

TSG RAN Meeting #27 Tokyo, Japan, 09 - 11 March 2005

RP-050062

Title	CR (Rel-6 category B) to TS 25.433 on Beamforming Enhancements
Source	TSG RAN WG3
Agenda Item	9.9

CHANGE REQUEST

25.433 CR 1085 #rev 2 # Current version: 6.4.0

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

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

Title:	# HSDPA Code Allocation/Measurement per Cell Portion	
Source:	# RAN3	
Work item code:	# RANimp-BFE	Date: # 14/02/2005
Category:	# B <i>Use one of the following categories:</i> 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 <i>Use one of the following releases:</i> Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)
Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		

Reason for change:	# At RAN1#34, it was agreed to extend HSDPA codes allocation and measurement for cell portion level in order to improve RRM for HSDPA for cell portion level. This CR provides the signaling which enables - HSDPA codes allocation per cell portion - HS-DSCH Required Power and HS-DSCH Provided Bit Rate measurement per cell portion.
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Summary of change:	# Rev2: - Editorial corrections to chapters 8.2.8.2, 9.1.62, 9.2.1.12 and 9.2.1.44 - Some cleanup in the ASN.1 - Protocol ids added Rev 1: - ASN.1 was changed. Rev0: - New IE: HSDPA Cell Portion Information IE consists of Cell Portion IE., HS-PDSCH And HS-SCCH Scrambling Code IE, HS-PDSCH FDD Code Information IE and HS-SCCH FDD Code Information IE were added in PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST. - Two new measurement type, HS-PDSCH Required Power for Cell Portion and HS-DSCH Provided Bit Rate were added. - Some procedural text regarding HSDPA code allocation per cell portion and two new measurement were added. - Corresponding ASN.1 changes were made. New Protocol IE-Ids are yet to be
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assigned.

Impact Analysis:

Impact assessment towards the previous version of the specification

This CR has no impact on the previous version of the specification because the functionality is introduced in backward compatible way.

Consequences if not approved: ☺ - RRM for HSDPA for cell portion level is not possible..

Clauses affected: ☺ 8.2.8.2, 8.2.8.4, 8.2.9.2, 8.2.18.2, 9.1.62.1, 9.2.1.11, 9.2.1.12, 9.2.1.44, 9.3.3, 9.3.4, 9.3.6

	Y	N
Other specs Affected:	☺	Other core specifications
	X	Test specifications
	X	O&M Specifications

Other comments: ☺

How to create CRs using this form:

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

Below is a brief summary:

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

8.2.8 Common Measurement Initiation

8.2.8.2 Successful Operation

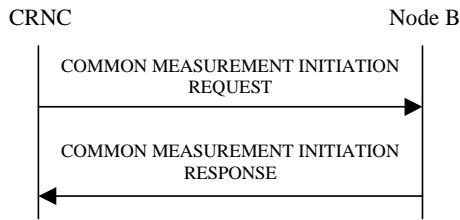


Figure 11: Common Measurement Initiation procedure, Successful Operation

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", the *SFN Reporting Indicator* IE shall be 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", "[HS-DSCH Required Power for Cell Portion](#)" or "[HS-DSCH Provided Bit Rate 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 "HS-DSCH Required Power", the measured entity to be considered is the sum of the HS-DSCH Required Power measurements for each priority class. 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", or "HS-DSCH Required Power 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 "HS-DSCH Required Power", the measured entity to be considered is the sum of the HS-DSCH Required Power measurements for each priority class. 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", or "HS-DSCH Required Power 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 terminate 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 "HS-DSCH Required Power", the measured entity to be considered is the sum of the HS-DSCH Required Power measurements for each priority class. 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", or "HS-DSCH Required Power 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 terminate 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 "HS-DSCH Required Power", the measured entity to be considered is the sum of the HS-DSCH Required Power measurements for each priority class. 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", or "HS-DSCH Required Power 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:

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

$$F_n = (M_n - M_{n-1}) \bmod 37158912000000 - ((SFN_n - SFN_{n-1}) \bmod 4096) * 10^3.84 * 10^3 * 16 + F_{n-1}$$

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

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}.

M₀ 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:

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

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

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

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.

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 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:

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

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

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

$$[\text{TDD} - P_n = ((a/16) * (15 * (\text{SFN}_n - \text{SFN}_{n-1}) \bmod 4096 + (\text{TS}_n - \text{TS}_{n-1})/1500 + P_{n-1})) \bmod 40960 \quad \text{for } n>0]$$

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

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 Fn)

$a = 1/2^{(k/2)}$, 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.

Measurement Recovery Behavior:

If the *Measurement Recovery Behavior* IE is included in the COMMON MEASUREMENT INITIATION REQUEST message, the Node B shall, if Measurement Recovery Behavior is supported, include the *Measurement Recovery Support Indicator* IE in the COMMON MEASUREMENT INITIATION RESPONSE message and perform the Measurement Recovery Behavior as described in subclause 8.2.9.2.

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 include the *Common Measurement Object Type* IE containing 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", "[HS-DSCH Required Power for Cell Portion](#)" or "[HS-DSCH Provided Bit Rate 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

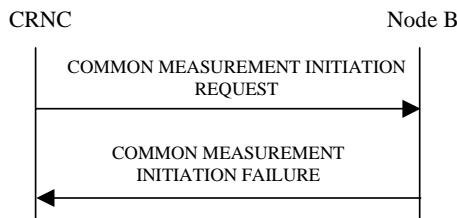


Figure 12: Common Measurement Initiation procedure, Unsuccessful Operation

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", [the "HS-DSCH Required Power for Cell Portion"](#) and [the "HS-DSCH Provided Bit Rate for Cell Portion"](#), 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 included 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 not set to "UTRAN GPS Timing of Cell Frames for UE Positioning" and the *Common Measurement Accuracy IE* is included 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							
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	
UpPTS interference	X	X	X	X	X	X	X	X	
<u>HS-DSCH Required Power for Cell Portion</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>			<u>X</u>	<u>X</u>	
<u>HS-DSCH Provided Bit Rate for Cell Portion</u>	<u>X</u>	<u>X</u>							

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]) or the measurement is temporarily not available in case Measurement Recovery Behavior is supported, the *Common Measurement Value Information* IE shall indicate Measurement not Available. If the Node B was configured to perform the Measurement Recovery Behavior, the Node B shall indicate Measurement Available to the CRNC when the achieved measurement accuracy again fulfils the given accuracy requirement (see ref. [22] and [23]) and include the *Measurement Recovery Report Indicator* IE in the COMMON MEASUREMENT REPORT message if the requested measurement reporting criteria are not met.

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, [HS-DSCH Required Power for Cell Portion](#), [HS-DSCH Provided Bit Rate for Cell Portion](#), 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 */

8.2.18 Physical Shared Channel Reconfiguration

8.2.18.1 General

This procedure is used to assign HS-DSCH related resources to the Node B.

[TDD - This procedure is also used for handling PDSCH Sets and PUSCH Sets in the Node B, i.e.

- Adding new PDSCH Sets and/or PUSCH Sets,
- Modifying these, and
- Deleting them.]

[FDD - This procedure is also used to assign E-DCH related resources to the Node B.]

8.2.18.2 Successful Operation

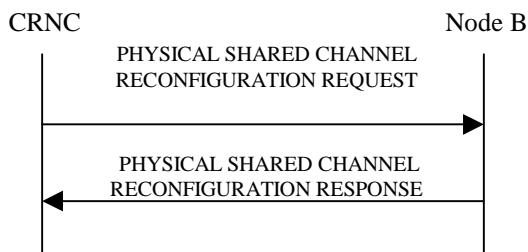


Figure 26: Physical Shared Channel Reconfiguration, Successful Operation

The procedure is initiated with a PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception, the Node B shall activate the new configuration at the head boundary of the SFN according to the parameters given in the message.

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes an *SFN IE*, the Node B shall activate the new configuration at the head boundary of that specified SFN. If no *SFN IE* is included Node B shall activate the new configuration immediately.

HS-DSCH Resources:

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH And HS-SCCH Total Power IE*, the Node B shall not exceed this maximum transmission power on all HS-PDSCH and HS-SCCH codes in the cell. If a value has never been set or if the value of the *HS-PDSCH And HS-SCCH Total Power IE* is equal to or greater than the maximum transmission power of the cell the Node B may use all unused power for HS-PDSCH and HS-SCCH codes.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH And HS-SCCH Scrambling Code IE*, the Node B shall use this as the scrambling code for all HS-PDSCHs and HS-SCCHs. If a value has never been set, the Node B shall use the primary scrambling code for all HS-PDSCH and HS-SCCH codes.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH FDD Code Information IE*, the Node B shall:

- if the *Number Of HS-PDSCH Codes IE* is set to "0", delete any existing HS-PDSCH resources from the cell.
- if the *Number Of HS-PDSCH Codes IE* is set to any value other than "0" and HS-PDSCH resources are not currently configured in the cell, use this list as the range of codes for HS-PDSCH channels.
- if the *Number Of HS-PDSCH Codes IE* is set to any value other than "0" and HS-PDSCH resources are currently configured in the cell, replace the current range of codes with this new range of codes for HS-PDSCH channels.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-SCCH FDD Code Information* IE, the Node B shall:

- If the *HS-SCCH FDD Code Information* IE contains no codes, delete any existing HS-SCCH resources from the cell.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are not currently configured in the cell, use this list of codes as the list of codes for HS-SCCH channels.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are currently configured in the cell, replace the current list of codes with this new list of codes for HS-SCCH channels.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH and HS-SCCH Total Power* IE for a particular timeslot, the Node B shall not exceed this maximum transmission power on all HS-PDSCH and HS-SCCH codes in that timeslot. If a value has never been set for that timeslot or if the value of the *HS-PDSCH and HS-SCCH Total Power* IE for that timeslot is equal to or greater than the maximum transmission power of the cell the Node B may use all unused power in that timeslot for HS-PDSCH and HS-SCCH codes.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH TDD Information* IE, the Node B shall:

- If the *HS-PDSCH TDD Information* IE contains no [3.84 Mcps TDD - *DL Timeslot and Code Information* IE] [1.28 Mcps TDD - *DL Timeslot and Code Information LCR* IE], delete any existing HS-PDSCH resources from the cell.
- If the *HS-PDSCH TDD Information* IE contains [3.84 Mcps TDD - *DL Timeslot and Code Information* IE] [1.28 Mcps TDD - *DL Timeslot and Code Information LCR* IE] and HS-PDSCH resources are not currently configured in the cell, use this IE as the list of timeslots / codes for HS-PDSCH channels.
- If the *HS-PDSCH TDD Information* IE contains [3.84 Mcps TDD - *DL Timeslot and Code Information* IE] [1.28 Mcps TDD - *DL Timeslot and Code Information LCR* IE] and HS-PDSCH resources are currently configured in the cell, replace the current list of timeslots / codes with this new list of timeslots / codes for HS-PDSCH channels.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *Add to HS-SCCH Resource Pool* IE, the Node B shall add this resource to the HS-SCCH resource pool to be used to assign HS-SCCH sets.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify HS-SCCH Resource Pool* IEs and includes any of [3.84Mcps TDD - *TDD Channelisation Code* IE, *Midamble Shift and Burst Type* IE, *Time Slot* IE], [1.28Mcps TDD - *First TDD Channelisation Code* IE, *Second TDD Channelisation Code* IE, *Midamble Shift LCR* IE, *Time Slot LCR* IE, *TDD Channelisation Code* IE], for either HS-SCCH or HS-SICH channels, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Modify HS-SCCH Resource Pool* IEs and includes the *HS-SCCH Maximum Power* IE, the Node B shall apply this value for the specified HS-SCCH code otherwise the old value is still applicable.]

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any *Delete from HS-SCCH Resource Pool* IEs, the Node B shall delete these resources from the HS-SCCH resource pool.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH And HS-SCCH Scrambling Code* IE in the *HSDPA Cell Portion Information* IE, the Node B shall use this as the scrambling code for all HS-PDSCHs and HS-SCCHs for the cell portion indicated by *Cell Portion ID*. If a value has never been set, the Node B shall use the primary scrambling code for all HS-PDSCH and HS-SCCH codes for the cell portion indicated by *Cell Portion ID*.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-PDSCH FDD Code Information* IE in the *HSDPA Cell Portion Information* IE, the Node B shall:

- if the *Number Of HS-PDSCH Codes* IE is set to "0", delete any existing HS-PDSCH resources from the cell portion indicated by *Cell Portion ID* IE.

- if the *Number Of HS-PDSCH Codes* IE is set to any value other than "0" and HS-PDSCH resources are not currently configured in the cell portion indicated by *Cell Portion ID* IE, use this list as the range of codes for HS-PDSCH channels.
- if the *Number Of HS-PDSCH Codes* IE is set to any value other than "0" and HS-PDSCH resources are currently configured in the cell portion indicated by *Cell Portion ID* IE, replace the current range of codes with this new range of codes for HS-PDSCH channels.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-SCCH FDD Code Information* IE in the *HSDPA Cell Portion Information* IE, the Node B shall:

- If the *HS-SCCH FDD Code Information* IE contains no codes, delete any existing HS-SCCH resources from the cell portion indicated by *Cell Portion ID* IE.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are not currently configured in the cell portion indicated by *Cell Portion ID* IE, use this list of codes as the list of codes for HS-SCCH channels.
- If the *HS-SCCH FDD Code Information* IE contains one or more codes and HS-SCCH resources are currently configured in the cell portion indicated by *Cell Portion ID* IE, replace the current list of codes with this new list of codes for HS-SCCH channels.]

[FDD - E-DCH Resources]:

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-AGCH And E-RGCH/E-HICH FDD Scrambling Code* IE, the Node B shall use this as the scrambling code for all E-AGCHs, E-RGCHs and E-HICHs. If a value has never been set, the Node B shall use the primary scrambling code for all E-AGCH, E-RGCH and E-HICH codes.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-AGCH FDD Code Information* IE, the Node B shall:]

- [FDD - If the *E-AGCH FDD Code Information* IE contains no codes, delete any existing E-AGCH resources from the cell.]
- [FDD - If the *E-AGCH FDD Code Information* IE contains one or more codes and E-AGCH resources are not currently configured in the cell, use this list of codes as the list of codes for E-AGCH channels.]
- [FDD - If the *E-AGCH FDD Code Information* IE contains one or more codes and E-AGCH resources are currently configured in the cell, replace the current list of codes with this new list of codes for E-AGCH channels.]

[FDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *E-RGCH/E-HICH FDD Code Information* IE, the Node B shall:]

- [FDD - If the *E-RGCH/E-HICH FDD Code Information* IE contains no codes, delete any existing E-RGCH/E-HICH resources from the cell.]
- [FDD - If the *E-RGCH/E-HICH FDD Code Information* IE contains one or more codes and E-RGCH/E-HICH resources are not currently configured in the cell, use this list of codes as the list of codes for E-RGCH/E-HICH channels.]
- [FDD - If the *E-RGCH/E-HICH FDD Code Information* IE contains one or more codes and E-RGCH/E-HICH resources are currently configured in the cell, replace the current list of codes with this new list of codes for E-RGCH/E-HICH channels.]

[TDD - PDSCH/PUSCH Addition]:

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be added, the Node B shall add these new sets to its PDSCH/PUSCH configuration.]

[1.28Mcps TDD - If the *TSTD Indicator* IE is included in *PDSCH To Add Information LCR* IE and is set to "active", the Node B shall activate TSTD diversity for PDSCH transmissions using the specified PDSCH Set that are not beacon

channels [19,21]. If the *TSTD Indicator* IE is set to "not active" or the *TSTD Indicator* IE is not included in *PDSCH To Add Information LCR* IE, the Node B shall not activate TSTD diversity for the PDSCH Set.]

[TDD - PDSCH/PUSCH Modification]:

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be modified, and includes any of [3.84Mcps TDD - *DL/UL Code Information* IE, *Midamble Shift And Burst Type* IE, *Time Slot* IE], [1.28Mcps TDD - *DL/UL Code Information LCR* IE, *Midamble Shift LCR* IE, *Time Slot LCR* IE], *TDD Physical Channel Offset* IE, *Repetition Period* IE, *Repetition Length* IE, or *TFCI Presence* IE, the Node B shall apply these as the new values, otherwise the old values specified for this set are still applicable.]

[TDD - PDSCH/PUSCH Deletion]:

[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes any PDSCH sets or PUSCH sets to be deleted the Node B shall delete these sets from its PDSCH/PUSCH configuration.]

Response Message:

HS-DSCH/HS-SCCH Resources:

In the successful case involving HS-PDSCH or HS-SCCH resources, the Node B shall store the value of *Configuration Generation ID* IE and it shall make these resources available to all the current and future HS-DSCH transport channels; and shall respond with PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.

[TDD - PDSCH/PUSCH Addition/Modification/Deletion]:

[TDD - In the successful case involving PDSCH/PUSCH addition, modification or deletion, the Node B shall add, modify and delete the PDSCH Sets and PUSCH Sets in the Common Transport Channel data base, as requested in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message, and shall make these available to all the current and future DSCH and USCH transport channels. The Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION RESPONSE message.]

9.1.62 PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST

9.1.62.1 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		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
SFN	O		9.2.1.53A		YES	reject
HS-PDSCH And HS-SCCH Total Power	O		Maximum Transmission Power 9.2.1.40	Maximum transmission power to be allowed for HS-PDSCH and HS-SCCH codes	YES	reject
HS-PDSCH And HS-SCCH Scrambling Code	O		DL Scrambling Code 9.2.2.13	Scrambling code on which HS-PDSCH and HS-SCCH is transmitted. 0= Primary scrambling code of the cell 1...15 = Secondary scrambling code	YES	reject
HS-PDSCH FDD Code Information	O		9.2.2.18F		YES	reject
HS-SCCH FDD Code Information	O		9.2.2.18G		YES	reject
E-AGCH And E-RGCH/E-HICH FDD Scrambling Code	O		DL Scrambling Code 9.2.2.13	Scrambling code on which E-AGCH, E-RGCH and E-HICH are transmitted. 0= Primary scrambling code of the cell 1...15 = Secondary scrambling code	YES	reject
E-AGCH Code FDD Information	O		9.2.2.13lb		YES	reject
E-RGCH/E-HICH Code FDD Information	O		9.2.2.13la		YES	reject
<u>HSDPA Cell Portion Information</u>		<u>0..<maxNo ofCellPortions></u>			<u>GLOBAL</u>	<u>reject</u>
<u>>Cell Portion ID</u>	<u>M</u>		<u>9.2.2.1Ca</u>		<u>–</u>	

<u>>HS-PDSCH And HS-SCCH Scrambling Code</u>	<u>O</u>		<u>DL Scrambling Code</u> <u>9.2.2.13</u>	<u>Scrambling code on which HS-PDSCH and HS-SCCH is transmitted over cell portion.</u>	<u>=</u>	
<u>>HS-PDSCH FDD Code Information</u>	<u>O</u>		<u>9.2.2.18F</u>		<u>=</u>	
<u>>HS-SCCH FDD Code Information</u>	<u>O</u>		<u>9.2.2.18G</u>		<u>=</u>	

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

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, 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, UpPTS Interference, HS-DSCH Required Power for Cell Portion , HS-DSCH Provided Bit Rate 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, "UpPTS interference" is used by 1.28Mcps TDD 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	M				–	
>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

<i>>>HS-DSCH Provided Bit Rate</i>					-	
<i>>>HS-DSCH Provided Bit Rate Value Information</i>	M		9.2.1.31lb		YES	ignore
<i>>>Transmitted Carrier Power For Cell Portion</i>					-	
<i>>>>Transmitted Carrier Power For Cell Portion Value</i>		1..< <i>maxNrO fCellPor tions></i>		FDD Only	GLOBAL	ignore
<i>>>>Cell Portion ID</i>	M		9.2.2.1Ca		-	
<i>>>>Transmitte d Carrier Power Value</i>	M		INTEGER (0..100)	According to mapping in [22]	-	
<i>>>Received Total Wide Band Power For Cell Portion</i>					-	
<i>>>>Received Total Wide Band Power For Cell Portion Value</i>		1..< <i>maxNrO fCellPor tions></i>		FDD Only	GLOBAL	ignore
<i>>>>Cell Portion ID</i>	M		9.2.2.1Ca		-	
<i>>>>Received Total Wide Band Power Value</i>	M		INTEGER (0..621)	According to mapping in [22]	-	
<i>>>Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission For Cell Portion</i>					-	
<i>>>>Transmitted Carrier Power Of All Codes Not Used For HS- PDSCH Or HS- SCCH Transmission For Cell Portion Value</i>		1..< <i>maxNrO fCellPor tions></i>		FDD Only	GLOBAL	ignore
<i>>>>Cell Portion ID</i>	M		9.2.2.1Ca		-	
<i>>>>Transmitte d Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission Value</i>	M		INTEGER (0..100)	According to mapping in [22]	-	
<i>>>UpPTS interference</i>				1.28Mcps TDD Only	-	
<i>>>>UpPTS interference Value</i>	M		INTEGER (0..127,...)	According to mapping in [23]	YES	reject
<i>>>HS-DSCH Required Power For Cell Portion</i>					-	
<i>>> HS-DSCH Required Power For Cell Portion Information</i>		1..< <i>maxNrO fCellPor tions></i>		FDD Only	GLOBAL	ignore
<i>>>>Cell Portion ID</i>	M		9.2.2.1Ca		-	

<u>>>>HS-DSCH Required Power Value Information</u>	M		<u>9.2.1.31lc</u>		=	
<u>>>HS-DSCH Provided Bit Rate For Cell Portion</u>					=	
<u>>>> HS-DSCH Provided Bit Rate For Cell Portion Informationr</u>		<u>1..< maxNrOfCellPortions></u>		<u>FDD Only</u>	<u>GLOBAL</u>	<u>ignore</u>
<u>>>>Cell Portion ID</u>	M		<u>9.2.2.1Ca</u>		=	
<u>>>>HS-DSCH Provided Bit Rate Value Information</u>	M		<u>9.2.1.31lb</u>		=	

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

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
CHOICE Measurement Threshold	M				–	
>Received Total Wide Band Power					–	
>>Received Total Wide Band Power	M		INTEGER (0..621)	According to mapping in [22] and [23]	–	
>Transmitted Carrier Power					–	
>>Transmitted Carrier Power	M		INTEGER (0..100)	According to mapping in [22] and [23]	–	
>Acknowledged PRACH Preambles				FDD only	–	
>>Acknowledged PRACH Preambles	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]	–	
>SIR					–	
>>SIR	M		INTEGER (0..63)	According to mapping in [22] and [23]	–	
>SIR Error				FDD only	–	
>>SIR Error	M		INTEGER (0..125)	According to mapping in [22]	–	
>Transmitted Code Power					–	
>>Transmitted Code Power	M		INTEGER (0..127)	According to mapping in [22] and [23]	–	
>RSCP				TDD only	–	
>>RSCP	M		INTEGER (0..127)	According to mapping in [23]	–	
>Rx Timing Deviation				Applicable to 3.84Mcps TDD only	–	
>>Rx Timing Deviation	M		INTEGER (0..8191)	According to mapping in [23]	–	
>Round Trip Time				FDD only	–	
>>Round Trip Time	M		INTEGER (0..32767)	According to mapping in [22]	–	
>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 Measurement Thresholds					–	
>>UTRAN GPS Timing Of Cell Frames For UE Positioning					–	
>>>UTRAN-GPS Measurement Threshold Information	M		9.2.1.64B		YES	reject
>>SFN-SFN Observed Time Difference					–	
>>>SFN-SFN Measurement Threshold	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..511)	According to mapping in [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>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-DSCH Required Power</i>					–	
>> <i>HS-DSCH Required Power Value</i>	M		9.2.1.31lba		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 Transmitted Carrier Power Of All Codes Not Used For HS-PDSCH Or HS-SCCH Transmission measurement in [22]	YES	reject
>> <i>UpPTS interference</i>				1.28Mcps TDD Only	–	
>> <i>UpPTS interference Value</i>	M		INTEGER (0..127,...)	According to mapping in [23]	YES	reject
>> <i>HS-DSCH Required Power For Cell Portion</i>				FDD only	–	
>> <i>HS-DSCH Required Power</i>	M		9.2.1.31lba		YES	reject

<u>Value For Cell Portion</u>						
-----------------------------------	--	--	--	--	--	--

9.3.3 PDU Definitions

```
-- ****
-- PDU definitions for NBAP.
-- ****

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

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

/* partly omitted */

FROM NBAP-Containers

id-Active-Pattern-Sequence-Information,
id-Additional-S-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-Additional-S-CCPCH-Parameters-CTCH-SetupRqstTDD,
id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRqstTDD,
id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRqstTDD,
id-AdjustmentRatio,
id-AICH-Information,
id-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-AP-AICH-Information,
id-AP-AICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-BCH-Information,
id-BCCH-ModificationTime,
id-bindingID,
id-BlockingPriorityIndicator,
id-Cause,
id-CauseLevel-PSCH-ReconfFailure,
id-CauseLevel-RL-AdditionFailureFDD,
id-CauseLevel-RL-AdditionFailureTDD,
id-CauseLevel-RL-ReconfFailure,
id-CauseLevel-RL-SetupFailureFDD,
id-CauseLevel-RL-SetupFailureTDD,
id-CauseLevel-SyncAdjustmntFailureTDD,
id-CCP-InformationItem-AuditRsp,
id-CCP-InformationList-AuditRsp,
id-CCP-InformationItem-ResourceStatusInd,
```

id-CCTrCH-InformationItem-RL-FailureInd,
id-CCTrCH-InformationItem-RL-RestoreInd,
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD,
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD,
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD,
id-CDCA-ICH-Information,
id-CDCA-ICH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD,
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD,
id-Cell-InformationItem-AuditRsp,
id-Cell-InformationItem-ResourceStatusInd,
id-Cell-InformationList-AuditRsp,
id-CellParameterID,
id-CellPortion-InformationItem-Cell-SetupRqstFDD,
id-CellPortion-InformationList-Cell-SetupRqstFDD,
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD,
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD,
id-cellSyncBurstRepetitionPeriod,
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD,
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD,
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD,
id-CellSyncInfo-CellSyncReprtTDD,
id-CFN,
id-CFNReportingIndicator,
id-C-ID,
id-Closed-Loop-Timing-Adjustment-Mode,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonPhysicalChannelID,
id-CommonPhysicalChannelType-CTCH-ReconfRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD,
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD,
id-CommunicationContextInfoItem-Reset,
id-CommunicationControlPortID,
id-CommunicationControlPortInfoItem-Reset,
id-Compressed-Mode-Deactivation-Flag,
id-ConfigurationGenerationID,
id-CPCH-Information,
id-CPCH-Parameters-CTCH-SetupRsp,
id-CPCH-ParametersListIE-CTCH-ReconfRqstFDD,
id-CRNC-CommunicationContextID,
id-CriticalityDiagnostics,
id-CSBTransmissionID,
id-CSBMeasurementID,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-AddList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,

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id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-DCH-InformationResponse,
id-DCH-RearrangeList-Bearer-RearrangeInd,
id-DSCH-RearrangeList-Bearer-RearrangeInd,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-DL-DPCH-InformationList-RL-SetupRqstTDD,
id-DL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-DL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-TimingAdjustment,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-ReferencePowerInformationItem-DL-PC-Rqst,
id-DL-PowerBalancing-UpdatedIndicator,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-TPC-Pattern01Count,
id-DPC-Mode,
id-DPCHConstant,
id-DSCH-AddItem-RL-ReconfPrepFDD,
id-DSCHs-to-Add-FDD,
id-DSCH-DeleteItem-RL-ReconfPrepFDD,
id-DSCH-DeleteList-RL-ReconfPrepFDD,
id-DSCHs-to-Add-TDD,
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id-DSCH-Information-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD,
id-DSCH-InformationResponse,
id-DSCH-FDD-Information,
id-DSCH-FDD-Common-Information,
id-DSCH-TDD-Information,
id-DSCH-ModifyItem-RL-ReconfPrepFDD,
id-DSCH-ModifyList-RL-ReconfPrepFDD,
id-End-Of-Audit-Sequence-Indicator,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-FACH-Information,
id-FACH-ParametersList-CTCH-ReconfRqstTDD,
id-FACH-ParametersList-CTCH-SetupRsp,
id-FACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstFDD,
id-FACH-ParametersListIE-CTCH-SetupRqstTDD,
[id-HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst,](#)
[id-HSDPA-CellPortion-InformationList-PSCH-ReconfRqst,](#)
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,
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD,
id-IPDLParameter-Information-Cell-ReconfRqstFDD,
id-IPDLParameter-Information-Cell-SetupRqstFDD,
id-IPDLParameter-Information-Cell-ReconfRqstTDD,
id-IPDLParameter-Information-Cell-SetupRqstTDD,
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD,
id-Limited-power-increase-information-Cell-SetupRqstFDD,
id-Local-Cell-ID,
id-Local-Cell-Group-InformationItem-AuditRsp,
id-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Local-Cell-Group-InformationList-AuditRsp,
id-Local-Cell-InformationItem-AuditRsp,
id-Local-Cell-InformationItem-ResourceStatusInd,
id-Local-Cell-InformationItem2-ResourceStatusInd,
id-Local-Cell-InformationList-AuditRsp,
id-AdjustmentPeriod,
id-MaxAdjustmentStep,
id-MaximumTransmissionPower,
id-MeasurementFilterCoefficient,
id-MeasurementID,
id-MeasurementRecoveryBehavior,
id-MeasurementRecoveryReportingIndicator,
id-MeasurementRecoverySupportIndicator,
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst,

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id-MICH-CFN,
id-MICH-Information-AuditRsp,
id-MICH-Information-ResourceStatusInd,
id-MICH-Parameters-CTCH-ReconfRqstFDD,
id-MICH-Parameters-CTCH-ReconfRqstTDD,
id-MICH-Parameters-CTCH-SetupRqstFDD,
id-MICH-Parameters-CTCH-SetupRqstTDD,
id-Modification-Period,
id-multipleRL-dl-DPCH-InformationList,
id-multipleRL-dl-DPCH-InformationModifyList,
id-multiple-RL-Information-RL-ReconfPrepTDD,
id-multiple-RL-Information-RL-ReconfRqstTDD,
id-multipleRL-ul-DPCH-InformationList,
id-multipleRL-ul-DPCH-InformationModifyList,
id-NCyclesPerSFNperiod,
id-NeighbouringCellMeasurementInformation,
id-NI-Information-NotifUpdateCmd,
id-NodeB-CommunicationContextID,
id-NRepetitionsPerCyclePeriod,
id-NumberOfReportedCellPortions,
id-P-CCPCH-Information,
id-P-CPICH-Information,
id-P-SCH-Information,
id-PCCPCH-Information-Cell-ReconfRqstTDD,
id-PCCPCH-Information-Cell-SetupRqstTDD,
id-PCH-Parameters-CTCH-ReconfRqstTDD,
id-PCH-Parameters-CTCH-SetupRsp,
id-PCH-ParametersItem-CTCH-ReconfRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstFDD,
id-PCH-ParametersItem-CTCH-SetupRqstTDD,
id-PCH-Information,
id-PCPCH-Information,
id-PICH-ParametersItem-CTCH-ReconfRqstFDD,
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PDSCH-Information-Cell-SetupRqstFDD,
id-PDSCH-Information-Cell-ReconfRqstFDD,
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PDSCH-RL-ID,
id-PDSCHSets-AddList-PSCH-ReconfRqst,
id-PDSCHSets-DeleteList-PSCH-ReconfRqst,
id-PDSCHSets-ModifyList-PSCH-ReconfRqst,
id-PICH-Information,
id-PICH-Parameters-CTCH-ReconfRqstTDD,
id-PICH-ParametersItem-CTCH-SetupRqstTDD,
id-PowerAdjustmentType,
id-Power-Local-Cell-Group-InformationItem-AuditRsp,
id-Power-Local-Cell-Group-InformationItem-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationItem2-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList-AuditRsp,
id-Power-Local-Cell-Group-InformationList-ResourceStatusInd,
id-Power-Local-Cell-Group-InformationList2-ResourceStatusInd,
id-Power-Local-Cell-Group-ID,
id-PRACH-Information,
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id-PRACHConstant,
id-PRACH-ParametersItem-CTCH-SetupRqstTDD,
id-PRACH-ParametersListIE-CTCH-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD,
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD,
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD,
id-PrimaryCPICH-Information-Cell-SetupRqstFDD,
id-Primary-CPICH-Usage-for-Channel-Estimation,
id-PrimarySCH-Information-Cell-ReconfRqstFDD,
id-PrimarySCH-Information-Cell-SetupRqstFDD,
id-PrimaryScramblingCode,
id-SCH-Information-Cell-ReconfRqstTDD,
id-SCH-Information-Cell-SetupRqstTDD,
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst,
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst,
id-PUSCHConstant,
id-PUSCHSets-AddList-PSCH-ReconfRqst,
id-PUSCHSets-DeleteList-PSCH-ReconfRqst,
id-PUSCHSets-ModifyList-PSCH-ReconfRqst,
id-Qth-Parameter,
id-RACH-Information,
id-RACH-Parameters-CTCH-SetupRsp,
id-RACH-ParametersItem-CTCH-SetupRqstFDD,
id-RACH-ParameterItem-CTCH-SetupRqstTDD,
id-ReferenceClockAvailability,
id-ReferenceSFNoffset,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporting-Object-RL-RestoreInd,
id-ResetIndicator,
id-RL-ID,
id-RL-InformationItem-DM-Rprt,
id-RL-InformationItem-DM-Rqst,
id-RL-InformationItem-DM-Rsp,
id-RL-InformationItem-RL-AdditionRqstFDD,
id-RL-informationItem-RL-DeletionRqst,
id-RL-InformationItem-RL-FailureInd,
id-RL-InformationItem-RL-PreemptRequiredInd,
id-RL-InformationItem-RL-ReconfPrepFDD,
id-RL-InformationItem-RL-ReconfRqstFDD,
id-RL-InformationItem-RL-RestoreInd,
id-RL-InformationItem-RL-SetupRqstFDD,
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-informationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationList-RL-ReconfRqstFDD,
id-RL-InformationList-RL-SetupRqstFDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReady,
id-RL-InformationResponseItem-RL-ReconfRsp,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
```

```
id-RL-InformationResponseList-RL-ReconfReady,
id-RL-InformationResponseList-RL-ReconfRsp,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-Information-RL-AdditionRqstTDD,
id-RL-Information-RL-ReconfRqstTDD,
id-RL-Information-RL-ReconfPrepTDD,
id-RL-Information-RL-SetupRqstTDD,
id-RL-ReconfigurationFailureItem-RL-ReconfFailure,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-InformationItem-RL-FailureInd,
id-RL-Set-InformationItem-RL-RestoreInd,
id-RL-Specific-DCH-Info,
id-S-CCPCH-Information,
id-S-CCPCH-InformationListExt-AuditRsp,
id-S-CCPCH-InformationListExt-ResourceStatusInd,
id-S-CCPCH-LCR-InformationListExt-AuditRsp,
id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd,
id-S-CPICH-Information,
id-SCH-Information,
id-S-SCH-Information,
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD,
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD,
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD,
id-Secondary-CPICH-Information,
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationItem-Cell-SetupRqstFDD,
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD,
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD,
id-Secondary-CPICH-Information-Change,
id-SecondarySCH-Information-Cell-ReconfRqstFDD,
id-SecondarySCH-Information-Cell-SetupRqstFDD,
id-SegmentInformationListIE-SystemInfoUpdate,
id-SFN,
id-SFNReportingIndicator,
id-ShutdownTimer,
id-SignallingBearerRequestIndicator,
id-SSDT-CellIDforEDSCHPC,
id-Start-Of-Audit-Sequence-Indicator,
id-Successful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Successful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Synchronisation-Configuration-Cell-ReconfRqst,
id-Synchronisation-Configuration-Cell-SetupRqst,
id-SyncCase,
id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH,
id-SyncFrameNumber,
id-SynchronisationReportType,
id-SynchronisationReportCharacteristics,
id-SyncReportType-CellSyncReprtTDD,
id-T-Cell,
id-TargetCommunicationControlPortID,
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id-TFCI2-Bearer-Information-RL-SetupRqstFDD,
id-TFCI2-BearerInformationResponse,
id-TFCI2BearerRequestIndicator,
id-TFCI2-BearerSpecificInformation-RL-ReconfPrepFDD,
id-Transmission-Gap-Pattern-Sequence-Information,
id-TimeSlotConfigurationList-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-Cell-SetupRqstTDD,
id-timeslotInfo-CellSyncInitiationRqstTDD,
id-TimeslotISCPInfo,
id-TimingAdvanceApplied,
id-TnlQos,
id-TransmissionDiversityApplied,
id-transportlayeraddress,
id-Tstd-indicator,
id-UARFCNforNt,
id-UARFCNforNd,
id-UARFCNforNu,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationItem-RL-AdditionRqstTDD,
id-UL-DPCH-InformationList-RL-SetupRqstTDD,
id-UL-DPCH-InformationModify-AddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-DeleteListIE-RL-ReconfPrepTDD,
id-UL-DPCH-InformationModify-ModifyListIE-RL-ReconfPrepTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD,
id-Unsuccessful-PDSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-PUSCHSetItem-PSCH-ReconfFailureTDD,
id-Unsuccessful-RL-InformationRespItem-RL-AdditionFailureFDD,
id-Unsuccessful-RL-InformationRespItem-RL-SetupFailureFDD,
id-Unsuccessful-RL-InformationResp-RL-AdditionFailureTDD,
id-Unsuccessful-RL-InformationResp-RL-SetupFailureTDD,
id-USCH-Information-Add,
id-USCH-Information-DeleteList-RL-ReconfPrepTDD,
id-USCH-Information-ModifyList-RL-ReconfPrepTDD,
id-USCH-InformationResponse,
id-USCH-Information,
id-USCH-RearrangeList-Bearer-RearrangeInd,
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-DwPCH-LCR-Information ,
id-DwPCH-LCR-InformationList-AuditRsp,
id-DwPCH-LCR-Information-Cell-SetupRqstTDD,
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id-DwPCH-LCR-Information-Cell-ReconfRqstTDD,
id-DwPCH-LCR-Information-ResourceStatusInd,
id-maxFACH-Power-LCR-CTCH-SetupRqstTDD,
id-maxFACH-Power-LCR-CTCH-ReconfRqstTDD,
id-FPACH-LCR-Information,
id-FPACH-LCR-Information-AuditRsp,
id-FPACH-LCR-InformationList-AuditRsp,
id-FPACH-LCR-InformationList-ResourceStatusInd,
id-FPACH-LCR-Parameters-CTCH-SetupRqstTDD,
id-FPACH-LCR-Parameters-CTCH-ReconfRqstTDD,
id-PCCPCH-LCR-Information-Cell-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-SetupRqstTDD,
id-PCH-Power-LCR-CTCH-ReconfRqstTDD,
id-PICH-LCR-Parameters-CTCH-SetupRqstTDD,
id-PRACH-LCR-ParametersList-CTCH-SetupRqstTDD,
id-RL-InformationResponse-LCR-RL-SetupRspTDD
id-Secondary-CCPCH-LCR-parameterList-CTCH-SetupRqstTDD,
id-TimeSlot,
id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD,
id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD,
id-TimeslotISCP-LCR-InfoList-RL-SetupRqstTDD,
id-TimeSlotLCR-CM-Rqst,
id-UL-DPCH-LCR-Information-RL-SetupRqstTDD,
id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD,
id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD,
id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-AddList-RL-ReconfPrepTDD,
id-DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfPrepTDD,
id-TimeslotISCPInfoList-LCR-DL-PC-RqstTDD,
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD,
id-UL-DPCH-LCR-InformationModify-AddList,
id-UL-TimeslotLCR-Information-RL-ReconfPrepTDD,
id-UL-SIRTtarget,
id-PDSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PDSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-AddInformation-LCR-AddListIE-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-PSCH-ReconfRqst,
id-PUSCH-ModifyInformation-LCR-ModifyListIE-PSCH-ReconfRqst,
id-PUSCH-Info-DM-Rqst,
id-PUSCH-Info-DM-Rsp,
id-PUSCH-Info-DM-Rprt,
id-RL-InformationResponse-LCR-RL-AdditionRspTDD,
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD,
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD,
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst,
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst,
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst,
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst,

id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst,
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD,
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD,
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD,
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD,
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD,
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD,
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD,
id-DwPCH-Power,
id-AccumulatedClockupdate-CellSyncReprtTDD,
id-HSDPA-Capability,
id-HDSCH-FDD-Information,
id-HDSCH-FDD-Information-Response,
id-HDSCH-Information-to-Modify,
id-HDSCH-Information-to-Modify-Unsynchronised,
id-HDSCH-MACdFlows-to-Add,
id-HDSCH-MACdFlows-to-Delete,
id-HDSCH-RearrangeList-Bearer-RearrangeInd,
id-HDSCH-Resources-Information-AuditRsp,
id-HDSCH-Resources-Information-ResourceStatusInd,
id-HDSCH-RNTI,
id-HDSCH-TDD-Information,
id-HDSCH-TDD-Information-Response,
id-HSPDSCH-RL-ID,
id-HSSICH-Info-DM-Rprt,
id-HSSICH-Info-DM-Rqst,
id-HSSICH-Info-DM-Rsp,
id-PrimCCPCH-RSCP-DL-PC-RqstTDD,
id-HDSCH-FDD-Update-Information,
id-HDSCH-TDD-Update-Information,
id-UL-Synchronisation-Parameters-LCR,
id-DL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD,
id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD,
id-CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD,
id-CCTrCH-Minimum-DL-Power-RL-SetupRqstTDD,
id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD,
id-CCTrCH-Minimum-DL-Power-RL-AdditionRqstTDD,
id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD,
id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD,
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD,
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD,
id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD,
id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD,
id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD,
id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD,
id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD,
id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD,
id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRqstTDD,
id-TDD-TPC-DownlinkStepSize-RL-AdditionRqstTDD,
id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD,
id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD,

```
id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD,  
id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD,  
id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD,  
id-TimingAdjustmentValueLCR,  
id-PrimaryCCPCH-RSCP-Delta,
```

```
maxNrOfCCTrCHs,  
maxNrOfCellSyncBursts,  
maxNrOfCodes,  
maxNrOfCPCHs,  
maxNrOfDCHs,  
maxNrOfDLTSS,  
maxNrOfDLTSLCRs,  
maxNrOfDPCHs,  
maxNrOfDPCHLCRs,  
maxNrOfDSCHs,  
maxNrOfFACHs,  
maxNrOfRLs,  
maxNrOfRLs-1,  
maxNrOfRLs-2,  
maxNrOfRLSets,  
maxNrOfPCPCHs,  
maxNrOfPDSCHs,  
maxNrOfPUSCHs,  
maxNrOfPRACHLCRs,  
maxNrOfPDSCHSets,  
maxNrOfPUSCHSets,  
maxNrOfReceptsPerSyncFrame,  
maxNrOfSCCPCHs,  
maxNrOfSCCPCHsinExt,  
maxNrOfSCCPCHLCRs,  
maxNrOfSCCPCHsLCRinExt,  
maxNrOfULTSs,  
maxNrOfULTSLCRs,  
maxNrOfUSCHs,  
maxAPSigNum,  
maxCPCHCell,  
maxFACHCell,  
maxFPACHCell,  
maxNoofLen,  
maxRACHCell,  
maxPCPCHCell,  
maxPRACHCell,  
maxSCCPCHCell,  
maxSCCPCHCellinExt,  
maxSCCPCHCellinExtLCR,  
maxSCPICHCell,  
maxCellinNodeB,  
maxCCPinNodeB,  
maxCommunicationContext,  
maxLocalCellinNodeB,  
maxNrOfSlotFormatsPRACH,
```

```

maxIB,
maxIBSEG,
maxNrOfCellPortionsPerCell,
maxNrOfHSSCCHs,
maxNrOfHSSIChs,
maxNrOfHSPDSCHs,
maxNrOfSyncFramesLCR,
maxNrOfReceptionsperSyncFrameLCR,
maxNrOfSyncDLCodesLCR,
maxNrOfMACdFlows
FROM NBAP-Constants;

/* partly omitted */

-- *****
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST FDD
-- *****

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

PhysicalSharedChannelReconfigurationRequestFDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-C-ID                                CRITICALITY reject   TYPE C-ID                               PRESENCE mandatory }|
    { ID id-ConfigurationGenerationID           CRITICALITY reject   TYPE ConfigurationGenerationID  PRESENCE mandatory }|
    { ID id-SFN                                  CRITICALITY reject   TYPE SFN                                PRESENCE optional }|
    { ID id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst  CRITICALITY reject   TYPE MaximumTransmissionPower  PRESENCE optional }|
    { ID id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst  CRITICALITY reject   TYPE DL-ScramblingCode        PRESENCE optional }|
    { ID id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst  CRITICALITY reject   TYPE HS-PDSCH-FDD-Code-Information  PRESENCE optional }|
    { ID id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst  CRITICALITY reject   TYPE HS-SCCH-FDD-Code-Information  PRESENCE optional },
    ...
}

PhysicalSharedChannelReconfigurationRequestFDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSDPA-CellPortion-InformationList-PSCH-ReconfRqst  CRITICALITY reject   EXTENSION HSDPA-CellPortion-InformationList-PSCH-ReconfRqst
    PRESENCE optional },
    ...
}

HSDPA-CellPortion-InformationList-PSCH-ReconfRqst ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF ProtocolIE-Single-Container{{ HSDPA-CellPortion-InformationItemIE-PSCH-ReconfRqst }}

HSDPA-CellPortion-InformationItemIE-PSCH-ReconfRqst NBAP-PROTOCOL-IES ::= {
    { ID id-HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst  CRITICALITY reject   TYPE HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst
    PRESENCE mandatory }
}

HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst ::= SEQUENCE {
    cellPortionID          CellPortionID,

```

```

hs-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst      DL-ScramblingCode          OPTIONAL,
hs-PDSCH-FDD-Code-Information-PSCH-ReconfRqst        HS-PDSCH-FDD-Code-Information  OPTIONAL,
hs-SCCH-FDD-Code-Information-PSCH-ReconfRqst         HS-SCCH-FDD-Code-Information  OPTIONAL,
iE-Extensions                                         ProtocolExtensionContainer { { HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst-ExtIEs } }
OPTIONAL,
...
}

HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst-ExtIEs_NBAP-PROTOCOL-EXTENSION ::= {
...
}

-- *****
-- PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST TDD
--
-- *****

/* 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,

```

```
maxNrOfReceptsPerSyncFrame,
maxNrOfTFCIGroups,
maxNrOfTFCI1Combs,
maxNrOfTFCI2Combs,
maxNrOfTFCI2Combs-1,
maxNrOfSF,
maxTGPS,
maxNrOfUSCHs,
maxNrOfULTSs,
maxNrOfULTSLCRs,
maxNrOfDPCHs,
maxNrOfDPCHLCRs,
maxNrOfCodes,
maxNrOfDSCHs,
maxNrOfDLTSSs,
maxNrOfDLTSLCRs,
maxNrOfDCHs,
maxNrOfLevels,
maxNoGPSItems,
maxNoSat,
maxNrOfCellPortionsPerCell,
maxNrOfCellPortionsPerCell-1,
maxNrOfHSSCCHs,
maxNrOfHSSCCHCodes,
maxNrOfMACdFlows,
maxNrOfMACdFlows-1,
maxNrOfMACdPDUIndexes,
maxNrOfMACdPDUIndexes-1,
maxNrOfNIs,
maxNrOfPriorityQueues,
maxNrOfPriorityQueues-1,
maxNrOfHARQProcesses,
maxNrOfSyncDLCodesLCR,
maxNrOfSyncFramesLCR,
maxNrOfContextsOnUeList,
maxNrOfPriorityClasses,
maxNrOfSatAlmanac-maxNoSat,

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-DSCHRequiredPowerValueInformation,
id-HS-DSCHProvidedBitRateValueInformation,
id-HS-DSCHRequiredPowerValue,
id-HS-DSCHRequiredPowerValue-For-Cell-Portion,
id-HS-DSCHRequiredPowerValueInformation-For-CellPortion,
id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion,
id-Best-Cell-Portions-Value,
id-Unidirectional-DCH-Indicator,
id-SAT-Info-Almanac-ExtItem,
id-TnlQos,
id-UpPTSInterferenceValue,
id-HARQ-Preamble-Mode
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-Originatoin-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,
mich-not-supported,
harq-preamble-mode-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,...)
}

CellSyncBurstTimingLCR ::= CHOICE {
    initialPhase       INTEGER (0..524287,...),
    steadyStatePhase   INTEGER (0..127,...)
}

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,
    upPTS-Interference,
    hs-DSCH-Required-Power-for-cell-portion,
    hs-DSCH-Provided-Bit-Rate-for-cell-portion
}

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-DSCHRequiredPowerValueInformation CRITICALITY ignore TYPE HS-DSCHRequiredPower mandatory } |
- { ID id-HS-DSCHProvidedBitRateValueInformation CRITICALITY ignore TYPE HS-DSCHProvidedBitRate 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 } |
- { ID id-UpPTSInterferenceValue CRITICALITY ignore TYPE UpPTSInterferenceValue PRESENCE mandatory } |
- { ID id-HS-DSCHRequiredPowerValueInformation-For-CellPortion CRITICALITY ignore TYPE HS-DSCHRequiredPowerValueInformation-For-CellPortion PRESENCE mandatory } |
- { ID id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion CRITICALITY ignore TYPE HS-DSCHProvidedBitRateValueInformation-For-CellPortion 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,
    repetitionNumber   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)

-- =====
-- D
-- =====
/* partly omitted */

-- =====
-- H
-- =====

HARQ-MemoryPartitioning ::= CHOICE {
  implicit      HARQ-MemoryPartitioning-Implicit,
  explicit      HARQ-MemoryPartitioning-Explicit,
  ...
}

HARQ-MemoryPartitioning-Implicit ::= SEQUENCE {
  number-of-Processes   INTEGER (1..8,...),
  iE-Extensions        ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Implicit-ExtIEs } }           OPTIONAL,
  ...
}

```

```

HARQ-MemoryPartitioning-Implicit-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQ-MemoryPartitioning-Explicit      ::= SEQUENCE {
    hARQ-MemoryPartitioningList          HARQ-MemoryPartitioningList,
    iE-Extensions                      ProtocolExtensionContainer { { HARQ-MemoryPartitioning-Explicit-ExtIEs } }           OPTIONAL,
    ...
}

HARQ-MemoryPartitioning-Explicit-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQ-MemoryPartitioningList ::= SEQUENCE (SIZE (1..maxNrOfHARQProcesses)) OF HARQ-MemoryPartitioningItem

HARQ-MemoryPartitioningItem ::= SEQUENCE {
    process-Memory-Size               ENUMERATED {
        hms800, hms1600, hms3200, hms4000,
        hms4800, hms5600, hms6400, hms7200, hms8000,
        hms8800, hms9600, hms10400, hms11200, hms12000,
        hms12800, hms13600, hms14400, hms15200, hms16000,
        hms17600, hms19200, hms20800, hms22400, hms24000,
        hms25600, hms27200, hms28800, hms30400, hms32000,
        hms36000, hms40000, hms44000, hms48000, hms52000,
        hms56000, hms60000, hms64000, hms68000, hms72000,
        hms76000, hms80000, hms88000, hms96000, hms104000,
        hms112000, hms120000, hms128000, hms136000, hms144000,
        hms152000, hms160000, hms176000, hms192000, hms208000,
        hms224000, hms240000, hms256000, hms272000, hms288000,
        hms304000...},
    iE-Extensions                      ProtocolExtensionContainer { { HARQ-MemoryPartitioningItem-ExtIEs } }           OPTIONAL,
    ...
}

HARQ-MemoryPartitioningItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQ-Preamble-Mode ::= ENUMERATED {
    mode0,
    mode1
}

HSDPA-Capability ::= ENUMERATED {hsdpa-capable, hsdpa-non-capable}

HS-DSCHProvidedBitRate ::= SEQUENCE (SIZE (1..maxNrOfPriorityClasses)) OF HS-DSCHProvidedBitRate-Item

HS-DSCHProvidedBitRate-Item ::= SEQUENCE {
    schedulingPriorityIndicator      SchedulingPriorityIndicator,

```

```

hs-DSCHProvidedBitRateValue          HS-DSCHProvidedBitRateValue,
iE-Extensions                         ProtocolExtensionContainer { { HS-DSCHProvidedBitRate-Item-ExtIEs} }           OPTIONAL,
...
}

HS-DSCHProvidedBitRate-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HS-DSCHProvidedBitRateValue ::= INTEGER(0..16777215,...)
-- Unit bit/s, Range 0..2^24-1, Step 1 bit

HS-DSCHProvidedBitRateValueInformation-For-CellPortion ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF HS-
DSCHProvidedBitRateValueInformation-For-CellPortion-Item

HS-DSCHProvidedBitRateValueInformation-For-CellPortion-Item ::= SEQUENCE{
  cellPortionID           CellPortionID,
  hs-DSCHProvidedBitRateValue   HS-DSCHProvidedBitRateValue,
  iE-Extensions             ProtocolExtensionContainer { { HS-DSCHProvidedBitRateValueInformation-For-CellPortion-Item-ExtIEs} } OPTIONAL,
  ...
}

HS-DSCHProvidedBitRateValueInformation-For-CellPortion-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HS-DSCHRequiredPower ::= SEQUENCE (SIZE (1..maxNrOfPriorityClasses)) OF HS-DSCHRequiredPower-Item

HS-DSCHRequiredPower-Item ::= SEQUENCE {
  schedulingPriorityIndicator      SchedulingPriorityIndicator,
  hs-DSCHRequiredPowerValue        HS-DSCHRequiredPowerValue,
  hs-DSCHRequiredPowerPerUEInformation HS-DSCHRequiredPowerPerUEInformation
  iE-Extensions                   ProtocolExtensionContainer { { HS-DSCHRequiredPower-Item-ExtIEs} }           OPTIONAL,
  ...
}

HS-DSCHRequiredPower-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HS-DSCHRequiredPowerValue ::= INTEGER(0..1000)
-- Unit %, Range 0 ..1000, Step 0.1%

HS-DSCHRequiredPowerPerUEInformation ::= SEQUENCE (SIZE (1.. maxNrOfContextsOnUeList)) OF HS-DSCHRequiredPowerPerUEInformation-Item

HS-DSCHRequiredPowerPerUEInformation-Item ::= SEQUENCE {
  cRNC-CommunicationContextID      CRNC-CommunicationContextID,
  hs-DSCHRequiredPowerPerUEWeight   HS-DSCHRequiredPowerPerUEWeight      OPTIONAL,
  iE-Extensions                     ProtocolExtensionContainer { { HS-DSCHRequiredPowerPerUEInformation-Item-ExtIEs} }           OPTIONAL,
  ...
}

```

```

HS-DSCHRequiredPowerPerUEInformation-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-DSCHRequiredPowerPerUEWeight ::= INTEGER(0..100)
-- Unit %, Range 0 ..100, Step 1%

HS-DSCHRequiredPowerValueInformation-For-CellPortion ::= SEQUENCE (SIZE (1..maxNrOfCellPortionsPerCell)) OF HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item

HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item ::= SEQUENCE{
    cellPortionID          CellPortionID,
    HS-DSCHRequiredPowerValue HS-DSCHRequiredPowerValue,
    iE-Extensions          ProtocolExtensionContainer { { HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item-ExtIEs} } OPTIONAL,
    ...
}

HS-DSCHRequiredPowerValueInformation-For-CellPortion-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-FDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlows-Information           HSDSCH-MACdFlows-Information,
    ueCapability-Info                     UE-Capability-Information,
    mAChs-Reordering-Buffer-Size-for-RLC-UM MACChsReorderingBufferSize-for-RLC-UM,
    cqiFeedback-CycleK                   CQI-Feedback-Cycle,
    cqiRepetitionFactor                 CQI-RepetitionFactor OPTIONAL,
    -- This IE shall be present if the CQI Feedback Cycle k is greater than 0
    ackNackRepetitionFactor             AckNack-RepetitionFactor,
    cqiPowerOffset                      CQI-Power-Offset,
    ackPowerOffset                      Ack-Power-Offset,
    nackPowerOffset                     Nack-Power-Offset,
    hsscch-PowerOffset                  HSSCCH-PowerOffset OPTIONAL,
    measurement-Power-Offset           Measurement-Power-Offset OPTIONAL,
    iE-Extensions                       ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs} } OPTIONAL,
    ...
}

HSDSCH-FDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-HARQ-Preamble-Mode CRITICALITY reject      EXTENSION HARQ-Preamble-Mode PRESENCE optional},
    ...
}

HSDSCH-TDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlows-Information           HSDSCH-MACdFlows-Information,
    ueCapability-Info                     UE-Capability-Information,
    mAChs-Reordering-Buffer-Size-for-RLC-UM MACChsReorderingBufferSize-for-RLC-UM,
    tDD-AckNack-Power-Offset              TDD-AckNack-Power-Offset,
    iE-Extensions                         ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs} } OPTIONAL,
    ...
}

HSDSCH-TDD-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```



```

}

HSDSCH-Information-to-Modify-Unsynchronised-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-HARQ-Preamble-Mode CRITICALITY reject      EXTENSION HARQ-Preamble-Mode PRESENCE optional},
  ...
}

HSDSCH-FDD-Information-Response ::= SEQUENCE {
  hsDSCH-MACdFlow-Specific-InformationResp          HSDSCH-MACdFlow-Specific-InformationResp           OPTIONAL,
  hsSCCH-Specific-Information-ResponseFDD           HSSCCH-Specific-InformationRespListFDD           OPTIONAL,
  HARQ-MemoryPartitioning                           HARQ-MemoryPartitioning                         OPTIONAL,
  iE-Extensions                                     ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }   OPTIONAL,
  ...
}

HSDSCH-FDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSDSCH-TDD-Information-Response ::= SEQUENCE {
  hsDSCH-MACdFlow-Specific-InformationResp          HSDSCH-MACdFlow-Specific-InformationResp           OPTIONAL,
  hsSCCH-Specific-Information-ResponseTDD           HSSCCH-Specific-InformationRespListTDD           OPTIONAL, -- Not Applicable to 1.28Mcps TDD
  hsSCCH-Specific-Information-ResponseTDDLCR        HSSCCH-Specific-InformationRespListTDDLCR         OPTIONAL, -- Not Applicable to 3.84Mcps TDD
  HARQ-MemoryPartitioning                           HARQ-MemoryPartitioning                         OPTIONAL,
  iE-Extensions                                     ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } }   OPTIONAL,
  ...
}

HSDSCH-TDD-Information-Response-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSDSCH-MACdFlow-Specific-InformationResp ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InformationResp-Item

HSDSCH-MACdFlow-Specific-InformationResp-Item ::= SEQUENCE {
  hsDSCHMacdFlow-Id                                HSDSCH-MACdFlow-ID,
  bindingID                                         BindingID           OPTIONAL,
  transportLayerAddress                            TransportLayerAddress   OPTIONAL,
  hsDSCH-Initial-Capacity-Allocation             HSDSCH-Initial-Capacity-Allocation OPTIONAL,
  iE-Extensions                                     ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs } }
  OPTIONAL,
  ...
}

HSDSCH-MACdFlow-Specific-InformationRespItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSDSCH-MACdFlows-Information ::= SEQUENCE {
  hsDSCH-MACdFlow-Specific-Info                    HSDSCH-MACdFlow-Specific-InfoList,
  priorityQueue-Info                             PriorityQueue-InfoList,
  iE-Extensions                                     ProtocolExtensionContainer { { HSDSCH-MACdFlows-Information-ExtIEs } }   OPTIONAL,
  ...
}

```

```

}

HSDSCH-MACdFlows-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSDSCH-MACdFlow-Specific-InfoList ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlow-Specific-InfoItem

HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
  hsDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
  allocationRetentionPriority AllocationRetentionPriority,
  bindingID                   BindingID           OPTIONAL,
  transportLayerAddress       TransportLayerAddress   OPTIONAL,
  iE-Extensions               ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs } }      OPTIONAL,
  ...
}

HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSDSCH-MACdFlows-to-Delete ::= SEQUENCE (SIZE (1..maxNrOfMACdFlows)) OF HSDSCH-MACdFlows-to-Delete-Item

HSDSCH-MACdFlows-to-Delete-Item ::= SEQUENCE {
  hsDSCH-MACdFlow-ID          HSDSCH-MACdFlow-ID,
  iE-Extensions               ProtocolExtensionContainer { { HSDSCH-MACdFlows-to-Delete-Item-ExtIEs } }      OPTIONAL,
  ...
}

HSDSCH-MACdFlows-to-Delete-Item-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSSCCH-PowerOffset ::= INTEGER (0..255)
-- PowerOffset = -32 + offset * 0.25
-- Unit dB, Range -32dB .. +31.75dB, Step +0.25dB

HSDSCH-Initial-Capacity-Allocation ::= SEQUENCE (SIZE (1..maxNrOfPriorityQueues)) OF HSDSCH-Initial-Capacity-AllocationItem

HSDSCH-Initial-Capacity-AllocationItem ::= SEQUENCE {
  schedulingPriorityIndicator SchedulingPriorityIndicator,
  maximum-MACdPDU-Size       MACdPDU-Size,
  hSDSCH-InitialWindowSize  HSDSCH-InitialWindowSize,
  iE-Extensions               ProtocolExtensionContainer { { HSDSCH-Initial-Capacity-AllocationItem-ExtIEs } } OPTIONAL,
  ...
}

HSDSCH-Initial-Capacity-AllocationItem-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

HSDSCH-InitialWindowSize      ::= INTEGER (1..255)
-- Number of MAC-d PDUs.

```

```

HSSCCH-Specific-InformationRespListFDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Codes

HSSCCH-Codes ::= SEQUENCE {
    codeNumber                                INTEGER (0..127),
    iE-Extensions                               ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemFDD-ExtIEs } }      OPTIONAL,
    ...
}

HSSCCH-Specific-InformationRespItemFDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-Specific-InformationRespListTDD ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDD

HSSCCH-Specific-InformationRespItemTDD ::= SEQUENCE {
    timeslot                                  TimeSlot,
    midambleShiftAndBurstType                 MidambleShiftAndBurstType,
    tDD-ChannelisationCode                   TDD-ChannelisationCode,
    hSICH-Info                                HSSICH-Info,
    iE-Extensions                               ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDD-ExtIEs } }      OPTIONAL,
    ...
}

HSSCCH-Specific-InformationRespItemTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-Specific-InformationRespListTDDLRC ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-Specific-InformationRespItemTDDLRC

HSSCCH-Specific-InformationRespItemTDDLRC ::= SEQUENCE {
    timeslotLCR                                TimeSlotLCR,
    midambleShiftLCR                            MidambleShiftLCR,
    first-TDD-ChannelisationCode                TDD-ChannelisationCode,
    second-TDD-ChannelisationCode               TDD-ChannelisationCode,
    hSICH-InfoLCR                             HSSICH-InfoLCR,
    iE-Extensions                               ProtocolExtensionContainer { { HSSCCH-Specific-InformationRespItemTDDLRC-ExtIEs } }      OPTIONAL,
    ...
}

HSSCCH-Specific-InformationRespItemTDDLRC-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-Info ::= SEQUENCE {
    hSICH-ID                                    HS-SICH-ID,
    timeslot                                   TimeSlot,
    midambleShiftAndBurstType                  MidambleShiftAndBurstType,
    tDD-ChannelisationCode                   TDD-ChannelisationCode,
    iE-Extensions                               ProtocolExtensionContainer { { HSSICH-Info-ExtIEs } }      OPTIONAL,
    ...
}

```

```

HSSICH-Info-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSICH-InfoLCR ::= SEQUENCE {
    hsSICH-ID                                HS-SICH-ID,
    timeslotLCR                               TimeSlotLCR,
    midambleShiftLCR                          MidambleShiftLCR,
    tDD-ChannelisationCode                    TDD-ChannelisationCode,
    iE-Extensions                             ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } }      OPTIONAL,
    ...
}

HSSICH-Info-LCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SICH-Reception-Quality-Value ::= SEQUENCE {
    failed-HS-SICH                         HS-SICH-failed,
    missed-HS-SICH                          HS-SICH-missed,
    total-HS-SICH                           HS-SICH-total,
    iE-Extensions                            ProtocolExtensionContainer { { HS-SICH-Reception-Quality-Value-ExtIEs } } OPTIONAL,
    ...
}

HS-SICH-Reception-Quality-Value-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HS-SICH-failed ::= INTEGER (0..20)

HS-SICH-missed ::= INTEGER (0..20)

HS-SICH-total ::= INTEGER (0..20)

HS-SICH-Reception-Quality-Measurement-Value ::= INTEGER (0..20)
-- According to mapping in [23]

HSDSCH-MACdFlow-ID ::= INTEGER (0..maxNrOfMACdFlows-1)

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

HS-PDSCH-FDD-Code-Information ::= SEQUENCE {
    number-of-HS-PDSCH-codes                INTEGER (0..maxHS-PDSCHCodeNrComp-1),
    hs-PDSCH-Start-code-number              HS-PDSCH-Start-code-number      OPTIONAL,
    -- Only included when number of HS-DSCH codes > 0
    iE-Extensions                           ProtocolExtensionContainer { { HS-PDSCH-FDD-Code-Information-ExtIEs } } OPTIONAL,
    ...
}

HS-PDSCH-FDD-Code-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

HS-PDSCH-Start-code-number ::= INTEGER (1..maxHS-PDSCHCodeNrComp-1)

HS-SCCH-ID ::= INTEGER (0..31)
HS-SICH-ID ::= INTEGER (0..31)

HS-SCCH-FDD-Code-Information ::= CHOICE {
    replace          HS-SCCH-FDD-Code-List,
    remove          NULL,
    ...
}

HS-SCCH-FDD-Code-List ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHs)) OF HS-SCCH-FDD-Code-Information-Item

HS-SCCH-FDD-Code-Information-Item ::= INTEGER (0..maxHS-SCCHCodeNrComp-1)

HSSCCH-CodeChangeIndicator ::= ENUMERATED {
    hsSCCHCodeChangeNeeded
}

HSSCCH-Code-Change-Grant ::= ENUMERATED {
    changeGranted
}

HSDSCH-FDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator           HSSCCH-CodeChangeIndicator           OPTIONAL,
    cqiFeedback-CycleK                 CQI-Feedback-Cycle                 OPTIONAL,
    cqiRepetitionFactor               CQI-RepetitionFactor               OPTIONAL,
    ackNackRepetitionFactor          AckNack-RepetitionFactor          OPTIONAL,
    cqiPowerOffset                    CQI-Power-Offset                  OPTIONAL,
    ackPowerOffset                   Ack-Power-Offset                  OPTIONAL,
    nackPowerOffset                  Nack-Power-Offset                OPTIONAL,
    iE-Extensions                     ProtocolExtensionContainer { { HSDSCH-FDD-Update-Information-ExtIEs } }   OPTIONAL,
    ...
}

HSDSCH-FDD-Update-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-TDD-Update-Information ::= SEQUENCE {
    hsSCCHCodeChangeIndicator           HSSCCH-CodeChangeIndicator           OPTIONAL,
    tDDAckNackPowerOffset              TDD-AckNack-Power-Offset             OPTIONAL,
    iE-Extensions                     ProtocolExtensionContainer { { HSDSCH-TDD-Update-Information-ExtIEs } }   OPTIONAL,
    ...
}

HSDSCH-TDD-Update-Information-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

-- =====
-- I

```

```

-- =====
/* 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)

RefTFCNumber ::= 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,
...                               ...                                         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 }|
{ ID id-UpPTSInterferenceValue        CRITICALITY reject      TYPE UpPTSInterferenceValue      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 TYPE
TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionValue PRESENCE mandatory } |
  { ID id-HS-DSCHRequiredPowerValue CRITICALITY reject TYPE HS-DSCHRequiredPowerValue 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 } |
  { ID id-UpPTSInterferenceValue CRITICALITY reject TYPE UpPTSInterferenceValue PRESENCE mandatory } |
  { ID id-HS-DSCHRequiredPowerValue-For-Cell-Portion CRITICALITY reject TYPE HS-DSCHRequiredPowerValue 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)

RLC-Mode ::= ENUMERATED {
    rLC-AM,
    rLC-UM,
    ...
}

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,
    gpsrxpos                GPS-RX-POS                                         OPTIONAL,
    iE-Extensions            ProtocolExtensionContainer { { RequestedDataValue-ExtIEs} }                                OPTIONAL,
    ...
}

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

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]

-- =====
-- S
-- =====

/* 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-mBMSNotificationUpdate ProcedureCode ::= 53
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
maxNrOfTFs	INTEGER ::= 32
maxNrOfTFCs	INTEGER ::= 1024
maxNrOfRLs	INTEGER ::= 16
maxNrOfRLs-1	INTEGER ::= 15 -- maxNrOfRLs - 1
maxNrOfRLs-2	INTEGER ::= 14 -- maxNrOfRLs - 2
maxNrOfRLSets	INTEGER ::= maxNrOfRLs
maxNrOfDPCHs	INTEGER ::= 240
maxNrOfDPCHLCRs	INTEGER ::= 240
maxNrOfSCCPCHs	INTEGER ::= 8
maxNrOfSCCPCHsinExt	INTEGER ::= 232
maxNrOfCPCHs	INTEGER ::= 16
maxNrOfPCPCHs	INTEGER ::= 64

```

maxNrOfDCHs           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
maxNrOfSCCPCHsLCRinExt INTEGER ::= 88
maxNrOfULTSs          INTEGER ::= 15
maxNrOfULTSLCRs       INTEGER ::= 6
maxNrOfUSCHs          INTEGER ::= 32
maxAPSigNum           INTEGER ::= 16
maxNrOfSlotFormatsPRACH INTEGER ::= 8
maxCellInNodeB         INTEGER ::= 256
maxCCPInNodeB          INTEGER ::= 256
maxCPCHCell            INTEGER ::= maxNrOfCPCHs
maxTFC                 INTEGER ::= 16777215
maxLocalCellInNodeB   INTEGER ::= maxCellInNodeB
maxNoofLen             INTEGER ::= 7
maxFPACHCell           INTEGER ::= 8
maxRACHCell            INTEGER ::= maxPRACHCell
maxPRACHCell           INTEGER ::= 16
maxPCPCHCell           INTEGER ::= 64
maxSCCPCHCell          INTEGER ::= 32
maxSCCPCHCellInExt    INTEGER ::= 208 -- maxNrOfSCCPCHs + maxNrOfSCCPCHsinExt - maxSCCPCHCell
maxSCCPCHCellInExtLCR INTEGER ::= 64 -- maxNrOfSCCPCHLCRs + maxNrOfSCCPCHsLCRinExt - maxSCCPCHCell
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
maxNrOfMeasNCell1       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
maxNrOfNIs               INTEGER ::= 256
maxNrOfPriorityQueues   INTEGER ::= 8
maxNrOfPriorityQueues-1  INTEGER ::= 7 -- maxNoOfPriorityQueues - 1
maxNrOfHARQProcesses     INTEGER ::= 8
maxNrOfContextsOnUeList  INTEGER ::= 16
maxNrOfCellPortionsPerCell  INTEGER ::= 64
maxNrOfCellPortionsPerCell-1  INTEGER ::= 63
maxNrOfPriorityClasses   INTEGER ::= 16
maxNrOfSatAlmanac-maxNoSat  INTEGER ::= 16 -- maxNrofSatAlmanac - maxNoSat

```

```

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

```

id-AICH-Information	ProtocolIE-ID ::= 0
id-AICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 1
id-BCH-Information	ProtocolIE-ID ::= 7
id-BCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 8
id-BCCH-ModificationTime	ProtocolIE-ID ::= 9
id-BlockingPriorityIndicator	ProtocolIE-ID ::= 10
id-Cause	ProtocolIE-ID ::= 13
id-CCP-InformationItem-AuditRsp	ProtocolIE-ID ::= 14
id-CCP-InformationList-AuditRsp	ProtocolIE-ID ::= 15
id-CCP-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 16
id-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 17
id-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 18
id-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 19
id-CellParameterID	ProtocolIE-ID ::= 23
id-CFN	ProtocolIE-ID ::= 24
id-C-ID	ProtocolIE-ID ::= 25
id-CommonMeasurementAccuracy	ProtocolIE-ID ::= 39
id-CommonMeasurementObjectType-CM-Rprt	ProtocolIE-ID ::= 31
id-CommonMeasurementObjectType-CM-Rqst	ProtocolIE-ID ::= 32
id-CommonMeasurementObjectType-CM-Rsp	ProtocolIE-ID ::= 33
id-CommonMeasurementType	ProtocolIE-ID ::= 34
id-CommonPhysicalChannelID	ProtocolIE-ID ::= 35
id-CommonPhysicalChannelType-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 36
id-CommonPhysicalChannelType-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 37
id-CommunicationControlPortID	ProtocolIE-ID ::= 40

id-ConfigurationGenerationID	ProtocolIE-ID ::= 43
id-CRNC-CommunicationContextID	ProtocolIE-ID ::= 44
id-CriticalityDiagnostics	ProtocolIE-ID ::= 45
id-DCHs-to-Add-FDD	ProtocolIE-ID ::= 48
id-DCH-AddList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 49
id-DCHs-to-Add-TDD	ProtocolIE-ID ::= 50
id-DCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 52
id-DCH-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 53
id-DCH-DeleteList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 54
id-DCH-DeleteList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 55
id-DCH-FDD-Information	ProtocolIE-ID ::= 56
id-DCH-TDD-Information	ProtocolIE-ID ::= 57
id-DCH-InformationResponse	ProtocolIE-ID ::= 59
id-FDD-DCHs-to-Modify	ProtocolIE-ID ::= 62
id-TDD-DCHs-to-Modify	ProtocolIE-ID ::= 63
id-DCH-ModifyList-RL-ReconfRqstTDD	ProtocolIE-ID ::= 65
id-DCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 135
id-DedicatedMeasurementObjectType-DM-Rprt	ProtocolIE-ID ::= 67
id-DedicatedMeasurementObjectType-DM-Rqst	ProtocolIE-ID ::= 68
id-DedicatedMeasurementObjectType-DM-Rsp	ProtocolIE-ID ::= 69
id-DedicatedMeasurementType	ProtocolIE-ID ::= 70
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD	ProtocolIE-ID ::= 72
id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD	ProtocolIE-ID ::= 73
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 76
id-DL-DPCH-InformationItem-RL-AdditionRqstTDD	ProtocolIE-ID ::= 77
id-DL-DPCH-InformationList-RL-SetupRqstTDD	ProtocolIE-ID ::= 79
id-DL-DPCH-Information-RL-ReconfPrepFDD	ProtocolIE-ID ::= 81
id-DL-DPCH-Information-RL-ReconfRqstFDD	ProtocolIE-ID ::= 82
id-DL-DPCH-Information-RL-SetupRqstFDD	ProtocolIE-ID ::= 83
id-DL-DPCH-TimingAdjustment	ProtocolIE-ID ::= 21
id-DL-ReferencePowerInformationItem-DL-PC-Rqst	ProtocolIE-ID ::= 84
id-DLReferencePower	ProtocolIE-ID ::= 85
id-DLReferencePowerList-DL-PC-Rqst	ProtocolIE-ID ::= 86
id-DSCH-AddItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 87
id-DSCHs-to-Add-FDD	ProtocolIE-ID ::= 89
id-DSCH-DeleteItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 91
id-DSCH-DeleteList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 93
id-DSCHs-to-Add-TDD	ProtocolIE-ID ::= 96
id-DSCH-Information-DeleteList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 98
id-DSCH-Information-ModifyList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 100
id-DSCH-InformationResponse	ProtocolIE-ID ::= 105
id-DSCH-FDD-Information	ProtocolIE-ID ::= 106
id-DSCH-TDD-Information	ProtocolIE-ID ::= 107
id-DSCH-ModifyItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 108
id-DSCH-ModifyList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 112
id-DSCH-RearrangeList-Bearer-RearrangeInd	ProtocolIE-ID ::= 136
id-End-Of-Audit-Sequence-Indicator	ProtocolIE-ID ::= 113
id-FACH-Information	ProtocolIE-ID ::= 116
id-FACH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 117
id-FACH-ParametersList-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 120
id-FACH-ParametersListIE-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 121
id-FACH-ParametersListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 122
id-IndicationType-ResourceStatusInd	ProtocolIE-ID ::= 123

id-Local-Cell-ID	ProtocolIE-ID ::= 124
id-Local-Cell-Group-InformationItem-AuditRsp	ProtocolIE-ID ::= 2
id-Local-Cell-Group-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 3
id-Local-Cell-Group-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 4
id-Local-Cell-Group-InformationList-AuditRsp	ProtocolIE-ID ::= 5
id-Local-Cell-InformationItem-AuditRsp	ProtocolIE-ID ::= 125
id-Local-Cell-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 126
id-Local-Cell-InformationItem2-ResourceStatusInd	ProtocolIE-ID ::= 127
id-Local-Cell-InformationList-AuditRsp	ProtocolIE-ID ::= 128
id-AdjustmentPeriod	ProtocolIE-ID ::= 129
id-MaxAdjustmentStep	ProtocolIE-ID ::= 130
id-MaximumTransmissionPower	ProtocolIE-ID ::= 131
id-MeasurementFilterCoefficient	ProtocolIE-ID ::= 132
id-MeasurementID	ProtocolIE-ID ::= 133
id-MessageStructure	ProtocolIE-ID ::= 115
id-MIB-SB-SIB-InformationList-SystemInfoUpdateRqst	ProtocolIE-ID ::= 134
id-NodeB-CommunicationContextID	ProtocolIE-ID ::= 143
id-NeighbouringCellMeasurementInformation	ProtocolIE-ID ::= 455
id-P-CCPCH-Information	ProtocolIE-ID ::= 144
id-P-CCPCH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 145
id-P-CPICH-Information	ProtocolIE-ID ::= 146
id-P-CPICH-InformationItem-ResourceStatusInd	ProtocolIE-ID ::= 147
id-P-SCH-Information	ProtocolIE-ID ::= 148
id-PCCPCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 150
id-PCCPCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 151
id-PCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 155
id-PCH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 156
id-PCH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 157
id-PCH-Information	ProtocolIE-ID ::= 158
id-PDSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 161
id-PDSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 162
id-PDSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 163
id-PDSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 164
id-PDSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 165
id-PICH-Information	ProtocolIE-ID ::= 166
id-PICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 168
id-PowerAdjustmentType	ProtocolIE-ID ::= 169
id-PRACH-Information	ProtocolIE-ID ::= 170
id-PrimaryCCPCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 175
id-PrimaryCCPCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 176
id-PrimaryCPICH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 177
id-PrimaryCPICH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 178
id-PrimarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 179
id-PrimarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 180
id-PrimaryScramblingCode	ProtocolIE-ID ::= 181
id-SCH-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 183
id-SCH-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 184
id-PUSCH-Information-AddListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 185
id-PUSCH-Information-ModifyListIE-PSCH-ReconfRqst	ProtocolIE-ID ::= 186
id-PUSCHSets-AddList-PSCH-ReconfRqst	ProtocolIE-ID ::= 187
id-PUSCHSets-DeleteList-PSCH-ReconfRqst	ProtocolIE-ID ::= 188
id-PUSCHSets-ModifyList-PSCH-ReconfRqst	ProtocolIE-ID ::= 189
id-RACH-Information	ProtocolIE-ID ::= 190

id-RACH-ParametersItem-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 196
id-RACH-ParameterItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 197
id-ReportCharacteristics	ProtocolIE-ID ::= 198
id-Reporting-Object-RL-FailureInd	ProtocolIE-ID ::= 199
id-Reporting-Object-RL-RestoreInd	ProtocolIE-ID ::= 200
id-RL-InformationItem-DM-Rprt	ProtocolIE-ID ::= 202
id-RL-InformationItem-DM-Rqst	ProtocolIE-ID ::= 203
id-RL-InformationItem-DM-Rsp	ProtocolIE-ID ::= 204
id-RL-InformationItem-RL-AdditionRqstFDD	ProtocolIE-ID ::= 205
id-RL-informationItem-RL-DeletionRqst	ProtocolIE-ID ::= 206
id-RL-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 207
id-RL-InformationItem-RL-PreemptRequiredInd	ProtocolIE-ID ::= 208
id-RL-InformationItem-RL-ReconfPrepFDD	ProtocolIE-ID ::= 209
id-RL-InformationItem-RL-ReconfRqstFDD	ProtocolIE-ID ::= 210
id-RL-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 211
id-RL-InformationItem-RL-SetupRqstFDD	ProtocolIE-ID ::= 212
id-RL-InformationList-RL-AdditionRqstFDD	ProtocolIE-ID ::= 213
id-RL-informationList-RL-DeletionRqst	ProtocolIE-ID ::= 214
id-RL-InformationList-RL-PreemptRequiredInd	ProtocolIE-ID ::= 215
id-RL-InformationList-RL-ReconfPrepFDD	ProtocolIE-ID ::= 216
id-RL-InformationList-RL-ReconfRqstFDD	ProtocolIE-ID ::= 217
id-RL-InformationList-RL-SetupRqstFDD	ProtocolIE-ID ::= 218
id-RL-InformationResponseItem-RL-AdditionRspFDD	ProtocolIE-ID ::= 219
id-RL-InformationResponseItem-RL-ReconfReady	ProtocolIE-ID ::= 220
id-RL-InformationResponseItem-RL-ReconfRsp	ProtocolIE-ID ::= 221
id-RL-InformationResponseItem-RL-SetupRspFDD	ProtocolIE-ID ::= 222
id-RL-InformationResponseList-RL-AdditionRspFDD	ProtocolIE-ID ::= 223
id-RL-InformationResponseList-RL-ReconfReady	ProtocolIE-ID ::= 224
id-RL-InformationResponseList-RL-ReconfRsp	ProtocolIE-ID ::= 225
id-RL-InformationResponseList-RL-SetupRspFDD	ProtocolIE-ID ::= 226
id-RL-InformationResponse-RL-AdditionRspTDD	ProtocolIE-ID ::= 227
id-RL-InformationResponse-RL-SetupRspTDD	ProtocolIE-ID ::= 228
id-RL-Information-RL-AdditionRqstTDD	ProtocolIE-ID ::= 229
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 230
id-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 236
id-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 238
id-RL-Set-InformationItem-DM-Rprt	ProtocolIE-ID ::= 240
id-RL-Set-InformationItem-DM-Rsp	ProtocolIE-ID ::= 241
id-RL-Set-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 242
id-RL-Set-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 247
id-S-CCPCH-Information	ProtocolIE-ID ::= 249
id-S-CPICH-Information	ProtocolIE-ID ::= 251
id-SCH-Information	ProtocolIE-ID ::= 253
id-S-SCH-Information	ProtocolIE-ID ::= 257
id-Secondary-CCPCHListIE-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 258
id-Secondary-CCPCH-parameterListIE-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 259
id-Secondary-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 260
id-SecondaryCPICH-InformationItem-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 261
id-SecondaryCPICH-InformationList-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 262
id-SecondaryCPICH-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 263
id-SecondarySCH-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 264

id-SecondarySCH-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 265
id-SegmentInformationListIE-SystemInfoUpdate	ProtocolIE-ID ::= 266
id-SFN	ProtocolIE-ID ::= 268
id-SignallingBearerRequestIndicator	ProtocolIE-ID ::= 138
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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
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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-ReconfRqstTDD	ProtocolIE-ID ::= 348
id-DL-CCTrCH-InformationModifyList-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-SFNRReportingIndicator	ProtocolIE-ID ::= 11
id-InnerLoopDLPCStatus	ProtocolIE-ID ::= 12
id-TimeslotISCPInfo	ProtocolIE-ID ::= 283
id-PICH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 167
id-PRACH-ParametersItem-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 20
id-CCTrCH-InformationItem-RL-FailureInd	ProtocolIE-ID ::= 46
id-CCTrCH-InformationItem-RL-RestoreInd	ProtocolIE-ID ::= 47
id-CauseLevel-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 420
id-CellAdjustmentInfo-SyncAdjustmntRqstTDD	ProtocolIE-ID ::= 421
id-CellAdjustmentInfoItem-SyncAdjustmentRqstTDD	ProtocolIE-ID ::= 494
id-CellSyncBurstInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 482
id-CellSyncBurstTransInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 422
id-CellSyncBurstMeasureInit-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 423
id-CellSyncBurstTransReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 424
id-CellSyncBurstMeasReconfiguration-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 425
id-CellSyncBurstTransInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 426
id-CellSyncBurstMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 427
id-CellSyncBurstTransReconfInfo-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 428
id-CellSyncInfo-CellSyncReprtTDD	ProtocolIE-ID ::= 429
id-CSBTtransmissionID	ProtocolIE-ID ::= 430
id-CSBMeasurementID	ProtocolIE-ID ::= 431
id-IntStdPhCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 432
id-NCyclesPerSFNperiod	ProtocolIE-ID ::= 433
id-NrepetitionsPerCyclePeriod	ProtocolIE-ID ::= 434
id-SyncFrameNumber	ProtocolIE-ID ::= 437
id-SynchronisationReportType	ProtocolIE-ID ::= 438
id-SynchronisationReportCharacteristics	ProtocolIE-ID ::= 439
id-Unsuccessful-cell-InformationRespItem-SyncAdjustmntFailureTDD	ProtocolIE-ID ::= 440
id-LateEntranceCellSyncInfoItem-CellSyncReprtTDD	ProtocolIE-ID ::= 119
id-ReferenceClockAvailability	ProtocolIE-ID ::= 435
id-ReferenceSFNoffset	ProtocolIE-ID ::= 436
id-InformationExchangeID	ProtocolIE-ID ::= 444
id-InformationExchangeObjectType-InfEx-Rqst	ProtocolIE-ID ::= 445
id-InformationType	ProtocolIE-ID ::= 446
id-InformationReportCharacteristics	ProtocolIE-ID ::= 447
id-InformationExchangeObjectType-InfEx-Rsp	ProtocolIE-ID ::= 448
id-InformationExchangeObjectType-InfEx-Rprt	ProtocolIE-ID ::= 449
id-IPDLParameter-Information-Cell-ReconfRqstFDD	ProtocolIE-ID ::= 451
id-IPDLParameter-Information-Cell-SetupRqstFDD	ProtocolIE-ID ::= 452
id-IPDLParameter-Information-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 453
id-IPDLParameter-Information-Cell-SetupRqstTDD	ProtocolIE-ID ::= 454
id-DL-DPCH-LCR-Information-RL-SetupRqstTDD	ProtocolIE-ID ::= 74
id-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-SetupRpstTDD	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-SFNSFNMeasurementValueInformation	ProtocolIE-ID ::= 513
id-SFNSFNMeasurementThresholdInformation	ProtocolIE-ID ::= 514
id-TUTRANGPSMeasurementValueInformation	ProtocolIE-ID ::= 515
id-TUTRANGPSMeasurementThresholdInformation	ProtocolIE-ID ::= 516
id-Rx-Timing-Deviation-Value-LCR	ProtocolIE-ID ::= 520
id-RL-InformationResponse-LCR-RL-AdditionRspTDD	ProtocolIE-ID ::= 51
id-DL-PowerBalancing-Information	ProtocolIE-ID ::= 28
id-DL-PowerBalancing-ActivationIndicator	ProtocolIE-ID ::= 29
id-DL-PowerBalancing-UpdatedIndicator	ProtocolIE-ID ::= 30
id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD	ProtocolIE-ID ::= 517
id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD	ProtocolIE-ID ::= 518
id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD	ProtocolIE-ID ::= 519
id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD	ProtocolIE-ID ::= 41
id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD	ProtocolIE-ID ::= 42
id-HS-PDSCH-HS-SCCH-MaxPower-PSCH-ReconfRqst	ProtocolIE-ID ::= 522
id-HS-PDSCH-HS-SCCH-ScramblingCode-PSCH-ReconfRqst	ProtocolIE-ID ::= 523
id-HS-PDSCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 524
id-HS-SCCH-FDD-Code-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 525
id-HS-PDSCH-TDD-Information-PSCH-ReconfRqst	ProtocolIE-ID ::= 526
id-Add-To-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 527
id-Modify-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 528
id-Delete-From-HS-SCCH-Resource-Pool-PSCH-ReconfRqst	ProtocolIE-ID ::= 529
id-bindingID	ProtocolIE-ID ::= 102
id-RL-Specific-DCH-Info	ProtocolIE-ID ::= 103
id-transportlayeraddress	ProtocolIE-ID ::= 104
id-DelayedActivation	ProtocolIE-ID ::= 231
id-DelayedActivationList-RL-ActivationCmdFDD	ProtocolIE-ID ::= 232
id-DelayedActivationInformation-RL-ActivationCmdFDD	ProtocolIE-ID ::= 233
id-DelayedActivationList-RL-ActivationCmdTDD	ProtocolIE-ID ::= 234
id-DelayedActivationInformation-RL-ActivationCmdTDD	ProtocolIE-ID ::= 235
id-neighbouringTDDCellMeasurementInformationLCR	ProtocolIE-ID ::= 58
id-SYNCDlCodeId-TransInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 543
id-SYNCDlCodeId-MeasureInitLCR-CellSyncInitiationRqstTDD	ProtocolIE-ID ::= 544
id-SYNCDlCodeIdTransReconfInfoLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 545
id-SYNCDlCodeIdMeasReconfigurationLCR-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 546
id-SYNCDlCodeIdMeasInfoList-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 547
id-SyncDLCodeIdsMeasInfoList-CellSyncReprtTDD	ProtocolIE-ID ::= 548
id-SyncDLCodeIdThreInfoLCR	ProtocolIE-ID ::= 549
id-NSubCyclesPerCyclePeriod-CellSyncReconfRqstTDD	ProtocolIE-ID ::= 550
id-DwPCH-Power	ProtocolIE-ID ::= 551
id-AccumulatedClockupdate-CellSyncReprtTDD	ProtocolIE-ID ::= 552
id-Angle-Of-Arrival-Value-LCR	ProtocolIE-ID ::= 521
id-HSDSCH-FDD-Information	ProtocolIE-ID ::= 530
id-HSDSCH-FDD-Information-Response	ProtocolIE-ID ::= 531
id-HSDSCH-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-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-DSCHProvidedBitRateValueInformation	ProtocolIE-ID ::= 583
id-HS-DSCHRequiredPowerValueInformation	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-NumberOfReportedCellPortions	ProtocolIE-ID ::= 596
id-CellPortion-InformationItem-Cell-SetupRqstFDD	ProtocolIE-ID ::= 597
id-CellPortion-InformationList-Cell-SetupRqstFDD	ProtocolIE-ID ::= 598
id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD	ProtocolIE-ID ::= 599
id-Secondary-CPICH-Information	ProtocolIE-ID ::= 600
id-Received-total-wide-band-power-For-CellPortion	ProtocolIE-ID ::= 601
id-Unidirectional-DCH-Indicator	ProtocolIE-ID ::= 602
id-TimingAdjustmentValueLCR	ProtocolIE-ID ::= 603
id-multipleRL-dl-DPCH-InformationList	ProtocolIE-ID ::= 604
id-multipleRL-dl-DPCH-InformationModifyList	ProtocolIE-ID ::= 605
id-multipleRL-ul-DPCH-InformationList	ProtocolIE-ID ::= 606

id-multipleRL-ul-DPCH-InformationModifyList	ProtocolIE-ID ::= 607
id-RL-ID	ProtocolIE-ID ::= 608
id-SAT-Info-Almanac-ExtItem	ProtocolIE-ID ::= 609
id-HSDPA-Capability	ProtocolIE-ID ::= 610
id-HSDSCH-Resources-Information-AuditRsp	ProtocolIE-ID ::= 611
id-HSDSCH-Resources-Information-ResourceStatusInd	ProtocolIE-ID ::= 612
id-HSDSCH-MACdFlows-to-Add	ProtocolIE-ID ::= 613
id-HSDSCH-MACdFlows-to-Delete	ProtocolIE-ID ::= 614
id-HSDSCH-Information-to-Modify-Unsynchronised	ProtocolIE-ID ::= 615
id-TnlQos	ProtocolIE-ID ::= 616
id-Received-total-wide-band-power-For-CellPortion-Value	ProtocolIE-ID ::= 617
id-Transmitted-Carrier-Power-For-CellPortion	ProtocolIE-ID ::= 618
id-Transmitted-Carrier-Power-For-CellPortion-Value	ProtocolIE-ID ::= 619
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortion	ProtocolIE-ID ::= 620
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmissionCellPortionValue	ProtocolIE-ID ::= 621
id-UpPTSInterferenceValue	ProtocolIE-ID ::= 622
id-PrimaryCCPCH-RSCP-Delta	ProtocolIE-ID ::= 623
id-MeasurementRecoveryBehavior	ProtocolIE-ID ::= 624
id-MeasurementRecoveryReportingIndicator	ProtocolIE-ID ::= 625
id-MeasurementRecoverySupportIndicator	ProtocolIE-ID ::= 626
id-Tstd-indicator	ProtocolIE-ID ::= 627
id-multiple-RL-Information-RL-ReconfPrepTDD	ProtocolIE-ID ::= 628
id-multiple-RL-Information-RL-ReconfRqstTDD	ProtocolIE-ID ::= 629
id-Additional-S-CCPCH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 633
id-Additional-S-CCPCH-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 634
id-Additional-S-CCPCH-LCR-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 635
id-Additional-S-CCPCH-LCR-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 636
id-MICH-CFN	ProtocolIE-ID ::= 637
id-MICH-Information-AuditRsp	ProtocolIE-ID ::= 638
id-MICH-Information-ResourceStatusInd	ProtocolIE-ID ::= 639
id-MICH-Parameters-CTCH-ReconfRqstFDD	ProtocolIE-ID ::= 640
id-MICH-Parameters-CTCH-ReconfRqstTDD	ProtocolIE-ID ::= 641
id-MICH-Parameters-CTCH-SetupRqstFDD	ProtocolIE-ID ::= 642
id-MICH-Parameters-CTCH-SetupRqstTDD	ProtocolIE-ID ::= 643
id-Modification-Period	ProtocolIE-ID ::= 644
id-NI-Information-NotifUpdateCmd	ProtocolIE-ID ::= 645
id-S-CCPCH-InformationListExt-AuditRsp	ProtocolIE-ID ::= 646
id-S-CCPCH-InformationListExt-ResourceStatusInd	ProtocolIE-ID ::= 647
id-S-CCPCH-LCR-InformationListExt-AuditRsp	ProtocolIE-ID ::= 648
id-S-CCPCH-LCR-InformationListExt-ResourceStatusInd	ProtocolIE-ID ::= 649
id-HARQ-Preamble-Mode	ProtocolIE-ID ::= 650
id-HSDPA-CellPortion-InformationItem-PSCH-ReconfRqst	ProtocolIE-ID ::= 658
id-HSDPA-CellPortion-InformationList-PSCH-ReconfRqst	ProtocolIE-ID ::= 659
id-HS-DSCHRequiredPowerValue-For-Cell-Portion	ProtocolIE-ID ::= 660
id-HS-DSCHRequiredPowerValueInformation-For-CellPortion	ProtocolIE-ID ::= 661
id-HS-DSCHProvidedBitRateValueInformation-For-CellPortion	ProtocolIE-ID ::= 662

END