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

RP-030119

Title: CR (Rel-5) on TS 25.331 (HS-DSCH midamble shift in TDD) (linked with 25.423 CR 779 agreed in RAN WG3)

Source: TSG-RAN WG2 and TSG-RAN WG3

Agenda item: 8.2.6

Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level	Workitem	Originator Working Group
25.331	1874	-	Rel-5	TDD HS-DSCH midamble shift and burst type	F	5.3.0	5.4.0	R2-030547	HSDPA-L23	TSG-RAN WG2
25.423	800	1	Rel-5	Signalling of Midamble Shift and Burst type for HS-PDSCH in TDD	F	5.4.0	5.5.0	R3-030285	HSDPA-Iublur	TSG-RAN WG3

CR-Form-v7

CHANGE REQUEST

⌘ **25.331 CR 1874** ⌘ **rev** **-** ⌘ Current version: **5.3.0** ⌘

*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 **X** Radio Access Network **X** Core Network ☐

Title:	⌘	TDD HS-DSCH midamble shift and burst type
Source:	⌘	TSG-RAN WG2
Work item code:	⌘	HSDPA-L23 **Date:** ⌘ 18/02/2003
Category:	⌘	**F** **Release:** ⌘ Rel-5

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

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

Reason for change:	⌘	For 3.84 Mcps TDD HS-DSCH allocations and reception it is necessary to know the Burst Type (1 or 2) and Midamble (Default, Common or UE specific). For 1.28 Mcps TDD HS-PDSCH Midamble Configuration and HS-SCCH Midamble Shift have been added to the tables.
Summary of change:	⌘	Semi static midamble shift and burst type configurations are specified by timeslot for HS-DSCH allocations in Downlink HS-PDSCH Information (10.3.6.23a) and a description for the Midamble Shift for HS-SCCH has been added in 10.3.6.36a. HS-DSCH timeslots may be dynamically assigned. These configurations are only used during HS-PDSCH allocations. When these timeslots are used for other physical channel types these configurations do not apply. Related ASN.1 changes: - DL-HSPDSCH-Information - DL-HSPDSCH-TS-Configuration (new) - HS-SCCH-Info - HS-PDSCH-Midamble-Configuration-TDD128 (new) - HS-SCCH-TDD128List
Consequences if not approved:	⌘	For 1.28 Mcps TDD the Midamble Allocation, Configuration Type and Burst Type for HS-PDSCH will be static and HS-SCCH will not have any midamble shift if the changes are not accepted. For 3.84 Mcps TDD Midamble and burst type are not

	specified for TDD HS-PDSCH.

Clauses affected:	⌘	8.6.6.32; 10.3.6.23a; 10.3.6.36a; 11.3		

		Y	**N**			
Other specs	⌘	**X**		Other core specifications	⌘	25.423 CR 800rev1.
affected:			**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.

8.6.6.32 Downlink HS-PDSCH Information

If the IE "Downlink HS-PDSCH Information" is included and the UE would enter CELL_DCH state according to subclause 8.6.3.3 applied on the received message, the UE shall:

> 1> if the IE "New H-RNTI" is included:
>
>> 2> perform the actions as specified in subclause 8.6.3.1b.
>
> 1> if the IE "HS-SCCH Info" is included:
>
>> 2> act as specified in subclause 8.6.6.33.
>
> 1> if the IE "Measurement Feedback Info" is included:
>
>> 2> act as specified in subclause 8.6.6.34.
>
> 1> if, as a result of the received message, the variable H_RNTI is set and the UE has a stored IE "HS-SCCH Info" and a stored IE "Measurement Feedback Info":
>
>> 2> set the variable HS_DSCH_RECEPTION to TRUE;
>
>> 2> start HS-DSCH reception procedures according to the stored HS-PDSCH configuration:
>
>>> 3> as stated in subclause 8.6.3.1b for the IE "H-RNTI";
>
>>> 3> in subclause 8.6.6.33 for the IE "HS-SCCH Info"; and
>
>>> 3> in subclause 8.6.6.34 for the IE "Measurement Feedback Info".
>
> 1> if the IE "HS-DSCH Timeslot Configuration" is included:
>
>> 2> store the received configuration.

If the IE "Downlink HS-PDSCH Information" is not included, the UE shall:

> 1> set the variable HS_DSCH_RECEPTION to FALSE;
>
> 1> stop HS-DSCH reception procedures according to the stored HS-PDSCH configuration.

10.3.6.36a HS-SCCH Info

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
CHOICE mode	MP				REL-5
>FDD					REL-5
>>HS-SCCH Channelisation Code Information	MP	<1 to maxHSSCCHcodes>			REL-5
>>>HS-SCCH Channelisation Code	MP		Integer (0..127)		REL-5
>TDD					REL-5
>>CHOICE *TDD option*	MP				REL-5
>>>3.84 Mcps					REL-5
>>>>HS-SCCH Set Configuration	MP	1 to <maxHS-SCCHs>			REL-5
>>>>>Timeslot number	MP		Integer (0..14)		REL-5
>>>>>Channelisation code	MP		Enumerated ((16/1)..(16/16))		REL-5
>>>>>Midamble Allocation mode	MP		Enumerated (Default midamble, Common midamble)	HS-SCCH always uses burst type 1.	REL-5
>>>>>Midamble configuration	MP		Integer (4, 8, 16)		REL-5
>>>>>BLER target	MP		Real (-3.15..0 by step of 0.05)	Signalled value is Log10(HS-SCCH BLER quality target)	REL-5
>>>>>HS-SICH configuration					REL-5
>>>>>>Timeslot number	MP		Integer (0..14)		REL-5
>>>>>>Channelisation code	MP		Enumerated ((16/1)..(16/16))		REL-5
>>>>>>Midamble Allocation mode	MP		Enumerated (Default midamble, UE specific midamble)		REL-5
>>>>>>Midamble configuration	MP		Integer (4, 8, 16)		REL-5
>>>>>>Midamble Shift	CV-*UE*		Integer (0..15)		REL-5
>>>>>>Ack-Nack Power Offset	MP		Integer (-7..8 by step of 1)	dB	REL-5
>>>>>>UL target SIR	MP		Real (-11..20 by step of 0.5)	dB	REL-5
>>>1.28 Mcps					REL-5
>>>>HS-SCCH Set	MP	1 to			REL-5

Configuration		<maxHS-SCCHs>			
>>>>>Timeslot number	MP		Integer (0..6)		REL-5
>>>>>First Channelisation code	MP		Enumerated ((16/1) ..(16/16))		REL-5
>>>>>Second Channelisation code	MP		Enumerated ((16/1) ..(16/16))		REL-5
>>>>>Midamble Allocation mode	MP		Enumerated (Default midamble, Common midamble, UE specific midamble)		REL-5
>>>>> Midamble Shift	CV-UE		Integer (0..15)		REL-5
>>>>>Midamble configuration	MP		Integer (2, 4, 6, 8, 10, 12, 14, 16)		REL-5
>>>>>BLER target	MP		Real (-3.15..0 by step of 0.05)	Signalled value is Log10(HS-SCCH BLER quality target)	REL-5
>>>>>HS-SICH configuration					REL-5
>>>>>>Timeslot number	MP		Integer (0..6)		REL-5
>>>>>>Channelisation code	MP		Enumerated ((16/1) ..(16/16))		REL-5
>>>>>>Midamble Allocation mode	MP		Enumerated (Default midamble, UE specific midamble)		REL-5
>>>>>>Midamble configuration	MP		Integer (2, 4, 6, 8, 10, 12, 14, 16)		REL-5
>>>>>>Midamble Shift	CV-UE		Integer (0..15)		REL-5
>>>>>>Ack-Nack Power Offset	MP		Integer (-7..8 by step of 1)	dB.	REL-5
>>>>>>PRX$_{HS\text{-}SICH}$	MP		Integer (-120..-58 by step of 1)	dBm. Desired power level for HS-SICH.	REL-5
>>>>>>TPC step size	MP		Integer (1, 2, 3)	dB.	REL-5

Condition	Explanation
UE	This IE is mandatory present when the value of the IE "Midamble Allocation Mode" is "UE specific midamble" and not needed otherwise.

CR page 5

10.3.6.23a   Downlink HS-PDSCH Information

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
HS-SCCH Info	OP		HS-SCCH Info 10.3.6.36a		REL-5
>>Measurement Feedback Info	OP		Measurement Feedback Info 10.3.6.40a		REL-5
CHOICE mode	MP				REL-5
>TDD					
>>CHOICE *TDD option*	MP				REL-5
>>>TDD3.84 Mcps					
>>>>HS-DSCH Timeslot Configuration	OP		10.3.6.xx		REL-5
>>> 1.28 Mcps					
>>>> HS-PDSCH Midamble Configuration	MP				
>>>>> Midamble Allocation Mode	MP		Enumerated(Default midamble, Common midamble, UE specific midamble)	This midamble allocation mode applies to all HS-PDSCH resources assigned to the UE.	REL-5
>>>>> Midamble Configuration	MP		Integer(2, 4, 6, 8, 10, 12, 14, 16)	This configuration applies to all HS-PDSCH resources assigned to the UE.	REL-5
>>>>> Midamble Shift	CV-UE		Integer(0..15)	This shift, when present, applies to all HS-PDSCH resources assigned to the UE.	REL-5
>FDD				(No data)	

10.3.6.xx   HS-PDSCH Timeslot Configuration

NOTE: Only for TDD 3.84 Mcps.

Information Element/Group name	Need	Multi	Type and reference	Semantics description	Version
HS-DSCH timeslot midamble shift and burst type	MP	1 to <maxTS>			REL-5
>Timeslot	MP		Timeslot Number 10.3.6.84		REL-5
>Midamble shift and burst type	MP		Midamble shift and burst type 10.3.6.41	Midamble shift and burst type that will be used when HS-PDSCH is allocated	REL-5

```
-- **************************************************
--
--      PHYSICAL CHANNEL INFORMATION ELEMENTS (10.3.6)
--
-- **************************************************

DL-HSPDSCH-Information ::=          SEQUENCE {
    hs-scch-Info                   HS-SCCH-Info,
    measurement-feedback-Info      Measurement-Feedback-Info   OPTIONAL
    modeSpecificInfo               CHOICE {
        tdd                            CHOICE{
            tdd384                     DL-HSPDSCH-TS-Configuration    OPTIONAL,
            tdd128                     HS-PDSCH-Midamble-Configuration-TDD128
        },
        fdd                        NULL
    },
}


DL-HSPDSCH-TS-Configuration ::=     SEQUENCE (SIZE (1..maxTS)) OF
                                    SEQUENCE {
    timeslot                           TimeslotNumber,
    midambleShiftAndBurstType          MidambleShiftAndBurstType
}
-- only apply to tdd-384 R-5

HS-SCCH-Info ::=                    SEQUENCE {
    modeSpecificInfo                   CHOICE {
        fdd                                SEQUENCE (SIZE (1..maxHSSCCHs)) OF
                                               HS-SCCH-Codes,
        tdd                                CHOICE {
            tdd384                             SEQUENCE (SIZE (1..maxHSSCCHs)) OF
                                                   HS-SCCH-TDD384,
            tdd128                                               TDD128,
                                           SEQUENCE (SIZE (1..maxHSSCCHs)) OF
                                               HS-SCCH-TDD128

        }
    }
}

HS-PDSCH-Midamble-Configuration-TDD128  :=  SEQUENCE {
    MidambleAllocationMode             CHOICE{
        defaultMidamble                    NULL,
        commonMidamble                     NULL,
        ueSpecificMidamble                 SEQUENCE{
            midambleShift                      INTEGER(1..15)
        }
    },
    MidambleConfiguration              Integer (1..8)
}
HS-SCCH-TDD128 ::=                  SEQUENCE (SIZE (1..maxHSSCCHs)) OF
                                        HS-SCCH-TDD128List


HS-SCCH-TDD128List ::=             SEQUENCE {
    timeslotNumber                     TimeslotNumber-LCR-r4,
    firstChannelisationCode            HS-ChannelisationCode-LCR,
    secondChannelisationCode           HS-ChannelisationCode-LCR,
    midambleAllocationMode             CHOICE {
        defaultMidamble                    NULL,
        commonMidamble                     NULL,
        ueSpecificMidamble                 SEQUENCE {
            midambleShift                      INTEGER(1..15)
        }
    },
    -- Actual value midambleConfiguration = IE value * 2
```

```
    midambleConfiguration              INTEGER (1..8),
    bler-target                        Bler-Target,
    hs-sich-configuration              HS-SICH-Configuration-TDD128
}
```

CR-Form-v7

CHANGE REQUEST

| ⌘ | **25.423** CR **800** | ⌘**rev** **1** | ⌘ | Current version: | **5.4.0** | ⌘ |

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

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

Title:	⌘	Signalling of Midamble Shift and Burst type for HS-PDSCH in TDD			
Source:	⌘	RAN WG3			
Work item code:⌘	HSDPA-IubIur		***Date:*** ⌘	31/01/2002	
Category:	⌘	**F**	***Release:*** ⌘	Rel-5	

Use <u>one</u> of the following categories:
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   R97 *(Release 1997)*
   R98 *(Release 1998)*
   R99 *(Release 1999)*
   Rel-4 *(Release 4)*
   Rel-5 *(Release 5)*
   Rel-6 *(Release 6)*

Reason for change:	⌘	Currently in the allocations of HS-DSCH channels which is done on the HS-SCCH does not include the Midamble shift and Burst Type for 3.84 Mcps and does not include the midamble shift for 1.28 Mcps. Offline discussion in RAN1 determined that the HS-SCCH does not have room for the semi-static Midamble shift and burst tpe signalling, making it necessary to be signalled to the UE at the setup of the UE HS-DSCH service and at any change of these parameters. This being the case, the CRNC which picks the codes/burst types/midamble shifts for the HS-DSCH pool must tell the SRNC upon HS-DSCH setup what the value of these parameters are for each timeslot that could be used for HS-DSCH. It also needs to tell the SRNC if the CRNC needs to modify these parameters at any time for its own purposes.
Summary of change:⌘		A list of HS-DSCH timeslots and there corresponding Midamble shifts/burst types are passed in the HS-DSCH TDD information response IE. They are also included in the PHYSICAL CHANNEL RECONFIGURATION REQUEST message so that the changing of the midamble shift/burst type can be done synchronously. Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects the newly added HS-DSCH for TDD.
Consequences if not approved:	⌘	HSDPA will not be functional in UTRAN over the Iur since the UE will not be able to know the midamble shift and burst type of HS-PDSCH transmissions.
Clauses affected:	⌘	8.3.8.2, 9.1.21.2, 9.2.3.3ab, 9.3.3, 9.3.4, 9.3.6

		Y	N			
Other specs	⌘	X		Other core specifications	⌘	TS 25.331 CR 1874
affected:			X	Test specifications		
			X	O&M Specifications		
Other comments:	⌘					

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## 8.3.8   Physical Channel Reconfiguration

8.3.8.1   General

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

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

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

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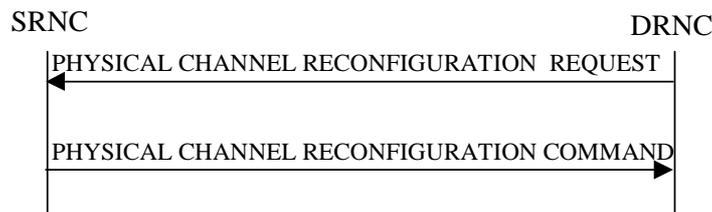
Figure 16: Physical Channel Reconfiguration procedure, Successful Operation

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

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

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

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

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

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

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

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

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

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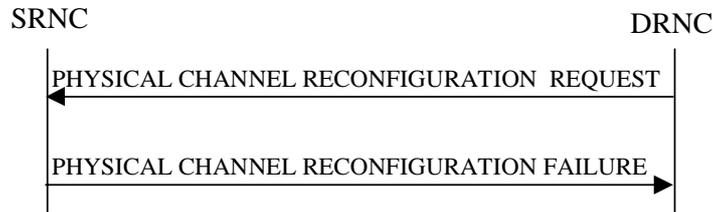
Figure 17: Physical Channel Reconfiguration procedure, Unsuccessful Operation

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

Typical cause values are:

Radio Network Layer Causes:

-    Reconfiguration not Allowed.

8.3.8.4   Abnormal Conditions

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

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

9.1.21   PHYSICAL CHANNEL RECONFIGURATION REQUEST

9.1.21.2   TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
RL Information		*1*			YES	reject
>RL ID	M		9.2.1.49		–	
>UL CCTrCH Information		*0.. <maxnoof CCTrCHs>*			GLOBAL	reject
>>CCTrCH ID	M		9.2.3.2		–	
>>UL DPCH Information		*1*			YES	notify
>>>Repetition Period	O		9.2.3.7		–	
>>>Repetition Length	O		9.2.3.6		–	
>>>TDD DPCH Offset	O		9.2.3.8A		–	
>>>UL Timeslot Information		*0..<maxnoOfTS>*		Applicable to 3.84Mcps TDD only	–	
>>>>Time Slot	M		9.2.1.56		–	
>>>>Midamble Shift And Burst Type	O		9.2.3.4		–	
>>>>TFCI Presence	O		9.2.1.55		–	
>>>>UL Code Information	O		TDD UL Code Information 9.2.3.10A		–	
>>>UL Timeslot Information LCR		*0..<maxnoOfTSLCR>*		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>>>>Time Slot LCR	M		9.2.3.12a		–	
>>>>Midamble Shift LCR	O		9.2.3.4C		–	
>>>>TFCI Presence	O		9.2.1.55		–	
>>>>UL Code Information LCR	O		TDD UL Code Information LCR 9.2.3.10B		–	
>DL CCTrCH Information		*0..<maxnoofCCTrCHs>*			GLOBAL	reject
>>CCTrCH ID	M		9.2.3.2		–	
>>DL DPCH Information		*1*			YES	notify
>>>Repetition Period	O		9.2.3.7		–	
>>>Repetition Length	O		9.2.3.6		–	
>>>TDD DPCH Offset	O		9.2.3.8A		–	
>>>DL Timeslot Information		*0..<maxnoOfTS>*		Applicable to 3.84Mcps TDD only	–	
>>>>Time Slot	M		9.2.1.56		–	
>>>>Midamble Shift And Burst Type	O		9.2.3.4		–	
>>>>TFCI Presence	O		9.2.1.55		–	
>>>>DL Code Information	O		TDD DL Code Information 9.2.3.8C		–	
>>>DL Timeslot Information LCR		*0..<maxnoOfTSLCR>*		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>>>>Time Slot LCR	M		9.2.3.12a		–	

>>>>Midamble Shift LCR	O		9.2.3.4C		–	
>>>>TFCI Presence	O		9.2.1.55		–	
>>>>DL Code Information LCR	O		TDD DL Code Information LCR 9.2.3.8D		–	
>HS-PDSCH Timeslot Specific Information		*0..<maxno ofDLts>*		Applicable to 3.84Mcps TDD only.	GLOBAL	reject
>>Time Slot	M		9.2.3.23		–	
>>Midamble Shift And Burst Type	M		9.2.3.7		–	
>HS-PDSCH Timeslot Specific Information LCR		*0..<maxno ofDLtsLCR >*		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>>Time Slot LCR	M		9.2.3.24a		–	
>>Midamble Shift LCR	M		9.2.3.7A		–	

Range bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
maxnoofTS	Maximum number of Timeslots for a UE for 3.84Mcps TDD.
maxnoofTSLCR	Maximum number of Timeslots for a UE for 1.28Mcps TDD.
maxnoofDLts	Maximum number of downlink time slots per Radio Link for 3.84Mcps TDD.
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.

9.2.3.3ab   HS-DSCH TDD Information Response

The *HS-DSCH TDD Information Response* IE provides information for HS-DSCH that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information Response		1..<maxnoofMACdFlows>			–	
>HS-DSCH MAC-d Flow ID	M		9.2.1.30O		–	
>Binding ID	O		9.2.1.3		–	
>Transport Layer Address	O		9.2.1.62		–	
>HS-DSCH Initial Capacity Allocation	O		9.2.1.30Na		–	
HS-SCCH Specific Information Response		0..<maxnoofHSSCCHcodes>		Mandatory for 3.84Mcps TDD	– ~~GLOBAL~~	~~reject~~
>Time Slot	M		9.2.3.23			
>Midamble Shift And Burst Type	M		9.2.3.7			
>TDD Channelisation Code	M		9.2.3.19			
>HS-SICH Information		1				
>>Time Slot	M		9.2.3.23			
>>Midamble Shift And Burst Type	M		9.2.3.7			
>>TDD Channelisation Code	M		9.2.3.19			
HS-SCCH Specific Information Response LCR		0..<maxnoofHSSCCHcodes>		Mandatory for 1.28Mcps TDD only	– ~~GLOBAL~~	~~reject~~
>Time Slot LCR	M		9.2.3.24a			
>Midamble shift LCR	M		9.2.3.7A			
>First TDD Channelisation Code LCR	M		TDD Channelisation Code LCR 9.2.3.19a			
>Second TDD Channelisation Code LCR	M		TDD Channelisation Code LCR 9.2.3.19a			
>HS-SICH Information LCR		1				
>>Time Slot LCR	M		9.2.3.24a			
>>Midamble shift LCR	M		9.2.3.7A			
>>TDD Channelisation Code LCR	M		9.2.3.19a			
HS-PDSCH Timeslot Specific Information Response		0..<maxnoofDLts>		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	–	
>Time Slot	M		9.2.3.23		–	
>Midamble Shift And Burst Type	M		9.2.3.7		–	
HS-PDSCH Timeslot Specific Information Response LCR		0..<maxnoofDLtsLCR>		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	–	
>Time Slot LCR	M		9.2.3.24a		–	
>Midamble Shift LCR	M		9.2.3.7A		–	

Range bound	Explanation
maxnoofMACdFlows	Maximum number of MAC-d flows.
maxnoofHSSCCHcodes	Maximum number of HS-SCCH codes.
maxnoofDLts	Maximum number of downlink time slots per Radio Link for 3.84Mcps TDD.
maxnoofDLtsLCR	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD.

9.3.3 PDU Definitions

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

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

DEFINITIONS AUTOMATIC TAGS ::=

BEGIN

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

IMPORTS
    Active-Pattern-Sequence-Information,
    AllocationRetentionPriority,
    AllowedQueuingTime,
    Allowed-Rate-Information,
    AlphaValue,
    AntennaColocationIndicator,
    BLER,
    SCTD-Indicator,
    BindingID,
    C-ID,
    C-RNTI,
    CCTrCH-ID,
    CFN,
    ClosedLoopMode1-SupportIndicator,
    ClosedLoopMode2-SupportIndicator,
    Closedlooptimingadjustmentmode,
    CN-CS-DomainIdentifier,
    CN-PS-DomainIdentifier,
    CNDomainType,
    Cause,
    CellCapabilityContainer-FDD,
    CellCapabilityContainer-TDD,
    CellCapabilityContainer-TDD-LCR,
    CellParameterID,
    ChipOffset,
    CommonMeasurementAccuracy,
    CommonMeasurementType,
    CommonMeasurementValue,
```

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

```
FDD-DL-CodeInformation,
FDD-S-CCPCH-Offset,
FDD-TPC-DownlinkStepSize,
FirstRLS-Indicator,
FNReportingIndicator,
FrameHandlingPriority,
FrameOffset,
GA-AccessPointPosition,
GA-Cell,

GA-CellAdditionalShapes,
HCS-Prio,
HSDSCH-FDD-Information,
HSDSCH-FDD-Information-Response,
HSDSCH-FDD-Update-Information,
HSDSCH-TDD-Update-Information,
HSDSCH-Information-to-Modify,
HSDSCH-MACdFlow-ID,
HSDSCH-RNTI,
HSDSCH-TDD-Information,
HSDSCH-TDD-Information-Response,
IMSI,
InformationExchangeID,
InformationReportCharacteristics,
InformationType,
InnerLoopDLPCStatus,
L3-Information,
SplitType,
LengthOfTFCI2,
LimitedPowerIncrease,
MaximumAllowedULTxPower,
MaxNrDLPhysicalchannels,
MaxNrOfUL-DPCHs,
MaxNrTimeslots,
MaxNrULPhysicalchannels,
MeasurementFilterCoefficient,
MeasurementID,
MidambleAllocationMode,
MidambleShiftAndBurstType,
MidambleShiftLCR,
MinimumSpreadingFactor,
MinUL-ChannelisationCodeLength,
MultiplexingPosition,
NeighbouringFDDCellMeasurementInformation,
NeighbouringTDDCellMeasurementInformation,
Neighbouring-GSM-CellInformation,
Neighbouring-UMTS-CellInformation,
NeighbouringTDDCellMeasurementInformationLCR,
NrOfDLchannelisationcodes,
PagingCause,
PagingRecordType,
PartialReportingIndicator,
PDSCHCodeMapping,
```

```
PayloadCRC-PresenceIndicator,
PCCPCH-Power,
PC-Preamble,
Permanent-NAS-UE-Identity,
PowerAdjustmentType,
PowerOffset,
PrimaryCCPCH-RSCP,
PrimaryCPICH-EcNo,
PrimaryCPICH-Power,
PrimaryScramblingCode,
PropagationDelay,
PunctureLimit,
QE-Selector,
Qth-Parameter,
RANAP-RelocationInformation,
RB-Info,
RL-ID,
RL-Set-ID,
RNC-ID,
RepetitionLength,
RepetitionPeriod,
ReportCharacteristics,
Received-total-wide-band-power,
RequestedDataValue,
RequestedDataValueInformation,
RL-Specific-DCH-Info,
RxTimingDeviationForTA,
S-FieldLength,
S-RNTI,
SCH-TimeSlot,
SAI,
SFN,
Secondary-CCPCH-Info,
Secondary-CCPCH-Info-TDD,
Secondary-LCR-CCPCH-Info-TDD,
SNA-Information,
SpecialBurstScheduling,
SSDT-CellID,
SSDT-CellID-Length,
SSDT-Indication,
SSDT-SupportIndicator,
STTD-Indicator,
STTD-SupportIndicator,
AdjustmentPeriod,
ScaledAdjustmentRatio,
MaxAdjustmentStep,
SecondaryCCPCH-SlotFormat,
SRB-Delay,
SyncCase,
SynchronisationConfiguration,
TDD-ChannelisationCode,
TDD-DCHs-to-Modify,
TDD-DL-Code-Information,
```

```
    TDD-DPCHOffset,
    TDD-PhysicalChannelOffset,
    TDD-TPC-DownlinkStepSize,
    TDD-ChannelisationCodeLCR,
    TDD-DL-Code-LCR-Information,
    TDD-UL-Code-Information,
    TDD-UL-Code-LCR-Information,
    TFCI-Coding,
    TFCI-PC-SupportIndicator,
    TFCI-Presence,
    TFCI-SignallingMode,
    TimeSlot,
    TimeSlotLCR,
    TimingAdvanceApplied,
    ToAWE,
    ToAWS,
    TrafficClass,
    TransmitDiversityIndicator,
    TransportBearerID,
    TransportBearerRequestIndicator,
    TFCS,
    Transmission-Gap-Pattern-Sequence-Information,
    TransportFormatManagement,
    TransportFormatSet,
    TransportLayerAddress,
    TrCH-SrcStatisticsDescr,
    TSTD-Indicator,
    TSTD-Support-Indicator,
    UARFCN,
    UC-ID,
    UL-DPCCH-SlotFormat,
    UL-SIR,
    UL-FP-Mode,
    UL-PhysCH-SF-Variation,
    UL-ScramblingCode,
    UL-Timeslot-Information,
    UL-TimeslotLCR-Information,
    UL-TimeSlot-ISCP-Info,
    UL-TimeSlot-ISCP-LCR-Info,
    URA-ID,
    URA-Information,
    USCH-ID,
    USCH-Information,
    UL-Synchronisation-Parameters-LCR,
    TDD-DL-DPCH-TimeSlotFormat-LCR,
    TDD-UL-DPCH-TimeSlotFormat-LCR,
    MAChs-ResetIndicator
FROM RNSAP-IEs

    PrivateIE-Container{},
    ProtocolExtensionContainer{},
    ProtocolIE-ContainerList{},
    ProtocolIE-ContainerPair{},
```

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

    maxNoOfDSCHs,
    maxNoOfUSCHs,
    maxNrOfCCTrCHs,
    maxNrOfDCHs,
    maxNrOfTS,
    maxNrOfDPCHs,
    maxNrOfRLs,
    maxNrOfRLSets,
    maxNrOfRLSets-1,
    maxNrOfRLs-1,
    maxNrOfRLs-2,
    maxNrOfULTs,
    maxNrOfDLTs,
    maxResetContext,
    maxNoOfDSCHsLCR,
    maxNoOfUSCHsLCR,
    maxNrOfCCTrCHsLCR,
    maxNrOfTsLCR,
    maxNrOfDLTsLCR,
    maxNrOfULTsLCR,
    maxNrOfDPCHsLCR,
    maxNrOfLCRTDDNeighboursPerRNC,
    maxNrOfMeasNCell,
    maxNrOfMACdFlows,

    id-Active-Pattern-Sequence-Information,
    id-AdjustmentRatio,
    id-AllowedQueuingTime,
    id-AntennaColocationIndicator,
    id-BindingID,
    id-C-ID,
    id-C-RNTI,
    id-CFN,
    id-CFNReportingIndicator,
    id-CN-CS-DomainIdentifier,
    id-CN-PS-DomainIdentifier,
    id-Cause,
    id-CauseLevel-RL-AdditionFailureFDD,
    id-CauseLevel-RL-AdditionFailureTDD,
    id-CauseLevel-RL-ReconfFailure,
    id-CauseLevel-RL-SetupFailureFDD,
    id-CauseLevel-RL-SetupFailureTDD,
    id-CCTrCH-InformationItem-RL-FailureInd,
    id-CCTrCH-InformationItem-RL-RestoreInd,
```

```
id-CellCapabilityContainer-FDD,
id-CellCapabilityContainer-TDD,
id-CellCapabilityContainer-TDD-LCR,
id-ClosedLoopMode1-SupportIndicator,
id-ClosedLoopMode2-SupportIndicator,
id-CNOriginatedPage-PagingRqst,
id-CommonMeasurementAccuracy,
id-CommonMeasurementObjectType-CM-Rprt,
id-CommonMeasurementObjectType-CM-Rqst,
id-CommonMeasurementObjectType-CM-Rsp,
id-CommonMeasurementType,
id-CommonTransportChannelResourcesInitialisationNotRequired,
id-CongestionCause,
id-CoverageIndicator,
id-CriticalityDiagnostics,
id-D-RNTI,
id-D-RNTI-ReleaseIndication,
id-DCHs-to-Add-FDD,
id-DCHs-to-Add-TDD,
id-DCH-DeleteList-RL-ReconfPrepFDD,
id-DCH-DeleteList-RL-ReconfPrepTDD,
id-DCH-DeleteList-RL-ReconfRqstFDD,
id-DCH-DeleteList-RL-ReconfRqstTDD,
id-DCH-FDD-Information,
id-DCH-TDD-Information,
id-FDD-DCHs-to-Modify,
id-TDD-DCHs-to-Modify,
id-DCH-InformationResponse,
id-DCH-Rate-InformationItem-RL-CongestInd,
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-FDD-DL-CodeInformation,
id-DL-DPCH-Information-RL-ReconfPrepFDD,
id-DL-DPCH-Information-RL-SetupRqstFDD,
id-DL-DPCH-Information-RL-ReconfRqstFDD,
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-DL-DPCH-InformationItem-RL-AdditionRspTDD,
id-DL-DPCH-InformationItem-RL-SetupRspTDD,
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,
```

```
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,
id-DL-DPCH-TimingAdjustment,
id-DL-Physical-Channel-Information-RL-SetupRqstTDD,
id-DL-PowerBalancing-Information,
id-DL-PowerBalancing-ActivationIndicator,
id-DL-PowerBalancing-UpdatedIndicator,
id-DL-ReferencePowerInformation,
id-DLReferencePower,
id-DLReferencePowerList-DL-PC-Rqst,
id-DL-ReferencePowerInformation-DL-PC-Rqst,
id-DRXCycleLengthCoefficient,
id-DedicatedMeasurementObjectType-DM-Fail,
id-DedicatedMeasurementObjectType-DM-Fail-Ind,
id-DedicatedMeasurementObjectType-DM-Rprt,
id-DedicatedMeasurementObjectType-DM-Rqst,
id-DedicatedMeasurementObjectType-DM-Rsp,
id-DedicatedMeasurementType,
id-DelayedActivation,
id-DelayedActivationList-RL-ActivationCmdFDD,
id-DelayedActivationList-RL-ActivationCmdTDD,
id-DelayedActivationInformation-RL-ActivationCmdFDD,
id-DelayedActivationInformation-RL-ActivationCmdTDD,
id-DPC-Mode,
id-DPC-Mode-Change-SupportIndicator,
id-DSCHs-to-Add-FDD,
id-DSCHs-to-Add-TDD,
id-DSCH-DeleteList-RL-ReconfPrepTDD,
id-DSCH-Delete-RL-ReconfPrepFDD,
id-DSCH-FDD-Information,
id-DSCH-InformationListIE-RL-AdditionRspTDD,
id-DSCH-InformationListIEs-RL-SetupRspTDD,
id-DSCH-TDD-Information,
id-DSCH-FDD-InformationResponse,
id-DSCH-ModifyList-RL-ReconfPrepTDD,
id-DSCH-Modify-RL-ReconfPrepFDD,
id-DSCH-RNTI,
id-DSCHsToBeAddedOrModified-FDD,
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD,
id-EnhancedDSCHPC,
id-EnhancedDSCHPCIndicator,
id-Enhanced-PrimaryCPICH-EcNo,
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD,
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD,
id-GA-Cell,
id-GA-CellAdditionalShapes,
id-HCS-Prio,
id-HSDSCH-FDD-Information,
id-HSDSCH-FDD-Information-Response,
id-HSDSCH-FDD-Information-to-Add,
id-HSDSCH-FDD-Information-to-Delete,
id-HSDSCH-FDD-Update-Information,
id-HSDSCH-TDD-Update-Information,
```

```
    id-HSDSCH-Information-to-Modify,
    id-HSDSCH-RNTI,
    id-HSDSCH-TDD-Information,
    id-HSDSCH-TDD-Information-Response,
    id-HSDSCH-TDD-Information-Response-LCR,
    id-HSDSCH-TDD-Information-to-Add,
    id-HSDSCH-TDD-Information-to-Delete,
    id-HSPDSCH-RL-ID,
    id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD,
    id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD,
    id-IMSI,
    id-InformationExchangeID,
    id-InformationExchangeObjectType-InfEx-Rprt,
    id-InformationExchangeObjectType-InfEx-Rqst,
    id-InformationExchangeObjectType-InfEx-Rsp,
    id-InformationReportCharacteristics,
    id-InformationType,
    id-InnerLoopDLPCStatus,
    id-SplitType,
    id-LengthOfTFCI2,
    id-L3-Information,
    id-AdjustmentPeriod,
    id-MaxAdjustmentStep,
    id-MeasurementFilterCoefficient,
    id-MeasurementID,
    id-PagingArea-PagingRqst,
    id-PartialReportingIndicator,
    id-PDSCH-RL-ID,
    id-Permanent-NAS-UE-Identity,
    id-FACH-FlowControlInformation,
    id-PowerAdjustmentType,
    id-PrimCCPCH-RSCP-DL-PC-RqstTDD,
    id-PropagationDelay,
    id-Qth-Parameter,
    id-RANAP-RelocationInformation,
    id-ResetIndicator,
    id-RL-Information-PhyChReconfRqstFDD,
    id-RL-Information-PhyChReconfRqstTDD,
    id-RL-Information-RL-AdditionRqstFDD,
    id-RL-Information-RL-AdditionRqstTDD,
    id-RL-Information-RL-DeletionRqst,
    id-RL-Information-RL-FailureInd,
    id-RL-Information-RL-ReconfPrepFDD,
    id-RL-Information-RL-RestoreInd,
    id-RL-Information-RL-SetupRqstFDD,
    id-RL-Information-RL-SetupRqstTDD,
    id-RL-InformationItem-RL-CongestInd,
    id-RL-InformationItem-DM-Rprt,
    id-RL-InformationItem-DM-Rqst,
    id-RL-InformationItem-DM-Rsp,
    id-RL-InformationItem-RL-PreemptRequiredInd,
    id-RL-InformationItem-RL-SetupRqstFDD,
    id-RL-InformationList-RL-CongestInd,
```

```
id-RL-InformationList-RL-AdditionRqstFDD,
id-RL-InformationList-RL-DeletionRqst,
id-RL-InformationList-RL-PreemptRequiredInd,
id-RL-InformationList-RL-ReconfPrepFDD,
id-RL-InformationResponse-RL-AdditionRspTDD,
id-RL-InformationResponse-RL-ReconfReadyTDD,
id-RL-InformationResponse-RL-ReconfRspTDD,
id-RL-InformationResponse-RL-SetupRspTDD,
id-RL-InformationResponseItem-RL-AdditionRspFDD,
id-RL-InformationResponseItem-RL-ReconfReadyFDD,
id-RL-InformationResponseItem-RL-ReconfRspFDD,
id-RL-InformationResponseItem-RL-SetupRspFDD,
id-RL-InformationResponseList-RL-AdditionRspFDD,
id-RL-InformationResponseList-RL-ReconfReadyFDD,
id-RL-InformationResponseList-RL-ReconfRspFDD,
id-RL-InformationResponseList-RL-SetupRspFDD,
id-RL-ReconfigurationFailure-RL-ReconfFail,
id-RL-ReconfigurationReadyTDD-RL-Information,
id-RL-ReconfigurationRequestFDD-RL-InformationList,
id-RL-ReconfigurationRequestFDD-RL-Information-IEs,
id-RL-ReconfigurationRequestTDD-RL-Information,
id-RL-Specific-DCH-Info,
id-RL-Set-InformationItem-DM-Rprt,
id-RL-Set-InformationItem-DM-Rqst,
id-RL-Set-InformationItem-DM-Rsp,
id-RL-Set-Information-RL-FailureInd,
id-RL-Set-Information-RL-RestoreInd,
id-RL-Set-Successful-InformationItem-DM-Fail,
id-RL-Set-Unsuccessful-InformationItem-DM-Fail,
id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind,
id-RL-Successful-InformationItem-DM-Fail,
id-RL-Unsuccessful-InformationItem-DM-Fail,
id-RL-Unsuccessful-InformationItem-DM-Fail-Ind,
id-ReportCharacteristics,
id-Reporting-Object-RL-FailureInd,
id-Reporing-Object-RL-RestoreInd,
id-RNC-ID,
id-RxTimingDeviationForTA,
id-S-RNTI,
id-SAI,
id-SFN,
id-SFNReportingIndicator,
id-SNA-Information,
id-SRNC-ID,
id-SSDT-CellIDforEDSCHPC,
id-STTD-SupportIndicator,
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-TFCI-PC-SupportIndicator,
id-timeSlot-ISCP,
id-TimeSlot-RL-SetupRspTDD,
id-TransportBearerID,
id-TransportBearerRequestIndicator,
```

```
id-TransportLayerAddress,
id-UC-ID,
id-ContextInfoItem-Reset,
id-Transmission-Gap-Pattern-Sequence-Information,
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD,
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD,
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD,
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD,
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD,
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD,
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-Information-RL-ReconfPrepFDD,
id-UL-DPCH-Information-RL-ReconfRqstFDD,
id-UL-DPCH-Information-RL-SetupRqstFDD,
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD,
id-UL-DPCH-InformationItem-RL-AdditionRspTDD,
id-UL-DPCH-InformationItem-RL-SetupRspTDD,
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD,
id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD,
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD,
id-UL-Physical-Channel-Information-RL-SetupRqstTDD,
id-UL-SIRTarget,
id-URA-Information,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD,
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD,
id-USCHs-to-Add,
id-USCH-DeleteList-RL-ReconfPrepTDD,
id-USCH-InformationListIE-RL-AdditionRspTDD,
id-USCH-InformationListIEs-RL-SetupRspTDD,
id-USCH-Information,
id-USCH-ModifyList-RL-ReconfPrepTDD,
id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD,
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD,
id-RL-LCR-InformationResponse-RL-SetupRspTDD,
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,
id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD,
id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD,
id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD,
id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD,
id-USCH-LCR-InformationListIEs-RL-SetupRspTDD,
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD,
id-RL-LCR-InformationResponse-RL-AdditionRspTDD,
```

```
    id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
    id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,
    id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD,
    id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD,
    id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD,
    id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD,
    id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
    id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
    id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD,
    id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD,
    id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD,
    id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD,
    id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD,
    id-TSTD-Support-Indicator-RL-SetupRqstTDD,
    id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD,
    id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD,
    id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD,
    id-neighbouringTDDCellMeasurementInformationLCR,
    id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD,
    id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD,
    id-TrafficClass,
    id-UL-Synchronisation-Parameters-LCR,
    id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD,
    id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD,
    id-MAChs-ResetIndicator

FROM RNSAP-Constants;
```

```
-- ****************************************************************
--
-- PHYSICAL CHANNEL RECONFIGURATION REQUEST TDD
--
-- ****************************************************************

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

PhysicalChannelReconfigurationRequestTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-RL-Information-PhyChReconfRqstTDD   CRITICALITY reject  TYPE RL-Information-PhyChReconfRqstTDD    PRESENCE mandatory   },
    ...
}

RL-Information-PhyChReconfRqstTDD ::= SEQUENCE {
    rL-ID                      RL-ID,
    ul-CCTrCH-Information           UL-CCTrCH-InformationList-PhyChReconfRqstTDD    OPTIONAL,
    dl-CCTrCH-Information           DL-CCTrCH-InformationList-PhyChReconfRqstTDD    OPTIONAL,
    iE-Extensions              ProtocolExtensionContainer { {RL-Information-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

RL-Information-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD   CRITICALITY reject       EXTENSION  HSPDSCH-Timeslot-InformationList-
PhyChReconfRqstTDD       PRESENCE optional } |
    --For 3.84Mcps TDD only
    { ID id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD   CRITICALITY reject      EXTENSION  HSPDSCH-Timeslot-InformationListLCR-
PhyChReconfRqstTDD       PRESENCE optional },
    --For 1.28Mcps TDD only
    ...
}

UL-CCTrCH-InformationList-PhyChReconfRqstTDD          ::= ProtocolIE-Single-Container { {UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} }

UL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD     CRITICALITY reject  TYPE UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD     PRESENCE
mandatory    }
}

UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-PhyChReconfRqstTDD

UL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                       CCTrCH-ID,
    ul-DPCH-Information             UL-DPCH-InformationList-PhyChReconfRqstTDD,
    iE-Extensions                   ProtocolExtensionContainer { {UL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
    ...
}

UL-DPCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container {{UL-DPCH-InformationListIEs-PhyChReconfRqstTDD}}

UL-DPCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationItem-PhyChReconfRqstTDD   CRITICALITY notify TYPE UL-DPCH-InformationItem-PhyChReconfRqstTDD     PRESENCE mandatory }
}

UL-DPCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    repetitionPeriod                RepetitionPeriod          OPTIONAL,
    repetitionLength                RepetitionLength          OPTIONAL,
    tDD-DPCHOffset                  TDD-DPCHOffset            OPTIONAL,
    uL-Timeslot-InformationList-PhyChReconfRqstTDD        UL-Timeslot-InformationList-PhyChReconfRqstTDD   OPTIONAL,
    --For 3.84Mcps TDD only
    iE-Extensions                   ProtocolExtensionContainer { {UL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD   CRITICALITY reject     EXTENSION  UL-TimeslotLCR-InformationList-PhyChReconfRqstTDD
        PRESENCE optional },
    --For 1.28Mcps TDD only
    ...
}

UL-TimeslotLCR-InformationList-PhyChReconfRqstTDD::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD

UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR                 TimeSlotLCR,
    midambleShiftLCR            MidambleShiftLCR        OPTIONAL,
    tFCI-Presence               TFCI-Presence       OPTIONAL,
    uL-Code-LCR-Information      TDD-UL-Code-LCR-Information      OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { {UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-Timeslot-InformationList-PhyChReconfRqstTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF UL-Timeslot-InformationItem-PhyChReconfRqstTDD

UL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlot                    TimeSlot,
    midambleShiftAndBurstType                   MidambleShiftAndBurstType       OPTIONAL,
    tFCI-Presence               TFCI-Presence       OPTIONAL,
    uL-Code-Information          TDD-UL-Code-Information     OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { {UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

UL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
    ...
}

DL-CCTrCH-InformationList-PhyChReconfRqstTDD           ::= ProtocolIE-Single-Container { {DL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD} }

DL-CCTrCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD    CRITICALITY reject  TYPE DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD    PRESENCE
mandatory    }
}

DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-PhyChReconfRqstTDD

DL-CCTrCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                     CCTrCH-ID,
    dl-DPCH-Information            DL-DPCH-InformationList-PhyChReconfRqstTDD,
    iE-Extensions                 ProtocolExtensionContainer { {DL-CCTrCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

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

DL-DPCH-InformationList-PhyChReconfRqstTDD ::= ProtocolIE-Single-Container {{DL-DPCH-InformationListIEs-PhyChReconfRqstTDD}}

DL-DPCH-InformationListIEs-PhyChReconfRqstTDD RNSAP-PROTOCOL-IES ::= {
    { ID id-DL-DPCH-InformationItem-PhyChReconfRqstTDD   CRITICALITY notify TYPE DL-DPCH-InformationItem-PhyChReconfRqstTDD    PRESENCE mandatory }
}

DL-DPCH-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    repetitionPeriod               RepetitionPeriod         OPTIONAL,
    repetitionLength               RepetitionLength         OPTIONAL,
    tDD-DPCHOffset                 TDD-DPCHOffset           OPTIONAL,
    dL-Timeslot-InformationList-PhyChReconfRqstTDD        DL-Timeslot-InformationList-PhyChReconfRqstTDD   OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { {DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-DPCH-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD   CRITICALITY reject     EXTENSION  DL-TimeslotLCR-InformationList-PhyChReconfRqstTDD
        PRESENCE optional },
    --For 1.28Mcps TDD only
    ...
}

DL-TimeslotLCR-InformationList-PhyChReconfRqstTDD::= SEQUENCE ( SIZE (1..maxNrOfTsLCR)) OF DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD

DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR                    TimeSlotLCR,
    midambleShiftLCR               MidambleShiftLCR        OPTIONAL,
    tFCI-Presence                  TFCI-Presence       OPTIONAL,
    dL-Code-LCR-Information         TDD-DL-Code-LCR-Information      OPTIONAL,
    iE-Extensions                  ProtocolExtensionContainer { {DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
```

```
    ...
}

DL-TimeslotLCR-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-Timeslot-InformationList-PhyChReconfRqstTDD::= SEQUENCE ( SIZE (1..maxNrOfTS)) OF DL-Timeslot-InformationItem-PhyChReconfRqstTDD

DL-Timeslot-InformationItem-PhyChReconfRqstTDD ::= SEQUENCE {
    timeSlot                        TimeSlot,
    midambleShiftAndBurstType               MidambleShiftAndBurstType        OPTIONAL,
    tFCI-Presence                   TFCI-Presence        OPTIONAL,
    dL-Code-Information         TDD-DL-Code-Information    OPTIONAL,
    iE-Extensions               ProtocolExtensionContainer { {DL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs} } OPTIONAL,
    ...
}

DL-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}
HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD

HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD::= SEQUENCE {
    timeslot                                    TimeSlot,
    midambleShiftAndBurstType               MidambleShiftAndBurstType,
    iE-Extensions                           ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs } }
        OPTIONAL,
    ...
}

HSPDSCH-Timeslot-InformationItem-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD::= SEQUENCE (SIZE (1..maxNrOfDLTsLCR)) OF HSPDSCH-Timeslot-InformationItemLCR-
PhyChReconfRqstTDD

HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD::= SEQUENCE {
    timeslotLCR                             TimeSlotLCR,
    midambleShiftLCR                        MidambleShiftLCR,
    iE-Extensions                           ProtocolExtensionContainer { { HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

HSPDSCH-Timeslot-InformationItemLCR-PhyChReconfRqstTDD-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}


PhysicalChannelReconfigurationRequestTDD-Extensions RNSAP-PROTOCOL-EXTENSION ::= {
    ...
```

}

```
-- H

HARQ-FDD-InfoList ::= SEQUENCE (SIZE (1..maxNrOfHARQProc)) OF HARQ-FDD-InfoItem

HARQ-FDD-InfoItem ::= SEQUENCE {
    process-Memory-Size             INTEGER (1..172800,...),
    iE-Extensions                   ProtocolExtensionContainer { { HARQ-FDD-InfoItem-ExtIEs } }      OPTIONAL,
    ...
}

HARQ-FDD-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HARQ-TDD-InfoList ::= SEQUENCE (SIZE (1..maxNrOfHARQProc)) OF HARQ-TDD-InfoItem

HARQ-TDD-InfoItem ::= SEQUENCE {
    process-Memory-Size             INTEGER (1..168960,...),
    iE-Extensions                   ProtocolExtensionContainer { { HARQ-TDD-InfoItem-ExtIEs } }      OPTIONAL,
    ...
}

HARQ-TDD-InfoItem-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HCS-Prio    ::= INTEGER (0..7)
-- 0 = lowest priority, ...7 = highest priority

HSDSCH-FDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-Info           HSDSCH-MACdFlow-Specific-InfoList,
    uE-Capabilities-InfoFDD                 UE-Capabilities-InfoFDD,
    hARQ-FDD-Info                           HARQ-FDD-InfoList,
    cqiFeedback-CycleK                      CQI-Feedback-Cycle,
    cqiRepetitionFactor                     CQI-RepetitionFactor        OPTIONAL,
    -- This IE shall be present if the CQI Feedback Cycle k is greater than 0
    cqiPowerOffset                          CQI-Power-Offset,
    ackNackRepetitionFactor                 AckNack-RepetitionFactor,
    ackPowerOffset                          Ack-Power-Offset,
    nackPowerOffset                         Nack-Power-Offset,
    hsscch-PowerOffset                      HSSCCH-PowerOffset          OPTIONAL,
    iE-Extensions                           ProtocolExtensionContainer { { HSDSCH-FDD-Information-ExtIEs } }      OPTIONAL,
    ...
}

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

HSDSCH-FDD-Information-Response ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-Response       HSDSCH-MACdFlow-Specific-InfoList-Response,
    hSSCCH-Specific-InfoList-Response                HSSCCH-FDD-Specific-InfoList-Response,
```

```
      measurement-Power-Offset                              Measurement-Power-Offset       OPTIONAL,
      iE-Extensions                                         ProtocolExtensionContainer { { HSDSCH-FDD-Information-Response-ExtIEs } }          OPTIONAL,
      ...
}

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

HSDSCH-Information-to-Modify ::= SEQUENCE {
      hSDSCH-MACdFlow-Specific-InfoList-to-Modify    HSDSCH-MACdFlow-Specific-InfoList-to-Modify          OPTIONAL,
      cqiFeedback-CycleK                             CQI-Feedback-Cycle             OPTIONAL,  -- For FDD only
      cqiRepetitionFactor                            CQI-RepetitionFactor           OPTIONAL,  -- For FDD only
      ackNackRepetitionFactor                        AckNack-RepetitionFactor       OPTIONAL,  -- For FDD only
      cqiPowerOffset                                 CQI-Power-Offset               OPTIONAL,  -- For FDD only
      ackPowerOffset                                 Ack-Power-Offset               OPTIONAL,  -- For FDD only
      nackPowerOffset                                Nack-Power-Offset              OPTIONAL,  -- For FDD only
      hsscch-PowerOffset                             HSSCCH-PowerOffset             OPTIONAL,  -- Only for FDD
      iE-Extensions                                  ProtocolExtensionContainer { { HSDSCH-Information-to-Modify-ExtIEs } }          OPTIONAL,
      ...
}

HSDSCH-Information-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
      ...
}

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

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

HSDSCH-MACdFlow-Specific-InfoItem ::= SEQUENCE {
      hSDSCH-MACdFlow-ID             HSDSCH-MACdFlow-ID,
      allocationRetentionPriority    AllocationRetentionPriority,
      trafficClass                   TrafficClass,
      bindingID                      BindingID                    OPTIONAL,
      transportLayerAddress          TransportLayerAddress        OPTIONAL,
      priorityQueue-Info             PriorityQueue-InfoList,
      iE-Extensions                  ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-ExtIEs } }      OPTIONAL,
      ...
}

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

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

HSDSCH-MACdFlow-Specific-InfoItem-Response ::= SEQUENCE {
      hSDSCH-MACdFlow-ID                 HSDSCH-MACdFlow-ID,
      bindingID                          BindingID                    OPTIONAL,
      transportLayerAddress              TransportLayerAddress        OPTIONAL,
      hSDSCH-Initial-Capacity-Allocation HSDSCH-Initial-Capacity-Allocation     OPTIONAL,
      iE-Extensions                      ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-Response-ExtIEs } }      OPTIONAL,
```

```
    ...
}

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

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

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify ::= SEQUENCE {
    hSDSCH-MACdFlow-ID               HSDSCH-MACdFlow-ID,
    allocationRetentionPriority      AllocationRetentionPriority            OPTIONAL,
    transportBearerRequestIndicator  TransportBearerRequestIndicator,
    trafficClass                     TrafficClass                          OPTIONAL,
    bindingID                        BindingID                             OPTIONAL,
    transportLayerAddress            TransportLayerAddress                 OPTIONAL,
    priorityQueue-Info-to-Modify     PriorityQueue-InfoList-to-Modify      OPTIONAL,
    iE-Extensions                    ProtocolExtensionContainer { { HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs } }        OPTIONAL,
    ...
}

HSDSCH-MACdFlow-Specific-InfoItem-to-Modify-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSDSCH-Initial-Capacity-Allocation::= SEQUENCE (SIZE (1..16)) OF HSDSCH-Initial-Capacity-AllocationItem

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

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

HSDSCH-InitialWindowSize           ::= INTEGER (1..2047)
-- Number of MAC-d PDUs.
-- 2047 = Unlimited number of MAC-d PDUs

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

HSDSCH-TDD-Information ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-Info          HSDSCH-MACdFlow-Specific-InfoList,
    uE-Capabilities-InfoTDD                UE-Capabilities-InfoTDD,
    hARQ-TDD-InfoList                      HARQ-TDD-InfoList,
    iE-Extensions                          ProtocolExtensionContainer { { HSDSCH-TDD-Information-ExtIEs } }        OPTIONAL,
    ...
}
```

```
HSDSCH-TDD-Information-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}


HSDSCH-TDD-Information-Response ::= SEQUENCE {
    hSDSCH-MACdFlow-Specific-InfoList-Response     HSDSCH-MACdFlow-Specific-InfoList-Response,
    hSSCCH-TDD-Specific-InfoList-Response          HSSCCH-TDD-Specific-InfoList-Response               OPTIONAL,
    hSSCCH-TDD-Specific-InfoList-Response-LCR       HSSCCH-TDD-Specific-InfoList-Response-LCR            OPTIONAL,
    hSPDSCH-TDD-Specific-InfoList-Response          HSPDSCH-TDD-Specific-InfoList-Response               OPTIONAL,
    hSPDSCH-TDD-Specific-InfoList-Response-LCR       HSPDSCH-TDD-Specific-InfoList-Response-LCR            OPTIONAL,
    iE-Extensions                                   ProtocolExtensionContainer { { HSDSCH-TDD-Information-Response-ExtIEs } }         OPTIONAL,
    ...
}

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


HSPDSCH-TDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfDLTs)) OF HSPDSCH-TDD-Specific-InfoItem-Response

HSPDSCH-TDD-Specific-InfoItem-Response ::= SEQUENCE {
    timeslot                                        TimeSlot,
    midambleShiftAndBurstType                       MidambleShiftAndBurstType,
    iE-Extensions                                   ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-ExtIEs } }        OPTIONAL,
    ...
}


HSPDSCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}


HSPDSCH-TDD-Specific-InfoList-Response-LCR ::= SEQUENCE (SIZE (1.. maxNrOfDLTsLCR)) OF HSPDSCH-TDD-Specific-InfoItem-Response-LCR

HSPDSCH-TDD-Specific-InfoItem-Response-LCR ::= SEQUENCE {
    timeslotLCR                                     TimeSlotLCR,
    midambleShiftLCR                                MidambleShiftLCR,
    iE-Extensions                                   ProtocolExtensionContainer { { HSPDSCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs } }        OPTIONAL,
    ...
}


HSPDSCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}

HSSCCH-FDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-FDD-Specific-InfoItem-Response

HSSCCH-FDD-Specific-InfoItem-Response ::= SEQUENCE {
    code-Number                                     INTEGER (0..127),
    iE-Extensions                                   ProtocolExtensionContainer { { HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs } }         OPTIONAL,
    ...
}

HSSCCH-FDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
```

```
    ...
}


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


HSSCCH-TDD-Specific-InfoList-Response ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response

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


HSSCCH-TDD-Specific-InfoItem-Response-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}


HSSCCH-TDD-Specific-InfoList-Response-LCR ::= SEQUENCE (SIZE (1..maxNrOfHSSCCHCodes)) OF HSSCCH-TDD-Specific-InfoItem-Response-LCR

HSSCCH-TDD-Specific-InfoItem-Response-LCR ::= SEQUENCE {
    timeslotLCR                              TimeSlotLCR,
    midambleShiftLCR                         MidambleShiftLCR,
    first-TDD-ChannelisationCodeLCR          TDD-ChannelisationCodeLCR,
    second-TDD-ChannelisationCodeLCR         TDD-ChannelisationCodeLCR,
    hSSICH-InfoLCR                           HSSICH-InfoLCR,
    iE-Extensions                            ProtocolExtensionContainer { { HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs } }        OPTIONAL,
    ...
}


HSSCCH-TDD-Specific-InfoItem-Response-LCR-ExtIEs RNSAP-PROTOCOL-EXTENSION ::= {
    ...
}


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


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


HSSICH-InfoLCR ::= SEQUENCE {
    timeslotLCR                              TimeSlotLCR,
    midambleShiftLCR                         MidambleShiftLCR,
```

```
    tDD-ChannelisationCodeLCR                       TDD-ChannelisationCodeLCR,
    iE-Extensions                                   ProtocolExtensionContainer { { HSSICH-Info-LCR-ExtIEs } }      OPTIONAL,
    ...
}

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

HSSCCH-CodeChangeIndicator  ::= ENUMERATED {
    hsSCCHCodeChangeNeeded
}

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

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

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

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

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

id-AllowedQueuingTime                                        ProtocolIE-ID ::= 4
id-Allowed-Rate-Information                                  ProtocolIE-ID ::= 42
id-AntennaColocationIndicator                               ProtocolIE-ID ::= 309
id-BindingID                                                ProtocolIE-ID ::= 5
id-C-ID                                                     ProtocolIE-ID ::= 6
id-C-RNTI                                                   ProtocolIE-ID ::= 7
id-Cell-Capacity-Class-Value                               ProtocolIE-ID ::= 303
id-CFN                                                      ProtocolIE-ID ::= 8
id-CN-CS-DomainIdentifier                                  ProtocolIE-ID ::= 9
id-CN-PS-DomainIdentifier                                  ProtocolIE-ID ::= 10
id-Cause                                                    ProtocolIE-ID ::= 11
id-CoverageIndicator                                        ProtocolIE-ID ::= 310
id-CriticalityDiagnostics                                   ProtocolIE-ID ::= 20
id-ContextInfoItem-Reset                                    ProtocolIE-ID ::= 211
id-D-RNTI                                                   ProtocolIE-ID ::= 21
id-D-RNTI-ReleaseIndication                                 ProtocolIE-ID ::= 22
id-DCHs-to-Add-FDD                                          ProtocolIE-ID ::= 26
id-DCHs-to-Add-TDD                                          ProtocolIE-ID ::= 27
id-DCH-DeleteList-RL-ReconfPrepFDD                          ProtocolIE-ID ::= 30
id-DCH-DeleteList-RL-ReconfPrepTDD                          ProtocolIE-ID ::= 31
id-DCH-DeleteList-RL-ReconfRqstFDD                          ProtocolIE-ID ::= 32
id-DCH-DeleteList-RL-ReconfRqstTDD                          ProtocolIE-ID ::= 33
id-DCH-FDD-Information                                       ProtocolIE-ID ::= 34
id-DCH-TDD-Information                                       ProtocolIE-ID ::= 35
id-FDD-DCHs-to-Modify                                        ProtocolIE-ID ::= 39
id-TDD-DCHs-to-Modify                                        ProtocolIE-ID ::= 40
id-DCH-InformationResponse                                  ProtocolIE-ID ::= 43
id-DCH-Rate-InformationItem-RL-CongestInd                   ProtocolIE-ID ::= 38
id-DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD            ProtocolIE-ID ::= 44
id-DL-CCTrCH-InformationListIE-RL-ReconfReadyTDD            ProtocolIE-ID ::= 45
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD         ProtocolIE-ID ::= 46
id-DL-CCTrCH-InformationItem-RL-SetupRqstTDD               ProtocolIE-ID ::= 47
id-DL-CCTrCH-InformationListIE-PhyChReconfRqstTDD           ProtocolIE-ID ::= 48
id-DL-CCTrCH-InformationListIE-RL-AdditionRspTDD            ProtocolIE-ID ::= 49
id-DL-CCTrCH-InformationListIE-RL-SetupRspTDD              ProtocolIE-ID ::= 50
id-DL-CCTrCH-InformationAddList-RL-ReconfPrepTDD            ProtocolIE-ID ::= 51
id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD         ProtocolIE-ID ::= 52
id-DL-CCTrCH-InformationList-RL-SetupRqstTDD               ProtocolIE-ID ::= 53
id-FDD-DL-CodeInformation                                   ProtocolIE-ID ::= 54
id-DL-DPCH-Information-RL-ReconfPrepFDD                     ProtocolIE-ID ::= 59
id-DL-DPCH-Information-RL-SetupRqstFDD                      ProtocolIE-ID ::= 60
id-DL-DPCH-Information-RL-ReconfRqstFDD                     ProtocolIE-ID ::= 61
id-DL-DPCH-InformationItem-PhyChReconfRqstTDD              ProtocolIE-ID ::= 62
id-DL-DPCH-InformationItem-RL-AdditionRspTDD               ProtocolIE-ID ::= 63
id-DL-DPCH-InformationItem-RL-SetupRspTDD                  ProtocolIE-ID ::= 64
id-DL-DPCH-TimingAdjustment                                ProtocolIE-ID ::= 278
```

```
id-DLReferencePower                                         ProtocolIE-ID ::= 67
id-DLReferencePowerList-DL-PC-Rqst                          ProtocolIE-ID ::= 68
id-DL-ReferencePowerInformation-DL-PC-Rqst                  ProtocolIE-ID ::= 69
id-DPC-Mode                                                 ProtocolIE-ID ::= 12
id-DRXCycleLengthCoefficient                                ProtocolIE-ID ::= 70
id-DedicatedMeasurementObjectType-DM-Fail-Ind               ProtocolIE-ID ::= 470
id-DedicatedMeasurementObjectType-DM-Fail                   ProtocolIE-ID ::= 471
id-DedicatedMeasurementObjectType-DM-Rprt                   ProtocolIE-ID ::= 71
id-DedicatedMeasurementObjectType-DM-Rqst                   ProtocolIE-ID ::= 72
id-DedicatedMeasurementObjectType-DM-Rsp                    ProtocolIE-ID ::= 73
id-DedicatedMeasurementType                                 ProtocolIE-ID ::= 74
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspFDD        ProtocolIE-ID ::= 82
id-FACH-InfoForUESelectedS-CCPCH-CTCH-ResourceRspTDD        ProtocolIE-ID ::= 83
id-Guaranteed-Rate-Information                              ProtocolIE-ID ::= 41
id-IMSI                                                     ProtocolIE-ID ::= 84
id-HCS-Prio                                                 ProtocolIE-ID ::= 311
id-L3-Information                                           ProtocolIE-ID ::= 85
id-AdjustmentPeriod                                         ProtocolIE-ID ::= 90
id-MaxAdjustmentStep                                        ProtocolIE-ID ::= 91
id-MeasurementFilterCoefficient                             ProtocolIE-ID ::= 92
id-MessageStructure                                         ProtocolIE-ID ::= 57
id-MeasurementID                                            ProtocolIE-ID ::= 93
id-Neighbouring-GSM-CellInformation                         ProtocolIE-ID ::= 13
id-Neighbouring-UMTS-CellInformationItem                    ProtocolIE-ID ::= 95
id-NRT-Load-Information-Value                               ProtocolIE-ID ::= 305
id-NRT-Load-Information-Value-IncrDecrThres                 ProtocolIE-ID ::= 306
id-PagingArea-PagingRqst                                    ProtocolIE-ID ::= 102
id-FACH-FlowControlInformation                              ProtocolIE-ID ::= 103
id-PartialReportingIndicator                                ProtocolIE-ID ::= 472
id-Permanent-NAS-UE-Identity                                ProtocolIE-ID ::= 17
id-PowerAdjustmentType                                      ProtocolIE-ID ::= 107
id-RANAP-RelocationInformation                              ProtocolIE-ID ::= 109
id-RL-Information-PhyChReconfRqstFDD                        ProtocolIE-ID ::= 110
id-RL-Information-PhyChReconfRqstTDD                        ProtocolIE-ID ::= 111
id-RL-Information-RL-AdditionRqstFDD                        ProtocolIE-ID ::= 112
id-RL-Information-RL-AdditionRqstTDD                        ProtocolIE-ID ::= 113
id-RL-Information-RL-DeletionRqst                           ProtocolIE-ID ::= 114
id-RL-Information-RL-FailureInd                             ProtocolIE-ID ::= 115
id-RL-Information-RL-ReconfPrepFDD                          ProtocolIE-ID ::= 116
id-RL-Information-RL-RestoreInd                             ProtocolIE-ID ::= 117
id-RL-Information-RL-SetupRqstFDD                           ProtocolIE-ID ::= 118
id-RL-Information-RL-SetupRqstTDD                           ProtocolIE-ID ::= 119
id-RL-InformationItem-RL-CongestInd                         ProtocolIE-ID ::= 55
id-RL-InformationItem-DM-Rprt                               ProtocolIE-ID ::= 120
id-RL-InformationItem-DM-Rqst                               ProtocolIE-ID ::= 121
id-RL-InformationItem-DM-Rsp                                ProtocolIE-ID ::= 122
id-RL-InformationItem-RL-PreemptRequiredInd                 ProtocolIE-ID ::= 2
id-RL-InformationItem-RL-SetupRqstFDD                       ProtocolIE-ID ::= 123
id-RL-InformationList-RL-CongestInd                         ProtocolIE-ID ::= 56
id-RL-InformationList-RL-AdditionRqstFDD                    ProtocolIE-ID ::= 124
id-RL-InformationList-RL-DeletionRqst                       ProtocolIE-ID ::= 125
id-RL-InformationList-RL-PreemptRequiredInd                 ProtocolIE-ID ::= 1
id-RL-InformationList-RL-ReconfPrepFDD                      ProtocolIE-ID ::= 126
```

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id-RL-InformationResponse-RL-AdditionRspTDD                          ProtocolIE-ID ::= 127
id-RL-InformationResponse-RL-ReconfReadyTDD                          ProtocolIE-ID ::= 128
id-RL-InformationResponse-RL-SetupRspTDD                             ProtocolIE-ID ::= 129
id-RL-InformationResponseItem-RL-AdditionRspFDD                      ProtocolIE-ID ::= 130
id-RL-InformationResponseItem-RL-ReconfReadyFDD                      ProtocolIE-ID ::= 131
id-RL-InformationResponseItem-RL-ReconfRspFDD                        ProtocolIE-ID ::= 132
id-RL-InformationResponseItem-RL-SetupRspFDD                         ProtocolIE-ID ::= 133
id-RL-InformationResponseList-RL-AdditionRspFDD                      ProtocolIE-ID ::= 134
id-RL-InformationResponseList-RL-ReconfReadyFDD                      ProtocolIE-ID ::= 135
id-RL-InformationResponseList-RL-ReconfRspFDD                        ProtocolIE-ID ::= 136
id-RL-InformationResponse-RL-ReconfRspTDD                            ProtocolIE-ID ::= 28
id-RL-InformationResponseList-RL-SetupRspFDD                         ProtocolIE-ID ::= 137
id-RL-ReconfigurationFailure-RL-ReconfFail                           ProtocolIE-ID ::= 141
id-RL-Set-InformationItem-DM-Rprt                                    ProtocolIE-ID ::= 143
id-RL-Set-InformationItem-DM-Rqst                                    ProtocolIE-ID ::= 144
id-RL-Set-InformationItem-DM-Rsp                                     ProtocolIE-ID ::= 145
id-RL-Set-Information-RL-FailureInd                                  ProtocolIE-ID ::= 146
id-RL-Set-Information-RL-RestoreInd                                  ProtocolIE-ID ::= 147
id-RL-Set-Successful-InformationItem-DM-Fail                        ProtocolIE-ID ::= 473
id-RL-Set-Unsuccessful-InformationItem-DM-Fail                      ProtocolIE-ID ::= 474
id-RL-Set-Unsuccessful-InformationItem-DM-Fail-Ind                  ProtocolIE-ID ::= 475
id-RL-Successful-InformationItem-DM-Fail                            ProtocolIE-ID ::= 476
id-RL-Unsuccessful-InformationItem-DM-Fail                          ProtocolIE-ID ::= 477
id-RL-Unsuccessful-InformationItem-DM-Fail-Ind                      ProtocolIE-ID ::= 478
id-ReportCharacteristics                                             ProtocolIE-ID ::= 152
id-Reporting-Object-RL-FailureInd                                    ProtocolIE-ID ::= 153
id-Reporing-Object-RL-RestoreInd                                     ProtocolIE-ID ::= 154
id-RT-Load-Value                                                     ProtocolIE-ID ::= 307
id-RT-Load-Value-IncrDecrThres                                       ProtocolIE-ID ::= 308
id-S-RNTI                                                            ProtocolIE-ID ::= 155
id-ResetIndicator                                                    ProtocolIE-ID ::= 244
id-RNC-ID                                                            ProtocolIE-ID ::= 245
id-SAI                                                               ProtocolIE-ID ::= 156
id-SRNC-ID                                                           ProtocolIE-ID ::= 157
id-SuccessfulRL-InformationResponse-RL-AdditionFailureFDD           ProtocolIE-ID ::= 159
id-SuccessfulRL-InformationResponse-RL-SetupFailureFDD              ProtocolIE-ID ::= 160
id-TransportBearerID                                                 ProtocolIE-ID ::= 163
id-TransportBearerRequestIndicator                                   ProtocolIE-ID ::= 164
id-TransportLayerAddress                                             ProtocolIE-ID ::= 165
id-TypeOfError                                                       ProtocolIE-ID ::= 140
id-UC-ID                                                             ProtocolIE-ID ::= 166
id-UL-CCTrCH-AddInformation-RL-ReconfPrepTDD                         ProtocolIE-ID ::= 167
id-UL-CCTrCH-InformationAddList-RL-ReconfPrepTDD                     ProtocolIE-ID ::= 169
id-UL-CCTrCH-InformationItem-RL-SetupRqstTDD                         ProtocolIE-ID ::= 171
id-UL-CCTrCH-InformationList-RL-SetupRqstTDD                         ProtocolIE-ID ::= 172
id-UL-CCTrCH-InformationListIE-PhyChReconfRqstTDD                    ProtocolIE-ID ::= 173
id-UL-CCTrCH-InformationListIE-RL-AdditionRspTDD                     ProtocolIE-ID ::= 174
id-UL-CCTrCH-InformationListIE-RL-ReconfReadyTDD                     ProtocolIE-ID ::= 175
id-UL-CCTrCH-InformationListIE-RL-SetupRspTDD                        ProtocolIE-ID ::= 176
id-UL-DPCH-Information-RL-ReconfPrepFDD                              ProtocolIE-ID ::= 177
id-UL-DPCH-Information-RL-ReconfRqstFDD                              ProtocolIE-ID ::= 178
id-UL-DPCH-Information-RL-SetupRqstFDD                               ProtocolIE-ID ::= 179
id-UL-DPCH-InformationItem-PhyChReconfRqstTDD                        ProtocolIE-ID ::= 180
```

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id-UL-DPCH-InformationItem-RL-AdditionRspTDD                     ProtocolIE-ID ::= 181
id-UL-DPCH-InformationItem-RL-SetupRspTDD                        ProtocolIE-ID ::= 182
id-UL-DPCH-InformationAddListIE-RL-ReconfReadyTDD                ProtocolIE-ID ::= 183
id-UL-SIRTarget                                                  ProtocolIE-ID ::= 184
id-URA-Information                                               ProtocolIE-ID ::= 185
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureFDD      ProtocolIE-ID ::= 188
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureFDD         ProtocolIE-ID ::= 189
id-UnsuccessfulRL-InformationResponse-RL-SetupFailureTDD         ProtocolIE-ID ::= 190
id-Active-Pattern-Sequence-Information                           ProtocolIE-ID ::= 193
id-AdjustmentRatio                                               ProtocolIE-ID ::= 194
id-CauseLevel-RL-AdditionFailureFDD                              ProtocolIE-ID ::= 197
id-CauseLevel-RL-AdditionFailureTDD                              ProtocolIE-ID ::= 198
id-CauseLevel-RL-ReconfFailure                                   ProtocolIE-ID ::= 199
id-CauseLevel-RL-SetupFailureFDD                                 ProtocolIE-ID ::= 200
id-CauseLevel-RL-SetupFailureTDD                                 ProtocolIE-ID ::= 201
id-DL-CCTrCH-InformationDeleteItem-RL-ReconfPrepTDD              ProtocolIE-ID ::= 205
id-DL-CCTrCH-InformationModifyItem-RL-ReconfPrepTDD              ProtocolIE-ID ::= 206
id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD              ProtocolIE-ID ::= 207
id-DL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD              ProtocolIE-ID ::= 208
id-DL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD              ProtocolIE-ID ::= 209
id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD              ProtocolIE-ID ::= 210
id-DL-DPCH-InformationAddListIE-RL-ReconfReadyTDD                ProtocolIE-ID ::= 212
id-DL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD             ProtocolIE-ID ::= 213
id-DL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD             ProtocolIE-ID ::= 214
id-DSCHs-to-Add-TDD                                              ProtocolIE-ID ::= 215
id-DSCHs-to-Add-FDD                                              ProtocolIE-ID ::= 216
id-DSCH-DeleteList-RL-ReconfPrepTDD                              ProtocolIE-ID ::= 217
id-DSCH-Delete-RL-ReconfPrepFDD                                  ProtocolIE-ID ::= 218
id-DSCH-FDD-Information                                          ProtocolIE-ID ::= 219
id-DSCH-InformationListIE-RL-AdditionRspTDD                      ProtocolIE-ID ::= 220
id-DSCH-InformationListIEs-RL-SetupRspTDD                        ProtocolIE-ID ::= 221
id-DSCH-TDD-Information                                          ProtocolIE-ID ::= 222
id-DSCH-FDD-InformationResponse                                  ProtocolIE-ID ::= 223
id-DSCH-Information-RL-SetupRqstFDD                              ProtocolIE-ID ::= 226
id-DSCH-ModifyList-RL-ReconfPrepTDD                              ProtocolIE-ID ::= 227
id-DSCH-Modify-RL-ReconfPrepFDD                                  ProtocolIE-ID ::= 228
id-DSCH-Specific-FDD-Additional-List                            ProtocolIE-ID ::= 324
id-DSCHsToBeAddedOrModified-FDD                                  ProtocolIE-ID ::= 229
id-DSCHToBeAddedOrModifiedList-RL-ReconfReadyTDD                 ProtocolIE-ID ::= 230
id-EnhancedDSCHPC                                                ProtocolIE-ID ::= 29
id-EnhancedDSCHPCIndicator                                       ProtocolIE-ID ::= 225
id-GA-Cell                                                       ProtocolIE-ID ::= 232
id-GA-CellAdditionalShapes                                       ProtocolIE-ID ::= 3
id-SSDT-CellIDforEDSCHPC                                         ProtocolIE-ID ::= 246
id-Transmission-Gap-Pattern-Sequence-Information                ProtocolIE-ID ::= 255
id-UL-CCTrCH-DeleteInformation-RL-ReconfPrepTDD                  ProtocolIE-ID ::= 256
id-UL-CCTrCH-ModifyInformation-RL-ReconfPrepTDD                  ProtocolIE-ID ::= 257
id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD             ProtocolIE-ID ::= 258
id-UL-CCTrCH-InformationDeleteList-RL-ReconfPrepTDD             ProtocolIE-ID ::= 259
id-UL-CCTrCH-InformationModifyList-RL-ReconfPrepTDD             ProtocolIE-ID ::= 260
id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD            ProtocolIE-ID ::= 261
id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD            ProtocolIE-ID ::= 262
id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD            ProtocolIE-ID ::= 263
```

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id-UL-DPCH-InformationDeleteListIE-RL-ReconfReadyTDD            ProtocolIE-ID ::= 264
id-UL-DPCH-InformationModifyListIE-RL-ReconfReadyTDD            ProtocolIE-ID ::= 265
id-UnsuccessfulRL-InformationResponse-RL-AdditionFailureTDD     ProtocolIE-ID ::= 266
id-USCHs-to-Add                                                 ProtocolIE-ID ::= 267
id-USCH-DeleteList-RL-ReconfPrepTDD                             ProtocolIE-ID ::= 268
id-USCH-InformationListIE-RL-AdditionRspTDD                     ProtocolIE-ID ::= 269
id-USCH-InformationListIEs-RL-SetupRspTDD                       ProtocolIE-ID ::= 270
id-USCH-Information                                             ProtocolIE-ID ::= 271
id-USCH-ModifyList-RL-ReconfPrepTDD                             ProtocolIE-ID ::= 272
id-USCHToBeAddedOrModifiedList-RL-ReconfReadyTDD                ProtocolIE-ID ::= 273
id-DL-Physical-Channel-Information-RL-SetupRqstTDD              ProtocolIE-ID ::= 274
id-UL-Physical-Channel-Information-RL-SetupRqstTDD              ProtocolIE-ID ::= 275
id-ClosedLoopMode1-SupportIndicator                            ProtocolIE-ID ::= 276
id-ClosedLoopMode2-SupportIndicator                            ProtocolIE-ID ::= 277
id-STTD-SupportIndicator                                       ProtocolIE-ID ::= 279
id-CFNReportingIndicator                                       ProtocolIE-ID ::= 14
id-CNOriginatedPage-PagingRqst                                 ProtocolIE-ID ::= 23
id-InnerLoopDLPCStatus                                         ProtocolIE-ID ::= 24
id-PropagationDelay                                            ProtocolIE-ID ::= 25
id-RxTimingDeviationForTA                                      ProtocolIE-ID ::= 36
id-timeSlot-ISCP                                               ProtocolIE-ID ::= 37
id-CCTrCH-InformationItem-RL-FailureInd                        ProtocolIE-ID ::= 15
id-CCTrCH-InformationItem-RL-RestoreInd                        ProtocolIE-ID ::= 16
id-CommonMeasurementAccuracy                                   ProtocolIE-ID ::= 280
id-CommonMeasurementObjectType-CM-Rprt                         ProtocolIE-ID ::= 281
id-CommonMeasurementObjectType-CM-Rqst                         ProtocolIE-ID ::= 282
id-CommonMeasurementObjectType-CM-Rsp                          ProtocolIE-ID ::= 283
id-CommonMeasurementType                                       ProtocolIE-ID ::= 284
id-CongestionCause                                             ProtocolIE-ID ::= 18
id-SFN                                                         ProtocolIE-ID ::= 285
id-SFNReportingIndicator                                       ProtocolIE-ID ::= 286
id-InformationExchangeID                                       ProtocolIE-ID ::= 287
id-InformationExchangeObjectType-InfEx-Rprt                    ProtocolIE-ID ::= 288
id-InformationExchangeObjectType-InfEx-Rqst                    ProtocolIE-ID ::= 289
id-InformationExchangeObjectType-InfEx-Rsp                     ProtocolIE-ID ::= 290
id-InformationReportCharacteristics                            ProtocolIE-ID ::= 291
id-InformationType                                             ProtocolIE-ID ::= 292
id-neighbouring-LCR-TDD-CellInformation                        ProtocolIE-ID ::= 58
id-DL-Timeslot-ISCP-LCR-Information-RL-SetupRqstTDD            ProtocolIE-ID ::= 65
id-RL-LCR-InformationResponse-RL-SetupRspTDD                   ProtocolIE-ID ::= 66
id-UL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD             ProtocolIE-ID ::= 75
id-UL-DPCH-LCR-InformationItem-RL-SetupRspTDD                 ProtocolIE-ID ::= 76
id-DL-CCTrCH-LCR-InformationListIE-RL-SetupRspTDD             ProtocolIE-ID ::= 77
id-DL-DPCH-LCR-InformationItem-RL-SetupRspTDD                 ProtocolIE-ID ::= 78
id-DSCH-LCR-InformationListIEs-RL-SetupRspTDD                 ProtocolIE-ID ::= 79
id-USCH-LCR-InformationListIEs-RL-SetupRspTDD                 ProtocolIE-ID ::= 80
id-DL-Timeslot-ISCP-LCR-Information-RL-AdditionRqstTDD        ProtocolIE-ID ::= 81
id-RL-LCR-InformationResponse-RL-AdditionRspTDD               ProtocolIE-ID ::= 86
id-UL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD         ProtocolIE-ID ::= 87
id-UL-DPCH-LCR-InformationItem-RL-AdditionRspTDD             ProtocolIE-ID ::= 88
id-DL-CCTrCH-LCR-InformationListIE-RL-AdditionRspTDD         ProtocolIE-ID ::= 89
id-DL-DPCH-LCR-InformationItem-RL-AdditionRspTDD             ProtocolIE-ID ::= 94
id-DSCH-LCR-InformationListIEs-RL-AdditionRspTDD             ProtocolIE-ID ::= 96
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id-USCH-LCR-InformationListIEs-RL-AdditionRspTDD                    ProtocolIE-ID ::= 97
id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD               ProtocolIE-ID ::= 98
id-UL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD          ProtocolIE-ID ::= 100
id-DL-DPCH-LCR-InformationAddListIE-RL-ReconfReadyTDD               ProtocolIE-ID ::= 101
id-DL-Timeslot-LCR-InformationModifyList-RL-ReconfReadyTDD          ProtocolIE-ID ::= 104
id-UL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD               ProtocolIE-ID ::= 105
id-DL-Timeslot-LCR-InformationList-PhyChReconfRqstTDD               ProtocolIE-ID ::= 106
id-timeSlot-ISCP-LCR-List-DL-PC-Rqst-TDD                            ProtocolIE-ID ::= 138
id-TSTD-Support-Indicator-RL-SetupRqstTDD                           ProtocolIE-ID ::= 139
id-RestrictionStateIndicator                                       ProtocolIE-ID ::= 142
id-Load-Value                                                      ProtocolIE-ID ::= 233
id-Load-Value-IncrDecrThres                                        ProtocolIE-ID ::= 234
id-OnModification                                                  ProtocolIE-ID ::= 235
id-Received-Total-Wideband-Power-Value                             ProtocolIE-ID ::= 236
id-Received-Total-Wideband-Power-Value-IncrDecrThres               ProtocolIE-ID ::= 237
id-SFNSFNMeasurementThresholdInformation                           ProtocolIE-ID ::= 238
id-Transmitted-Carrier-Power-Value                                 ProtocolIE-ID ::= 239
id-Transmitted-Carrier-Power-Value-IncrDecrThres                   ProtocolIE-ID ::= 240
id-TUTRANGPSMeasurementThresholdInformation                        ProtocolIE-ID ::= 241
id-UL-Timeslot-ISCP-Value                                          ProtocolIE-ID ::= 242
id-UL-Timeslot-ISCP-Value-IncrDecrThres                            ProtocolIE-ID ::= 243
id-Rx-Timing-Deviation-Value-LCR                                   ProtocolIE-ID ::= 293
id-DPC-Mode—Change-SupportIndicator                                ProtocolIE-ID ::= 19
id-SplitType                                                      ProtocolIE-ID ::= 247
id-LengthOfTFCI2                                                   ProtocolIE-ID ::= 295
id-PrimaryCCPCH-RSCP-RL-ReconfPrepTDD                              ProtocolIE-ID ::= 202
id-DL-TimeSlot-ISCP-Info-RL-ReconfPrepTDD                          ProtocolIE-ID ::= 203
id-DL-Timeslot-ISCP-LCR-Information-RL-ReconfPrepTDD               ProtocolIE-ID ::= 204
id-DSCH-RNTI                                                       ProtocolIE-ID ::= 249
id-DL-PowerBalancing-Information                                   ProtocolIE-ID ::= 296
id-DL-PowerBalancing-ActivationIndicator                           ProtocolIE-ID ::= 297
id-DL-PowerBalancing-UpdatedIndicator                              ProtocolIE-ID ::= 298
id-DL-ReferencePowerInformation                                    ProtocolIE-ID ::= 299
id-Enhanced-PrimaryCPICH-EcNo                                       ProtocolIE-ID ::= 224
id-IPDL-TDD-ParametersLCR                                          ProtocolIE-ID ::= 252
id-CellCapabilityContainer-FDD                                     ProtocolIE-ID ::= 300
id-CellCapabilityContainer-TDD                                     ProtocolIE-ID ::= 301
id-CellCapabilityContainer-TDD-LCR                                 ProtocolIE-ID ::= 302
id-RL-Specific-DCH-Info                                            ProtocolIE-ID ::= 317
id-RL-ReconfigurationRequestFDD-RL-InformationList                 ProtocolIE-ID ::= 318
id-RL-ReconfigurationRequestFDD-RL-Information-IEs                 ProtocolIE-ID ::= 319
id-RL-ReconfigurationReadyTDD-RL-Information                        ProtocolIE-ID ::= 320
id-RL-ReconfigurationRequestTDD-RL-Information                      ProtocolIE-ID ::= 321
id-CommonTransportChannelResourcesInitialisationNotRequired        ProtocolIE-ID ::= 250
id-DelayedActivation                                               ProtocolIE-ID ::= 312
id-DelayedActivationList-RL-ActivationCmdFDD                        ProtocolIE-ID ::= 313
id-DelayedActivationInformation-RL-ActivationCmdFDD                ProtocolIE-ID ::= 314
id-DelayedActivationList-RL-ActivationCmdTDD                        ProtocolIE-ID ::= 315
id-DelayedActivationInformation-RL-ActivationCmdTDD                ProtocolIE-ID ::= 316
id-neighbouringTDDCellMeasurementInformationLCR                    ProtocolIE-ID ::= 251
id-UL-SIR-Target-CCTrCH-InformationItem-RL-SetupRspTDD             ProtocolIE-ID ::= 150
id-UL-SIR-Target-CCTrCH-LCR-InformationItem-RL-SetupRspTDD         ProtocolIE-ID ::= 151
id-PrimCCPCH-RSCP-DL-PC-RqstTDD                                    ProtocolIE-ID ::= 451
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id-HSDSCH-FDD-Information                                    ProtocolIE-ID ::= 452
id-HSDSCH-FDD-Information-Response                           ProtocolIE-ID ::= 453
id-HSDSCH-FDD-Information-to-Add                             ProtocolIE-ID ::= 454
id-HSDSCH-FDD-Information-to-Delete                          ProtocolIE-ID ::= 455
id-HSDSCH-FDD-Update-Information                             ProtocolIE-ID ::= 466
id-HSDSCH-Information-to-Modify                              ProtocolIE-ID ::= 456
id-HSDSCH-RNTI                                               ProtocolIE-ID ::= 457
id-HSDSCH-TDD-Information                                    ProtocolIE-ID ::= 458
id-HSDSCH-TDD-Information-Response                           ProtocolIE-ID ::= 459
id-HSDSCH-TDD-Information-Response-LCR                       ProtocolIE-ID ::= 460
id-HSDSCH-TDD-Information-to-Add                             ProtocolIE-ID ::= 461
id-HSDSCH-TDD-Information-to-Delete                          ProtocolIE-ID ::= 462
id-HSDSCH-TDD-Update-Information                             ProtocolIE-ID ::= 467
id-HSPDSCH-RL-ID                                            ProtocolIE-ID ::= 463
id-Angle-Of-Arrival-Value-LCR                               ProtocolIE-ID ::= 148
id-TrafficClass                                             ProtocolIE-ID ::= 158
id-TFCI-PC-SupportIndicator                                 ProtocolIE-ID ::= 248
id-Qth-Parameter                                            ProtocolIE-ID ::= 253
id-PDSCH-RL-ID                                              ProtocolIE-ID ::= 323
id-TimeSlot-RL-SetupRspTDD                                  ProtocolIE-ID ::= 325
id-GERAN-Cell-Capability                                    ProtocolIE-ID ::= 468
id-GERAN-Classmark                                          ProtocolIE-ID ::= 469
id-DSCH-InitialWindowSize                                   ProtocolIE-ID ::= 480
id-UL-Synchronisation-Parameters-LCR                        ProtocolIE-ID ::= 464
id-SNA-Information                                          ProtocolIE-ID ::= 479
id-MAChs-ResetIndicator                                     ProtocolIE-ID ::= 465
id-TDD-DL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD  ProtocolIE-ID ::= 481
id-TDD-UL-DPCH-TimeSlotFormatModifyItem-LCR-RL-ReconfReadyTDD  ProtocolIE-ID ::= 482
id-HSPDSCH-Timeslot-InformationList-PhyChReconfRqstTDD      ProtocolIE-ID ::= 493
id-HSPDSCH-Timeslot-InformationListLCR-PhyChReconfRqstTDD   ProtocolIE-ID ::= 494
END
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