalityDiagnostics          ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD                 ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD    ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD                 ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD  ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD  ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD  ProtocolIE-ID ::= 54

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id-DCH-DeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 55
id-DCH-FDD-Information	ProtocolIE-ID ::= 56
id-DCH-TDD-Information	ProtocolIE-ID ::= 57
id-DCH-InformationResponse	ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 65
id-DCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 135
id-DedicatedMeasurementObject-Type-DM-Rprt	ProtocolIE-ID ::= 67
id-DedicatedMeasurementObject-Type-DM-Rqst	ProtocolIE-ID ::= 68
id-DedicatedMeasurementObject-Type-DM-Rsp	ProtocolIE-ID ::= 69
id-DedicatedMeasurementType	ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 21
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-DSCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 136
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123
id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128

id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190
id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205

id-RL-informationItem-RL-DeletionRgst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 286
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfRgstFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-SetupRgstFDD	ProtocolIE-ID ::= 211
id-RL-InformationList-RL-AdditionRgstFDD	ProtocolIE-ID ::= 212
id-RL-informationList-RL-DeletionRgst	ProtocolIE-ID ::= 213
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 237
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-ReconfRgstFDD	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-SetupRgstFDD	ProtocolIE-ID ::= 216
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 217
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 220
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 221
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 224
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 225
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 226
id-RL-Information-RL-AdditionRgstTDD	ProtocolIE-ID ::= 227
id-RL-Information-RL-ReconfRgstTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-SetupRgstTDD	ProtocolIE-ID ::= 230
id-RL-ReconfigurationFailureItem-RL-ReconfFailure	ProtocolIE-ID ::= 236
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 242
id-S-CCPCH-Information	ProtocolIE-ID ::= 247
id-S-CPICH-Information	ProtocolIE-ID ::= 249
id-SCH-Information	ProtocolIE-ID ::= 251
id-S-SCH-Information	ProtocolIE-ID ::= 253
id-Secondary-CCPCHListIE-CTCH-ReconfRgstTDD	ProtocolIE-ID ::= 257
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRgstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-Parameters-CTCH-ReconfRgstTDD	ProtocolIE-ID ::= 259
id-SecondaryCPICH-InformationItem-Cell-ReconfRgstFDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-SetupRgstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRgstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRgstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRgstFDD	ProtocolIE-ID ::= 264
id-SecondarySCH-Information-Cell-SetupRgstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
id-SignallingBearerRequestIndicator	ProtocolIE-ID ::= 138
id-ShutdownTimer	ProtocolIE-ID ::= 269
id-Start-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 114
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 270
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 271
id-SyncCase	ProtocolIE-ID ::= 274

id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH	ProtocolIE-ID ::= 275
id-T-Cell	ProtocolIE-ID ::= 276
id-TargetCommunicationControlPortID	ProtocolIE-ID ::= 139
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 277
id-TimeSlotConfigurationList-Cell-SetupRqstTDD	ProtocolIE-ID ::= 278
id-TransmissionDiversityApplied	ProtocolIE-ID ::= 279
id-TypeOfError	ProtocolIE-ID ::= 508
id-UARFCNforNt	ProtocolIE-ID ::= 280
id-UARFCNforNd	ProtocolIE-ID ::= 281
id-UARFCNforNu	ProtocolIE-ID ::= 282
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 284
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 285
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 288
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 289
id-UL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 291
id-UL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 293
id-UL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 294
id-UL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 295
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD	ProtocolIE-ID ::= 296
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD	ProtocolIE-ID ::= 297
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD	ProtocolIE-ID ::= 300
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD	ProtocolIE-ID ::= 301
id-USCH-Information-Add	ProtocolIE-ID ::= 302
id-USCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 304
id-USCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 306
id-USCH-InformationResponse	ProtocolIE-ID ::= 309
id-USCH-Information	ProtocolIE-ID ::= 310
id-USCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 141
id-Active-Pattern-Sequence-Information	ProtocolIE-ID ::= 315
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 316
id-AdjustmentRatio	ProtocolIE-ID ::= 317
id-AP-AICH-Information	ProtocolIE-ID ::= 320
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 322
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 323
id-CauseLevel-PSCH-ReconfFailure	ProtocolIE-ID ::= 324
id-CauseLevel-RL-AdditionFailureFDD	ProtocolIE-ID ::= 325
id-CauseLevel-RL-AdditionFailureTDD	ProtocolIE-ID ::= 326
id-CauseLevel-RL-ReconfFailure	ProtocolIE-ID ::= 327
id-CauseLevel-RL-SetupFailureFDD	ProtocolIE-ID ::= 328
id-CauseLevel-RL-SetupFailureTDD	ProtocolIE-ID ::= 329
id-CDCA-ICH-Information	ProtocolIE-ID ::= 330
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 332
id-Closed-Loop-Timing-Adjustment-Mode	ProtocolIE-ID ::= 333
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 334
id-Compressed-Mode-Deactivation-Flag	ProtocolIE-ID ::= 335
id-CPCH-Information	ProtocolIE-ID ::= 336
id-CPCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 342
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 343
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 346
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 347
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 349
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 350

id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 351
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 352
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 353
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 355
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 356
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 357
id-DL-TPC-Pattern01Count	ProtocolIE-ID ::= 358
id-DPC-Mode	ProtocolIE-ID ::= 450
id-DPCHConstant	ProtocolIE-ID ::= 359
id-DSCH-FDD-Common-Information	ProtocolIE-ID ::= 94
id-EnhancedDSCHPC	ProtocolIE-ID ::= 110
id-EnhancedDSCHPCIIndicator	ProtocolIE-ID ::= 111
id-FACH-ParametersList-CTCH-SetupRsp	ProtocolIE-ID ::= 362
id-Limited-power-increase-information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 369
id-PCH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 374
id-PCH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 375
id-PCPCH-Information	ProtocolIE-ID ::= 376
id-PICH-ParametersItem-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 380
id-PRACHConstant	ProtocolIE-ID ::= 381
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 383
id-PUSCHConstant	ProtocolIE-ID ::= 384
id-RACH-Parameters-CTCH-SetupRsp	ProtocolIE-ID ::= 385
id-SSDT-CellIDforEDSCHPC	ProtocolIE-ID ::= 443
id-Synchronisation-Configuration-Cell-ReconfRqst	ProtocolIE-ID ::= 393
id-Synchronisation-Configuration-Cell-SetupRqst	ProtocolIE-ID ::= 394
id-Transmission-Gap-Pattern-Sequence-Information	ProtocolIE-ID ::= 395
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 396
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 397
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 398
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 399
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD	ProtocolIE-ID ::= 400
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 401
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 402
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 403
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 405
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 406
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 407
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 408
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD	ProtocolIE-ID ::= 409
id-CommunicationContextInfoItem-Reset	ProtocolIE-ID ::= 412
id-CommunicationControlPortInfoItem-Reset	ProtocolIE-ID ::= 414
id-ResetIndicator	ProtocolIE-ID ::= 416
id-TFCI2-Bearer-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 417
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD	ProtocolIE-ID ::= 418
id-TFCI2-BearerInformationResponse	ProtocolIE-ID ::= 419
id-TFCI2BearerRequestIndicator	ProtocolIE-ID ::= 142
id-TimingAdvanceApplied	ProtocolIE-ID ::= 287
id-CFNReportingIndicator	ProtocolIE-ID ::= 6
id-SFNReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPSCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20

id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD	ProtocolIE-ID ::= 429
id-CSBTransmissionID	ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 433
id-NRepetitionsPerCyclePeriod	ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435
id-ReferenceSFOffset	ProtocolIE-ID ::= 436
id-InformationExchangeID	ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445
id-InformationType	ProtocolIE-ID ::= 446
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-DwPCH-LCR-Information	ProtocolIE-ID ::= 78
id-DwPCH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 90
id-DwPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 97
id-DwPCH-LCR-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 99
id-DwPCH-LCR-Information-ResourceStatusInd	ProtocolIE-ID ::= 101
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 154
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 174
id-FPACH-LCR-Information	ProtocolIE-ID ::= 290
id-FPACH-LCR-Information-AuditRsp	ProtocolIE-ID ::= 292
id-FPACH-LCR-InformationList-AuditRsp	ProtocolIE-ID ::= 22
id-FPACH-LCR-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 311
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 312
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 314
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 456
id-PCH-Power-LCR-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 457
id-PCH-Power-LCR-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 458

id-PICH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 459
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 461
id-RL-InformationResponse-LCR-RL-SetupRspTDD	ProtocolIE-ID ::= 463
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 465
id-TimeSlot	ProtocolIE-ID ::= 495
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 466
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 467
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD	ProtocolIE-ID ::= 468
id-TimeSlotLCR-CM-Rqst	ProtocolIE-ID ::= 469
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 470
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 472
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 473
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 474
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 475
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 477
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 479
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD	ProtocolIE-ID ::= 480
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD	ProtocolIE-ID ::= 481
id-UL-DPCH-LCR-InformationModify-AddList	ProtocolIE-ID ::= 483
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 485
id-UL-SIRTarget	ProtocolIE-ID ::= 510
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 486
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 487
id-PDSCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 26
id-PDSCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 27
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 488
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 489
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 490
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 491
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst	ProtocolIE-ID ::= 492
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 493
id-timeslotInfo-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 496
id-SyncReportType-CellSyncReprtTDD	ProtocolIE-ID ::= 497
id-Power-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 498
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 499
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 500
id-Power-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 501
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd	ProtocolIE-ID ::= 502
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd	ProtocolIE-ID ::= 503
id-Power-Local-Cell-Group-ID	ProtocolIE-ID ::= 504
id-PUSCH-Info-DM-Rqst	ProtocolIE-ID ::= 505
id-PUSCH-Info-DM-Rsp	ProtocolIE-ID ::= 506
id-PUSCH-Info-DM-Rprt	ProtocolIE-ID ::= 507
id-InitDL-Power	ProtocolIE-ID ::= 509
id-cellSyncBurstRepetitionPeriod	ProtocolIE-ID ::= 511
id-ReportCharacteristicsType-OnModification	ProtocolIE-ID ::= 512
id-SFN_SFMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFN_SFMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD	ProtocolIE-ID ::= 51
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 28

id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 29
id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 30
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 517
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 518
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD	ProtocolIE-ID ::= 519
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 41
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 42
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst	ProtocolIE-ID ::= 522
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst	ProtocolIE-ID ::= 523
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 524
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 525
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 526
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 527
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 528
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 529
id-bindingID	ProtocolIE-ID ::= 102
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= 103
id-transportlayeraddress	ProtocolIE-ID ::= 104
id-DelayedActivation	ProtocolIE-ID ::= 231
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 232
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 233
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 234
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 235
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 58
id-SYNCdlCodeId-TransInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 543
id-SYNCdlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 544
id-SYNCdlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 545
id-SYNCdlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 546
id-SYNCdlCodeIdMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 547
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD	ProtocolIE-ID ::= 548
id-SyncDLCodeIdThreInfoLCR	ProtocolIE-ID ::= 549
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 550
id-DwPCH-Power	ProtocolIE-ID ::= 551
id-AccumulatedClockupdate-CellSyncReprtTDD	ProtocolIE-ID ::= 552
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 521
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 530
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 531
id-HSDSCH-FDD-Information-to-Add	ProtocolIE-ID ::= 532
id-HSDSCH-FDD-Information-to-Delete	ProtocolIE-ID ::= 533
id-HSDSCH-Information-to-Modify	ProtocolIE-ID ::= 534
id-HSDSCH-RNTI	ProtocolIE-ID ::= 535
id-HSDSCH-TDD-Information	ProtocolIE-ID ::= 536
id-HSDSCH-TDD-Information-Response	ProtocolIE-ID ::= 537
id-HSDSCH-TDD-Information-Response-LCR	ProtocolIE-ID ::= 538
id-HSDSCH-TDD-Information-to-Add	ProtocolIE-ID ::= 539
id-HSDSCH-TDD-Information-to-Delete	ProtocolIE-ID ::= 540
id-HSPDSCH-RL-ID	ProtocolIE-ID ::= 541
id-PrimCCPCH-RSCP-DL-PC-RqstTDD	ProtocolIE-ID ::= 542
id-Qth-Parameter	ProtocolIE-ID ::= 64
id-PDSCH-RL-ID	ProtocolIE-ID ::= 66
id-HSDSCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 553
id-UL-Synchronisation-Parameters-LCR	ProtocolIE-ID ::= 554
id-HSDSCH-FDD-Update-Information	ProtocolIE-ID ::= 555

id-HSDSCH-TDD-Update-Information	ProtocolIE-ID ::= 556
id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 558
id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD	ProtocolIE-ID ::= 559
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD	ProtocolIE-ID ::= 560
id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRqstTDD	ProtocolIE-ID ::= 561
id-TDD-TPC-DownlinkStepSize-RL-AdditionRqstTDD	ProtocolIE-ID ::= 562
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 563
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD	ProtocolIE-ID ::= 564
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 565
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD	ProtocolIE-ID ::= 566
id-CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 567
id-CCTrCH-Minimum-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 568
id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 569
id-CCTrCH-Minimum-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 570
id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD	ProtocolIE-ID ::= 571
id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD	ProtocolIE-ID ::= 572
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 573
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 574
id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 575
id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD	ProtocolIE-ID ::= 576
id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 577
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD	ProtocolIE-ID ::= 578
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD	ProtocolIE-ID ::= 579
id-Initial-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 580
id-Maximum-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 581
id-Minimum-DL-Power-TimeslotLCR-InformationItem	ProtocolIE-ID ::= 582
id-HS-DSCHProvidedBitRate	ProtocolIE-ID ::= 583
id-HS-DSCHProvidedBitRateValue	ProtocolIE-ID ::= 584
id-HS-DSCHRequiredPower	ProtocolIE-ID ::= 585
id-HS-DSCHRequiredPowerValue	ProtocolIE-ID ::= 586
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission	ProtocolIE-ID ::= 587
id-HS-SICH-Reception-Quality	ProtocolIE-ID ::= 588
id-HS-SICH-Reception-Quality-Measurement-Value	ProtocolIE-ID ::= 589
id-HSSICH-Info-DM-Rprt	ProtocolIE-ID ::= 590
id-HSSICH-Info-DM-Rqst	ProtocolIE-ID ::= 591
id-HSSICH-Info-DM-Rsp	ProtocolIE-ID ::= 592
id-Best-Cell-Portions-Value	ProtocolIE-ID ::= 593
id-Primary-CPICH-Usage-for-Channel-Estimation	ProtocolIE-ID ::= 594
id-Secondary-CPICH-Information-Change	ProtocolIE-ID ::= 595
id-NumberOfReportedCellPortion	ProtocolIE-ID ::= 596
id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 599
id-Unidirectional-DCH-Indicator	ProtocolIE-ID ::= 602
id-CellPortion-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 597
id-CellPortion-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 598
id-Secondary-CPICH-Information	ProtocolIE-ID ::= 600
id-Received-total-wide-band-power-For-CellPortion	ProtocolIE-ID ::= 601
id-Received-total-wide-band-power-For-CellPortion-Value	ProtocolIE-ID ::= 617
id-Transmitted-Carrier-Power-For-CellPortion	ProtocolIE-ID ::= 618
id-Transmitted-Carrier-Power-For-CellPortion-Value	ProtocolIE-ID ::= 619
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortion	ProtocolIE-ID ::= 620
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue	ProtocolIE-ID ::= 621

END

3GPP TSG-RAN Meeting #22
Hawaii, USA, 9th – 12th, December 2003

Tdoc #RP-03xxxx

CR-Form-v7

CHANGE REQUEST

#

25.435 CR 106

#rev

1

Current version: **5.5.0**

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

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

Title:	# Signalling Support for Beamforming Enhancement	
Source:	# Nokia	
Work item code:	RANimp-BFE	Date: # 17/11/2003
Category:	# B Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u> .	
	Release: # Rel-6 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)	

Reason for change: # Beamforming Enhancement WI has been worked out by RAN1 in the past and consequently it is required for RAN3 to provide proper signalling.

This CR provides necessary signalling to support beamforming enhancement.

Summary of change:	Rev 1: <ul style="list-style-type: none"> - Updated based on agreed new Spare Extension Mechanism. <hr/> Rev 0: <ul style="list-style-type: none"> - Cell Portion ID IE is added to RACH Data Frame to inform the best cell portion to SRNC. - Explanation of Cell Portion IE is added.
---------------------------	--

Consequences if not approved:	Beamforming Enhancement will not be completed. <u>Impact Analysis:</u> Impact assessment towards the previous version of the specification (same release): This CR has no impact on the previous version of the specification because the functionality is introduced in backward compatible way. Impact assessment towards the previous release of the specification: This CR has no impact on previous releases because the functionality is introduced in backward compatible way.
--------------------------------------	--

Clauses affected:		⌘ 6.2.1, new 6.2.7.xx, new 6.2.7.xy							
Other specs	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td style="text-align: center;">Y</td><td style="text-align: center;">N</td></tr> <tr><td style="text-align: center;">X</td><td></td></tr> <tr><td></td><td></td></tr> </table>		Y	N	X				Other core specifications ⌘ CR145 TS 25.215 v5.4.0 CR887 TS 25.423 v5.7.0 CR064 TS 25.425 v5.5.0 CR935 TS 25.433 v5.6.0 CR109 TS 25.435 v5.5.0 R3-031770(CR- TS25.921 v5.2.0)
	Y	N							
X									
affected:	<input checked="" type="checkbox"/>	<input type="checkbox"/>							
		Test specifications							
		O&M Specifications							
Other comments: ⌘ This CR is based on R3-031714.									

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>.

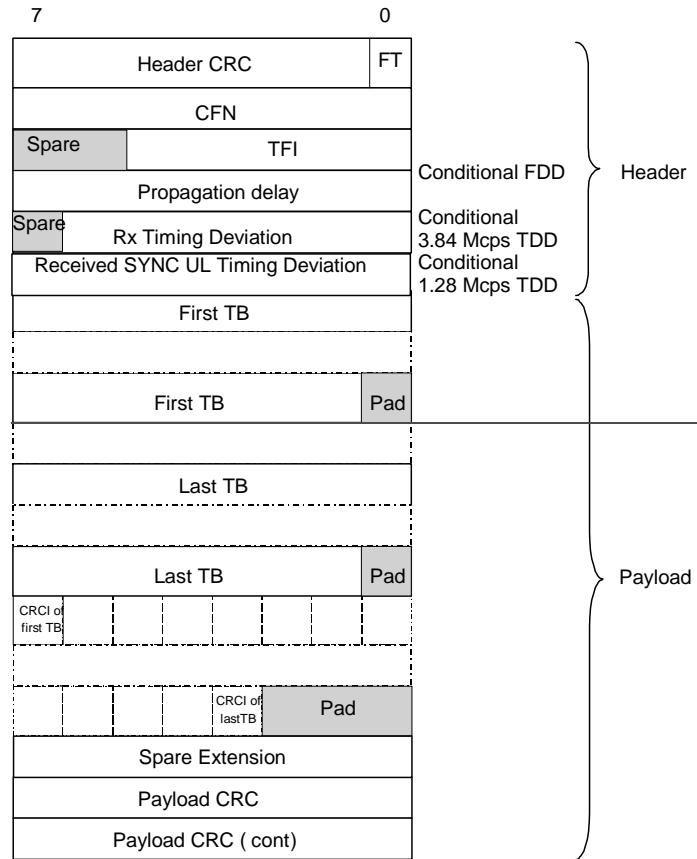
Below is a brief summary:

- 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.

6.2 Data frame structure

6.2.1 RACH Channels

The RACH DATA FRAME includes the CFN corresponding to the SFN of the frame in which the payload was received. If the payload was received in several frames, the CFN corresponding to the first Uu frame in which the information was received shall be indicated.



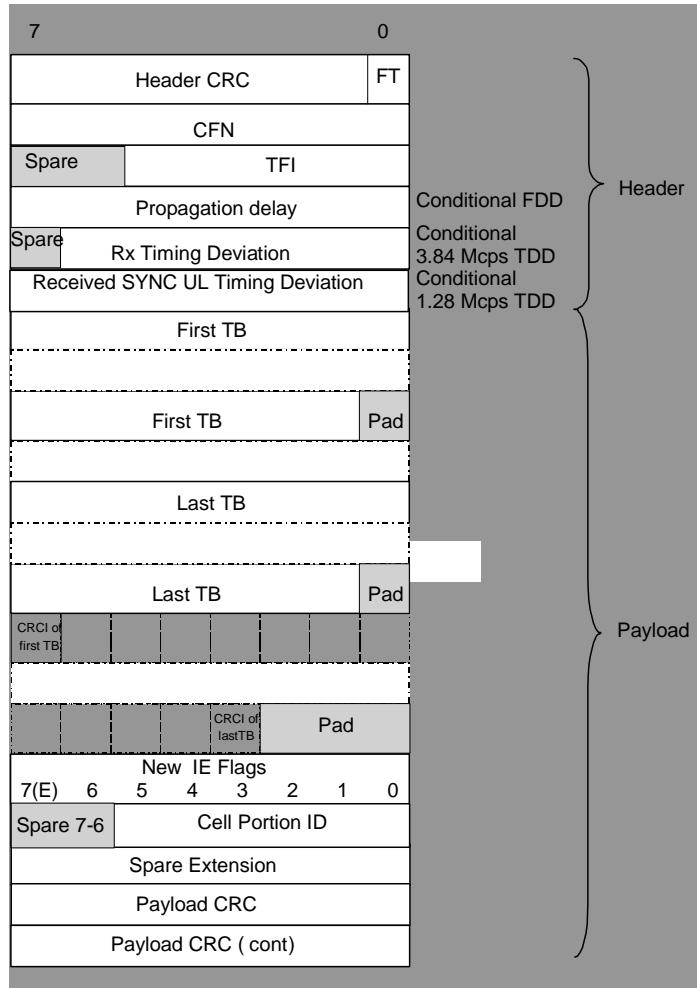


Figure 15: RACH DATA FRAME structure

Propagation Delay is a conditional Information Element which is only present when the Cell supporting the RACH Transport Channel is a FDD Cell.

Rx Timing Deviation is a conditional Information Element which is only present when the Cell supporting the RACH Transport Channel is a 3.84 Mcps TDD Cell.

Received SYNC UL Timing Deviation is a conditional Information Element which is only present when the Cell supporting the RACH Transport Channel is a 1.28Mcps TDD Cell.

[FDD- Bit 0 of New IE Flags in RACH DATA FRAME indicates if the 1st byte (bits 0-5) following the *New IE Flags* IE contains a valid Cell Portion ID (1) or not (0).]

[FDD - Field length of *Spare Extension* IE in RACH DATA FRAME is 0-30 octets.]

6.2.7.xx Cell Portion ID [FDD]

Description: Cell Portion ID indicates the cell portion with highest SIR during RACH access. Cell Portion ID is configured by O&M.

Value range: {0-63}.

Field Length: 6 bits

6.2.7.xy New IE Flags

Description: Contains flags indicating which information is valid in the fields following the *New IE Flags* IE. The last bit position of the *New IE Flags* IE is used as the Extension Flag to allow the extension of the *New IE Flags* IE in the future

Value range:

Bit 0-6: Indicates if the bytes following the *New IE Flags* IE contains a valid data (1) or not (0). The meaning of each bit is explained in the corresponding DATA FRAME subclause;

Bit7 : Indicates if the 1st byte following the *New IE Flags* IE and the corresponding IEs has additional *New IE Flags* IE (1) or not (0).

Field length: 8 bits.