

**TSG RAN Meeting #21**  
**Frankfurt, Germany, 16 - 19 September 2003**

**RP-030441**

**Title** CRs (Rel-5 only) to TS 25.433  
**Source** TSG RAN WG3  
**Agenda Item** 7.4.5

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-031052	25.433	5.5.0	5.6.0	REL-5	894	-	F	Correction of CR 609 implementation error on definition of end of audit sequence indicator and dwPCH power	TEI5
R3-031139	25.433	5.5.0	5.6.0	REL-5	876	1	F	Correction of HS-SCCH Code IE	HSDPA-IubIur
R3-031140	25.433	5.5.0	5.6.0	REL-5	888	1	F	Correction for the start code number of HS-PDSCH	HSDPA-IubIur
R3-031149	25.433	5.5.0	5.6.0	REL-5	898	2	F	Clarification to the Constant Value for TDD	TEI5
R3-031169	25.433	5.5.0	5.6.0	REL-5	877	1	F	Power configuration of PDSCH for TDD	TEI5

## CHANGE REQUEST

# 25.433 CR 876 # rev 1 # Current version: 5.5.0 #

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

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

<b>Title:</b>	# Correction of HS-SCCH Code IE		
<b>Source:</b>	# RAN3		
<b>Work item code:</b>	# HSDPA-lublur	<b>Date:</b>	# 26/08/2003
<b>Category:</b>	# <b>F</b>	<b>Release:</b>	# Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)	2	(GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)	R96	(Release 1996)
	<b>B</b> (addition of feature),	R97	(Release 1997)
	<b>C</b> (functional modification of feature)	R98	(Release 1998)
	<b>D</b> (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Rel-4	(Release 4)
		Rel-5	(Release 5)
		Rel-6	(Release 6)

<b>Reason for change:</b>	# In the procedure text for Synchronised Radio Link Reconfiguration Preparation it is stated that the Node B may modify the HS-SCCH codes corresponding to the HS-DSCH and shall then report the codes, which are used in the new configuration, in <i>HS-SCCH Specific Information Response IE</i> in the RADIO LINK RECONFIGURATION READY message.  <i>HS-SCCH Specific Information Response IE</i> is however not included in the definition of <i>HS-DSCH FDD Information Response IE</i> . Instead the name <i>HS-SCCH Code IE</i> has been used.  To correct the specification it is proposed to change the name <i>HS-SCCH Code IE</i> to <i>HS-SCCH Specific Information Response IE</i> in the definition of <i>HS-DSCH FDD Information Response IE</i> . This is also in line with the current ASN.1 code and 25.423.
<b>Summary of change:</b>	# <i>HS-SCCH Code IE</i> has been replaced with <i>HS-SCCH Specific Information Response IE</i> for <i>HS-DSCH FDD Information Response IE</i> .  <u>Impact assessment towards the previous version of the specification (same release):</u>  This CR has no impact on the previous version of the specification (same release).
<b>Consequences if not approved:</b>	# If the CR is not approved, the definition of <i>HS-DSCH FDD Information Response IE</i> is incorrect.

<b>Clauses affected:</b>	# 9.2.2.18E
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<b>Other specs affected:</b>		<b>Y</b>	<b>N</b>	
	⌘		<b>X</b>	Other core specifications ⌘
			<b>X</b>	Test specifications
			<b>X</b>	O&M Specifications
<b>Other comments:</b>	⌘			

**How to create CRs using this form:**

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

## 9.2.2.18E HS-DSCH FDD Information Response

The HS-DSCH Information Response 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
<b>HS-DSCH MAC-d Flow Specific Information Response</b>		<i>1..&lt;maxnoofMACdFlows&gt;</i>			–	
>HS-DSCH MAC-d Flow ID	M		9.2.1.31I		–	
>Binding ID	O		9.2.1.4		–	
>Transport Layer Address	O		9.2.1.63		–	
>HS-DSCH Initial Capacity Allocation	O		9.2.1.31Ha		–	
<b>HS-SCCH Specific Information ResponseCode</b>		<i>1..&lt;maxnoofHSSCCHcodes&gt;</i>			–	
>Code Number	M		INTEGER (0..127)		–	
<b>CHOICE HARQ Memory Partitioning</b>	M				–	
>Implicit					–	
>>Number of Processes	M		INTEGER (1..8,...)		–	
>Explicit					–	
>>>HARQ Memory Partitioning Information		<i>1..&lt;maxnoofHARQprocesses&gt;</i>			–	
>>>>Process Memory Size	M		9.2.1.49D	See [18]	–	

Range Bound	Explanation
<i>maxnoofMACdFlows</i>	Maximum number of HS-DSCH MAC-d flows
<i>maxnoofHSSCCHcodes</i>	Maximum number of HS-SCCH codes
<i>MaxnoofHARQprocesses</i>	Maximum number of HARQ processes for one UE

## CHANGE REQUEST

# **25.433 CR 877** # rev **1** # Current version: **5.5.0** #

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

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

<b>Title:</b>	# Power configuration of PDSCH for TDD		
<b>Source:</b>	# RAN3		
<b>Work item code:</b>	# TEI5	<b>Date:</b>	# 26/08/2003
<b>Category:</b>	# <b>F</b>	<b>Release:</b>	# Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
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		Rel-5	(Release 5)
		Rel-6	(Release 6)

<b>Reason for change:</b>	# There are two items that are not clear in the handling of power for TDD PDSCH: <ol style="list-style-type: none"> <li>1. For the case when the PDSCH is power controlled based on an inner loop power control (it has a paired UL CCTrCH), it is not clear how the initial power, minimum power and maximum power are defined.</li> <li>2. For the case that the DSCH is not power controlled based on an inner loop, it is not clear how the maximum power value, that is the reference for the power offset within the DSCH Data Frame Protocol, is defined for 3.84Mcps TDD.</li> </ol>
<b>Summary of change:</b>	# 3.84Mcps TDD: It is made clear that the minimum, maximum and initial power for PDSCH are specified in the same way as for DPCH, when the PDSCH is inner loop power controlled, in the Radio Link Setup, Radio Link Addition, and Radio Link Reconfiguration procedures. Additionally it is clarified how the maximum transmission power is determined when the DSCH is not inner loop power controlled, in each of these procedures.  1.28Mcps TDD: It is explained how the minimum, maximum and initial power for PDSCH are specified in the Radio Link Setup, Radio Link Addition, and Radio Link Reconfiguration procedures.  Rev1: two ASN punctuation errors fixed on pages 57 and 64; protocolIE-id value included.
<b>Consequences if not approved:</b>	# If this CR is not approved, it will not be clear how to determine the power settings for the PDSCH inner loop or what the maximum PDSCH power reference in 3.84 Mcps TDD is when not using a PDSCH inner loop.  Impact Analysis:

Impact assessment towards the previous version of the specification (same release):  
 This CR has isolated impact with the previous version of the specification (same release) because these changes correct the power settings for DSCH for TDD. The impact can be considered isolated because the change affects one function namely power settings for DSCH for TDD.

<b>Clauses affected:</b>	⌘	8.2.17.2, 8.3.1.2, 8.3.2.2, 8.3.5.2, 9.1.36.2, 9.1.39.2, 9.1.42.2, 9.1.47.2, 9.2.1.21, 9.3.3, 9.3.6										
<b>Other specs affected:</b>	⌘	<table border="1"><tr><th>Y</th><th>N</th></tr><tr><td></td><td>X</td></tr><tr><td></td><td>X</td></tr><tr><td></td><td>X</td></tr></table>	Y	N		X		X		X	Other core specifications	⌘
		Y	N									
			X									
	X											
	X											
	Test specifications											
	O&M Specifications											
<b>Other comments:</b>	⌘											

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## 8.2.17 Radio Link Setup

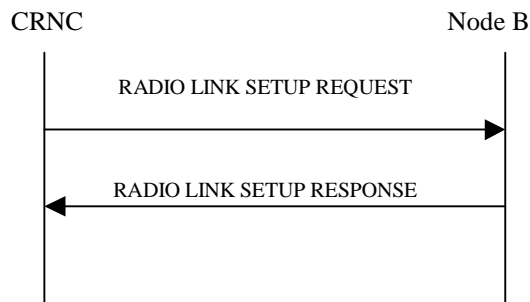
### 8.2.17.1 General

This procedure is used for establishing the necessary resources for a new Node B Communication Context in the Node B.

[FDD - The Radio Link Setup procedure is used to establish one or more radio links. The procedure establishes one or more DCHs on all radio links, and in addition, it can include the establishment of one or more DSCHs or an HS-DSCH on one radio link.]

[TDD - The Radio Link Setup procedure is used to establish one radio link including one or more transport channels. The transport channels can be a mix of DCHs, DSCHs, and USCHs, or DCHs and an HS-DSCH, including also combinations where one or more transport channel types are not present.]

### 8.2.17.2 Successful Operation



**Figure 24: Radio Link Setup procedure, Successful Operation**

The procedure is initiated with a RADIO LINK SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port.

Upon reception of the RADIO LINK SETUP REQUEST message, the Node B shall reserve necessary resources and configure the new Radio Link(s) according to the parameters given in the message.

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

#### Transport Channels Handling:

##### DCH(s):

[TDD - If the *DCH Information* IE is present, the Node B shall configure the new DCH(s) according to the parameters given in the message.]

If the RADIO LINK SETUP REQUEST message includes a *DCH Information* IE with multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCH Information* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.

[FDD - For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]

For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD - If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16].]

The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs as the FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the configuration.

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

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

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

[FDD - The *Diversity Control Field* IE indicates for each RL (except the first RL in the message) whether the Node B shall combine the concerned RL or not.

- If the *Diversity Control Field* IE is set to "May", the Node B shall decide for either of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other RL.
- If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

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

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

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

[TDD - The Node B shall include in the *DCH Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearer to be established for each DCH of this RL.]

In the case of a set of co-ordinated DCHs, the *Binding ID* IE and the *Transport Layer Address* IE shall be specified for only one of the DCHs in the set of co-ordinated DCHs.

#### **DSCH(s):**

If the *DSCH Information* IE is present, the Node B shall configure the new DSCH(s) according to the parameters given in the message.

[FDD - If the RADIO LINK SETUP REQUEST message includes the *TFCI2 Bearer Information* IE then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received. The Node B shall manage the time of arrival of these frames according to the values of ToAWS and ToAWE specified in the IEs. The *TFCI2 Bearer Information Response* IE containing the *Binding ID* IE and the *Transport Layer Address* IE for the new bearer to be set up for this purpose shall be returned in the RADIO LINK SETUP RESPONSE message. If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *TFCI2 Bearer Information* IE the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a TFCI2 transport bearer.]

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *DSCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the DSCH.



The Node B shall include in the *DSCH Information Response* IE in the RADIO LINK SETUP RESPONSE the *Binding ID* IE and the *Transport Layer Address* IE for the transport bearer to be established for each DSCH of this RL.

**[TDD - USCH(s)]:**

[TDD - If the *USCH Information* IE is present, the Node B shall configure the new USCH(s) according to the parameters given in the message.]

[TDD - If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *USCH Information* IE, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the USCH.]

[TDD - If the *USCH Information* IE is present, the Node B shall include in the *USCH Information Response* IE in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and the *Transport Layer Address* IE for the transport bearer to be established for each USCH of this RL.]

**HS-DSCH(s):**

If the *HS-DSCH Information* IE is present, the Node B shall configure the new HS-DSCH resources according to the parameters given in the message.

[FDD - If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]

If the *HS-DSCH Information* IE and the *HS-PDSCH RL ID* IE are present, the Node B shall configure the new HS-DSCH resources in the radio link specified by the HS-PDSCH RL ID.

In addition, the Node B shall include in the RADIO LINK SETUP RESPONSE message the *Binding ID* IE and *Transport Layer Address* IE for the transport bearers to be established for the HS-DSCH MAC-d flows of this RL.

If the RADIO LINK SETUP REQUEST message includes the *Transport Layer Address* IE and *Binding ID* IE in the *HS-DSCH Information* IE for an HS-DSCH MAC-d flow, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for the concerned HS-DSCH MAC-d flow.

If the *HS-DSCH-RNTI* IE is present, the Node B shall use the HS-DSCH RNTI value for HS-DSCH processing for the respective Node B Communication Context.

The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK SETUP RESPONSE message for each MAC-d flow, if the Node B allows the CRNC to start transmission of the MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].

[FDD - If the RADIO LINK SETUP REQUEST message includes *Measurement Power Offset* IE in the *HS-DSCH Information* IE, then the Node B shall use the measurement power offset as described in ref [10], subclause 6A.2.]

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

**Physical Channels Handling:**

**[FDD - Compressed Mode]:**

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

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

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

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

**[FDD - DL Code Information]:**

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

**[TDD - PDSCH RL ID]:**

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

**General:**

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

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

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

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

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

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

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

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

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

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

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

**DL Power Control:**

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

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

[3.84 Mcps TDD - The Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall start any DL transmission on each DCH type CCTrCH using the initial CCTrCH DL power, as determined above, on each DL DPCH and on each Time Slot of the CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

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

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

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

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

[1.28 Mcps TDD - The Node B shall determine the initial DL power for each timeslot within the DCH type CCTrCH by the following rule: If the *Initial DL Transmission Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the Initial DL Power and ignore the *DL Time Slot ISCP info LCR* IE, otherwise the initial DL Power is the *Initial DL Transmission Power* IE included in the *RL Information* IE and if *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio

link unchanged. The Node B shall start any DL transmission on each timeslot within each DCH type CCTrCH using the initial DL power, as determined above, on each DL DPCH and on each timeslot of the CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4), but shall always be kept within the maximum and minimum limit specified in the RADIO LINK SETUP REQUEST message.]

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

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

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

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

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

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

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

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

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

**[1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:**

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

**General:**

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

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

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

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

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

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

**[FDD - Radio Link Set Handling]:**

[FDD - The *First RLS Indicator* IE indicates if the concerned RL shall be considered part of the first RLS established towards this UE. The *First RLS Indicator* IE shall be used by the Node B together with the value of the *DL TPC Pattern 01 Count* IE which the Node B has received in the Cell Setup procedure, to determine the initial TPC pattern in the DL of the concerned RL and all RLs which are part of the same RLS, as described in [10], section 5.1.2.2.1.2.]

[FDD - For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication Context.]

[FDD - For all RLs having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK SETUP RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication Context.]

[FDD - The UL out-of-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the maximum value of the parameters *N\_OUTSYNC\_IND* and *T\_RLFAILURE* that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters *N\_INSYNC\_IND*, that are configured in the cells supporting the radio links of the RL Set.]

**Response Message:**

If the RLs are successfully established, the Node B shall and respond with a RADIO LINK SETUP RESPONSE message.

After sending the RADIO LINK SETUP RESPONSE message the Node B shall continuously attempt to obtain UL synchronisation on the Uu interface.

For each RL for which the *Delayed Activation IE* is not included in the RADIO LINK SETUP REQUEST message, the Node B shall:

- [FDD - start transmission on the DL DPDCH(s) of the new RL as specified in [16].]
- [TDD - start transmission on the new RL immediately as specified in [16].]

For each RL for which the *Delayed Activation IE* is included in the RADIO LINK SETUP REQUEST message, the Node B shall:

- if the *Delayed Activation IE* indicates "Separate Indication":
  - not start any DL transmission for the concerned RL on the Uu interface;
- if the *Delayed Activation IE* indicates "CFN":
  - [FDD - start transmission on the DL DPDCH(s) of the new RL as specified in [16], however never before the CFN indicated in the *Activation CFN IE*.]
  - [TDD - start transmission on the new RL at the CFN indicated in the *Activation CFN IE* as specified in [16].]

**/\* partly omitted \*/**

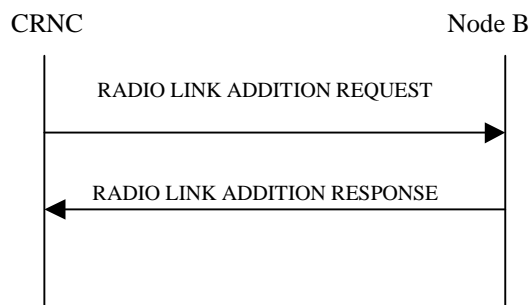
### 8.3.1 Radio Link Addition

#### 8.3.1.1 General

This procedure is used for establishing the necessary resources in the Node B for one or more additional RLs towards a UE when there is already a Node B Communication Context for this UE in the Node B.

The Radio Link Addition procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

#### 8.3.1.2 Successful Operation



**Figure: 28 Radio Link Addition procedure, Successful Operation**

The procedure is initiated with a RADIO LINK ADDITION REQUEST message sent from the CRNC to the Node B using the Communication Control Port assigned to the concerned Node B Communication Context.

Upon reception, the Node B shall reserve the necessary resources and configure the new RL(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

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

**Physical Channels Handling:**

[TDD – If the *UL DPCH Information IE* is present, the Node B shall configure the new UL DPCH(s) according to the parameters given in the message.]

[TDD – If the *DL DPCH Information* IE is present, the Node B shall configure the new DL DPCH(s) according to the parameters given in the message.]

**[FDD – Compressed Mode]:**

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Compressed Mode Deactivation Flag* IE with value "Deactivate", the Node B shall not activate any compressed mode pattern in the new RLs. In all the other cases (Flag set to "Maintain Active" or not present), the ongoing compressed mode (if existing) shall be applied also to the added RLs.]

[FDD- If the RADIO LINK ADDITION REQUEST message contains the *Transmission Gap Pattern Sequence Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated for each DL Channelisation Code for which the *Transmission Gap Pattern Sequence Code Information* IE is set to "Code Change".]

**[FDD – DL Code Information]:**

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

**[TDD – CCTrCH Handling]:**

[TDD – If the *UL CCTrCH Information* IE is present, the Node B shall configure the new UL CCTrCH(s) according to the parameters given in the message.]

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

[TDD – If the *DL CCTrCH Information* IE is present, the Node B shall configure the new DL CCTrCH(s) according to the parameters given in the message.]

[TDD - If the *DL CCTrCH Information* IE includes the *TDD TPC DL Step Size* IE, the Node B shall configure the downlink TPC step size according to the parameters given in the message, otherwise it shall use the step size configured in other radio link.]

**Radio Link Handling:**

**Diversity Combination Control:**

The *Diversity Control Field* IE indicates for each RL whether the Node B shall combine the new RL with existing RL(s) or not.

- If the *Diversity Control Field* IE is set to "May", the Node B shall decide for any of the alternatives.
- If the *Diversity Control Field* IE is set to "Must", the Node B shall combine the RL with one of the other - RL.
- If the *Diversity Control Field* IE is set to "Must not", the Node B shall not combine the RL with any other existing RL.

When a new RL is to be combined, the Node B shall choose which RL(s) to combine it with.

In the case of not combining a RL with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or a RL previously listed in the RADIO LINK ADDITION RESPONSE message, the Node B shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that no combining is done. In this case, the Node B shall include in the *DCH Information Response* IE both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DCH of the RL in the RADIO LINK ADDITION RESPONSE message.

In the case of combining with a RL established with a previous Radio Link Setup or Radio Link Addition Procedure or with a RL previously listed in this RADIO LINK ADDITION RESPONSE message, the Node B shall indicate with the Diversity Indication in the *RL Information Response* IE in the RADIO LINK ADDITION RESPONSE message that the RL is combined. In this case, the *RL ID* IE indicates (one of) the

previously established RL(s) or a RL previously listed in this RADIO LINK ADDITION RESPONSE message with which the new RL is combined.

In the case of a set of co-ordinated DCHs, the *Binding ID* IE and the *Transport Layer Address* IE shall be included for only one of the DCHs in a set of coordinated DCHs.

[TDD – The Node B shall include in the RADIO LINK ADDITION RESPONSE message both the *Transport Layer Address* IE and the *Binding ID* IE for the transport bearer to be established for each DSCH and USCH.]

**[FDD – Transmit Diversity]:**

[FDD – If the *Transmit Diversity Indicator* IE is included in the RADIO LINK ADDITION REQUEST message, the Node B shall activate/deactivate the Transmit Diversity for each new Radio Link in accordance with the *Transmit Diversity Indicator* IE and the already known diversity mode.]

**DL Power Control:**

[FDD – If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall apply the given power to the transmission on each DL DPCH of the RL when starting transmission until either UL synchronisation on the Uu interface is achieved for the RLS or Power Balancing is activated. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing RLs for this Node B Communication Context. No inner loop power control or balancing shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[10], subclause 5.2.1.2) with DPC MODE currently configured for the relevant Node B Communication Context and the downlink power control procedure (see subclause 8.3.7).]

[3.84 Mcps TDD – If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CCTrCH DL power for each DCH type CCTrCH by the following rule: If the *CCTrCH Initial DL Transmission Power* IE is included for that CCTrCH, then the Node B shall use that power for the initial CCTrCH DL power, otherwise the initial CCTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CCTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included (even if *CCTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CCTrCHs for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4).]

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

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power* IE, the Node B shall store this value and not transmit with a higher power on any DL DPCH of the RL. If no *Maximum DL Power* IE is included, any Maximum DL power stored for already existing RLs for this Node B Communication Context shall be applied. During compressed mode, the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

[FDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power* IE, the Node B shall store this value and never transmit with a lower power on any DL DPCH of the RL. If no *Minimum*



*DL Power IE* is included, any Minimum DL power stored for already existing RLs for this Node B Communication Context shall be applied.]

[3.84 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power IE*, the Node B shall determine the maximum CcTrCH DL power for each DCH type CcTrCH by the following rule: If the *CcTrCH Maximum DL Transmission Power IE* is included for that CcTrCH, then the Node B shall use that power for the maximum CcTrCH DL power, otherwise the maximum CcTrCH DL power is the *Maximum DL Power IE* included in the *RL Information IE*. If no *Maximum DL Power IE* is included (even if *CcTrCH Maximum DL Transmission Power IEs* are included), any maximum DL power stored for already existing DCH type CcTrCHs for this Node B Communication Context shall be applied.]

[3.84 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power IE*, the Node B shall determine the minimum CcTrCH DL power for each DCH type CcTrCH by the following rule: If the *CcTrCH Minimum DL Transmission Power IE* is included for that CcTrCH, then the Node B shall use that power for the minimum CcTrCH DL power, otherwise the minimum CcTrCH DL power is the *Minimum DL Power IE* included in the *RL Information IE*. If no *Minimum DL Power IE* is included (even if *CcTrCH Minimum DL Transmission Power IEs* are included), any minimum DL power stored for already existing DCH type CcTrCHs for this Node B Communication Context shall be applied.]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power IE*, the Node B shall determine the maximum DL power for each timeslot within a DCH type CcTrCH by the following rule: If the *Maximum DL Power IE* is included in the *DL Timeslot Information LCR IE* for that timeslot, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power IE* included in the *RL Information IE*. The Node B shall store this value and not transmit with a higher power on any applicable DL DPCH. If no *Maximum DL Power IE* is included, any maximum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power IE*, the Node B shall determine the minimum DL power for each timeslot within a DCH type CcTrCH by the following rule: If the *Minimum DL Power IE* is included in the *DL Timeslot Information LCR IE* for that timeslot, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power IE* included in the *RL Information IE*. The Node B shall store this value and not transmit with a lower power on any applicable DL DPCH. If no *Minimum DL Power IE* is included, any minimum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

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

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

[1.28 Mcps TDD – If the RADIO LINK ADDITION REQUEST message includes the *Initial DL Transmission Power IE*, the Node B shall determine the initial DL power for each timeslot within a DSCH type CcTrCH by the following rule: If both the *CcTrCH Initial DL Transmission Power IE*, included in the *DL CcTrCH Information IE*, and the *DL Time Slot ISCP Info LCR IE*, included in the *RL Information IE*, are included then the Node B shall use that power for the PDSCH and ignore the *Initial DL Transmission Power IE* included in the *RL Information IE*, otherwise the initial DL Power is the *Initial DL Transmission Power IE* included in the *RL Information IE* and if *DL Time Slot ISCP info LCR IE* is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall apply the given power to the transmission on each DL PDSCH and on each Time Slot of the CcTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CcTrCH. If no *Initial DL Transmission Power IE* is included, the Node B shall use any transmission power level currently used on already existing RL/timeslots for this Node B

Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Maximum DL Power IE*, the Node B shall determine the maximum DL power for each timeslot within a DSCH type CTrCH by the following rule: If the *CTrCH Maximum DL Transmission Power IE*, included in the *DL CTrCH Information IE*, is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum DL Power IE* included in the *RL Information IE*. The Node B shall store this value and not transmit with a higher power on any applicable PDSCH. If no *Maximum DL Power IE* is included, any maximum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

[1.28 Mcps TDD - If the RADIO LINK ADDITION REQUEST message includes the *Minimum DL Power IE*, the Node B shall determine the minimum DL power for each timeslot within a DSCH type CTrCH by the following rule: If the *CTrCH Minimum DL Transmission Power IE*, included in the *DL CTrCH Information IE*, is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum DL Power IE* included in the *RL Information IE*. The Node B shall store this value and not transmit with a lower power on any applicable PDSCH. If no *Minimum DL Power IE* is included, any minimum DL power stored for already existing RL/timeslots for this Node B Communication Context shall be applied.]

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

[FDD – If the power balancing is active with the Power Balancing Adjustment Type of the Node B Communication Context set to "Individual" in the existing RL(s) and the RADIO LINK ADDITION REQUEST message includes the *DL Reference Power IE*, the Node B shall activate the power balancing and use the *DL Reference Power IE* for the power balancing procedure in the new RL(s), if activation of power balancing by the RADIO LINK ADDITION REQUEST message is supported, according to subclause 8.3.7. If the Node B starts the DL transmission and the activation of the power balancing at the same CFN, the initial power of the power balancing, i.e.  $P_{init}$  shall be set to the power level indicated by the *Initial DL Transmission Power IE* (if received) or the decided DL TX power level on each DL channelisation code of a RL based on power level of existing RLs.]

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

#### **[1.28Mcps TDD – Uplink Synchronisation Parameters LCR]:**

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

#### **General:**

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

[FDD – If the RADIO LINK ADDITION REQUEST message contains an *SSDT Cell Identity IE*, the Node B shall activate SSDT, if supported, for the concerned new RL, with the indicated SSDT cell identity used for that RL.]

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

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

**[FDD – Radio Link Set Handling]:**

[FDD – For each RL not having a common generation of the TPC commands in the DL with another RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message a value that uniquely identifies the RL Set within the Node B Communication Context.]

[FDD – For all RLs having a common generation of the TPC commands in the DL with another new or existing RL, the Node B shall assign the *RL Set ID* IE included in the RADIO LINK ADDITION RESPONSE message the same value. This value shall uniquely identify the RL Set within the Node B Communication Context.]

[FDD – After addition of the new RL(s), the UL out-of-sync algorithm defined in [10] shall, for each of the previously existing and newly established RL Set(s), use the maximum value of the parameters *N\_OUTSYNC\_IND* and *T\_RLFAILURE* that are configured in the cells supporting the radio links of the RL Set. The UL in-sync algorithm defined in [10] shall, for each of the established RL Set(s), use the minimum value of the parameters *N\_INSYNC\_IND*, that are configured in the cells supporting the radio links of the RL Set.]

**Response Message:**

If all requested RLs are successfully added, the Node B shall respond with a RADIO LINK ADDITION RESPONSE message.

After sending the RADIO LINK ADDITION RESPONSE message, the Node B shall continuously attempt to obtain UL synchronisation on the Uu interface.

For each RL for which the *Delayed Activation* IE is not included in the RADIO LINK ADDITION REQUEST message, the Node B shall:

- [FDD - start transmission on the DL DPDCH(s) of the new RL as specified in [16].]
- [TDD - start transmission on the new RL immediately as specified in [16].]

For each RL for which the *Delayed Activation* IE is included in the RADIO LINK ADDITION REQUEST message, the Node B shall:

- if the *Delayed Activation* IE indicates "Separate Indication":
  - not start any DL transmission for the concerned RL on the Uu interface;
- if the *Delayed Activation* IE indicates "CFN":
  - [FDD – start transmission on the DL DPDCH(s) of the new RL as specified in [16], however never before the CFN indicated in the *Activation CFN* IE.]
  - [TDD – start transmission on the new RL at the CFN indicated in the *Activation CFN* IE as specified in [16].]

/\* partly omitted \*/

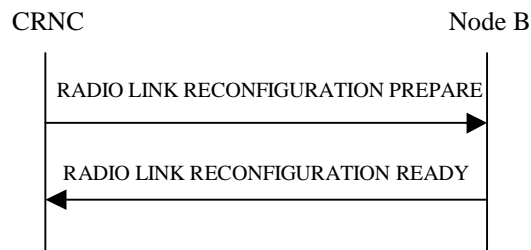
## 8.3.2 Synchronised Radio Link Reconfiguration Preparation

### 8.3.2.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one Node B Communication Context.

The Synchronised Radio Link Reconfiguration Preparation procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.2.2 Successful Operation



**Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation**

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the CRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

#### **DCH Modification:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Modify* IE then the Node B shall treat them each as follows:

- If the *DCHs to Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the radio interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the UL of a DCH, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Transport Format Set* IE for the DL of a DCH, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Allocation/Retention Priority* IE for a DCH, the Node B shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- If the *DCHs to Modify* IE includes multiple *DCH Specific Info* IEs, the Node B shall treat the DCHs in the *DCHs to Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs to Modify* IE includes the *UL FP Mode* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWS* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs to Modify* IE includes the *ToAWE* IE for a DCH or a DCH which belongs to a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD – If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

**DCH Addition:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs then the Node B shall treat them each as follows:

- If the *DCHs to Add* IE includes multiple *DCH Specific Info* IEs, the Node B shall treat the DCHs in the *DCHs to Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD – For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Transport channel BER from that DCH shall be the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" shall be used for the QE in the UL data frames, ref. [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE, ref. [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE, ref. [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD – The Node B shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration.]

**DCH Deletion:**

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Delete* IE, the Node B shall not include the referenced DCHs in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

**Physical Channel Modification:**

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD - If the *UL DPCH Information* IE includes the *Uplink Scrambling Code* IE, the Node B shall apply this Uplink Scrambling Code to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Min UL Channelisation Code Length* IE, the Node B shall apply the value in the new configuration. The Node B shall apply the contents of the *Max Number of UL DPDCHs* IE (if it is included) in the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *UL SIR Target* IE, the Node B shall use the value for the UL inner loop power control when the new configuration is being used.]

- [FDD - If the *UL DPCH Information* IE includes the *Puncture Limit* IE, the Node B shall apply the value in the uplink of the new configuration.]
- [FDD - The Node B shall use the *TFCS* IE for the UL (if present) when reserving resources for the uplink of the new configuration. The Node B shall apply the new TFCS in the Uplink of the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *UL DPCCCH Slot Format* IE, the Node B shall set the new Uplink DPCCCH Structure to the new configuration.]
- [FDD - If the *UL DPCH Information* IE includes the *Diversity Mode* IE, the Node B shall apply diversity according to the given value.]
- [FDD - If the *UL DPCH Information* IE includes an *SSDT Cell Identity Length* IE and/or an *S-Field Length* IE, the Node B shall apply the values in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DL DPCH Information* IE, the Node B shall apply the parameters to the new configuration as follows:]

- [FDD - The Node B shall use the *TFCS* IE for the DL (if it is present) when reserving resources for the downlink of the new configuration. The Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD - If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE or the *TFCI Presence* IE, the Node B shall use the information when building TFCIs in the new configuration.]
- [FDD - If the *DL DPCH Information* IE includes the *DL DPCH Slot Format* IE, the Node B shall set the new Downlink DPCH Structure to the new configuration.]
- [FDD - If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the Node B shall apply the indicated multiplexing type in the new configuration.]
- [FDD - If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD - If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]
- [FDD - If the *DL DPCH Information* IE includes the *PDSCH Code Mapping* IE, then the Node B shall apply the defined mapping between TFCI values and PDSCH channelisation codes.]
- [FDD - If the *DL DPCH Information* IE includes the *PDSCH RL ID* IE, then the Node B shall infer that the PDSCH for the specified user will be transmitted on the defined radio link.]

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

#### [TDD – UL/DL CCTrCH Modification]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH to Modify* or *DL CCTrCH to Modify* IE, then the Node B shall treat them each as follows:]

- [TDD – If the IE includes any of the *TFCS* IE, *TFCI coding* IE or *Puncture Limit* IE, the Node B shall apply these as the new values, otherwise the old values specified for this CCTrCH are still applicable.]
- [TDD – If the IE includes any *UL DPCH To Add* IE or *DL DPCH To Add* IE, the Node B shall include this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH To Delete* IE or *DL DPCH To Delete* IE, the Node B shall remove this DPCH in the new configuration.]
- [TDD – If the IE includes any *UL DPCH To Modify* IE or *DL DPCH To Modify* IE and includes any of the *Repetition Period* IE, *Repetition Length* IE or *TDD DPCH Offset* IE, or the message includes UL/DL Timeslot Information and includes any of the [3.84Mcps TDD - *Midamble Shift And Burst Type* IE], [1.28Mcps TDD -

*Midamble Shift LCR IE*], or *TFCI Presence IE* or the message includes UL/DL Code information and includes [3.84Mcps TDD - *TDD Channelisation Code IE*], [1.28Mcps TDD - *TDD Channelisation Code LCR IE*] , [1.28Mcps TDD - *TDD UL DPCH Time Slot Format LCR IE* or *TDD DL DPCH Time Slot Format LCR IE*], the Node B shall apply these specified information elements as the new values, otherwise the old values specified for this DPCH configuration are still applicable.]

- [1.28Mcps TDD – If the *UL CCH To Modify IE* includes the *UL SIR Target IE*, the Node B shall use the value for the UL inner loop power control according [19] and [21] when the new configuration is being used.]
- [1.28Mcps TDD - If the *UL CCH to Modify IE* includes the *TDD TPC UL Step Size IE*, the Node B shall apply this value to the uplink TPC step size in the new configuration.]
- [TDD - If the *DL CCH to Modify IE* includes the *TDD TPC DL Step Size IE*, the Node B shall apply this value to the downlink TPC step size in the new configuration.]

#### [TDD – UL/DL CCH Addition]

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

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

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

[1.28Mcps TDD - If the *UL CCH To Add IE* includes the *TDD TPC UL Step Size IE*, the Node B shall apply the uplink TPC step size in the new configuration.]

[1.28Mcps TDD –The Node B shall use the *UL SIR Target IE* in the *UL CCH To Add IE* as the UL SIR value for the inner loop power control for this CCH according [19] and [21] in the new configuration.]

#### [TDD – UL/DL CCH Deletion]

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

#### DL Power Control:

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

[FDD - If updating of power balancing parameters by the RADIO LINK RECONFIGURATION PREPARE message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator IE* in the *RL Information Response IE* for each affected RL in the RADIO LINK RECONFIGURATION READY message.]

#### DSCH Addition/Modification/Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Add*, *DSCH To Modify* or *DSCH To Delete IE*, then the Node B shall use this information to add/modify/delete the indicated DSCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address IE* and the *Binding ID IE* for the transport bearer to be established for each DSCH.

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Information IE*, then the Node B shall support the establishment of a transport bearer on which the DSCH TFCI Signaling control frames shall be received if one does not already exist or shall apply the new values if such a bearer does already exist

for this Node B Communication Context. The *Binding ID IE* and *Transport Layer Address IE* of any new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message. If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address IE* and *Binding ID IE* in the *TFCI2 Bearer Information IE* the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a TFCI2 transport bearer. If the RADIO LINK RECONFIGURATION PREPARE message specifies that the TFCI2 transport bearer is to be deleted, then the Node B shall release the resources associated with that bearer in the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *TFCI2 Bearer Request Indicator IE* in the *TFCI2 Bearer Information IE* with the value "New Bearer Requested", the Node B shall, if supported, establish a new transport bearer replacing the existing transport bearer on which the DSCH TFCI Signaling control frames shall be received. The *Binding ID IE* and *Transport Layer Address IE* of a new bearer to be set up for this purpose shall be returned in the RADIO LINK RECONFIGURATION READY message.]

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

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

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

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

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

- [FDD - If the *Enhanced DSCH PC Indicator IE* is included and set to "Enhanced DSCH PC Active in the UE ", the Node B shall activate enhanced DSCH power control in accordance with ref. [10] subclause 5.2.2, if supported, using either:]
  - [FDD - the *SSDT Cell Identity for EDSCHPC IE* in the *RL Information IE*, if the *SSDT Cell Identity IE* is not included in the *RL Information IE* or]
  - [FDD - the *SSDT Cell Identity IE* in the *RL Information IE*, if both the *SSDT Cell Identity IE* and the *SSDT Cell Identity for EDSCHPC IE* are included in the *RL Information IE*.]
- [FDD - together with the *SSDT Cell Identity Length IE* in *UL DPCH Information IE*, and *Enhanced DSCH PC IE*, in the new configuration.]

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

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

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

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes USCH information for the USCHs to be added/modified/deleted then the Node B shall use this information to add/modify/delete the indicated USCH channels to/from the radio link, in the same way as the DCH info is used to add/modify/release DCHs.]
- [TDD – The Node B shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address IE* and the *Binding ID IE* for the transport bearer to be established for each USCH.]



**RL Information:**

If the RADIO LINK RECONFIGURATION PREPARE message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD – When more than one DL DPDCH are assigned per RL, the segmented physical channel shall be mapped on to DL DPDCHs according to [8]. When  $p$  number of DL DPDCHs are assigned to each RL, the first pair of DL Scrambling Code and FDD DL Channelisation Code Number corresponds to "*PhCH number 1*", the second to "*PhCH number 2*", and so on until the  $p$ th to "*PhCH number p*".]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B may activate SSDT using the *SSDT Cell Identity* IE in the new configuration.]
- [FDD – If the *RL Information* IE includes the *Qth Parameter* IE and the *SSDT Indication* IE set to "SSDT Active in the UE", the Node B shall use the *Qth Parameter* IE, if  $Q$ th signalling is supported, when SSDT is activated in the new configuration.]
- [FDD – If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT not Active in the UE", the Node B shall deactivate SSDT in the new configuration.]
- [FDD – If the *RL Information* IE includes a *DL Code Information* IE, the Node B shall apply the values in the new configuration.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- [FDD - If the *RL Information* IE includes the *Maximum DL Power* and/or the *Minimum DL Power* IEs, the Node B shall apply the values in the new configuration. During compressed mode, the  $\delta P_{curr}$ , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [3.84 Mcps TDD - If the *DL CTrCH To Add* IE is included, the Node B shall determine the maximum CTrCH DL power for the DCH type CTrCH by the following rule: If the *CTrCH Maximum DL Transmission Power* IE is included for that CTrCH, then the Node B shall use that power for the maximum CTrCH DL power, otherwise the maximum CTrCH DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. If no *Maximum Downlink Power* IE is included (even if *CTrCH Maximum DL Transmission Power* IEs are included), any maximum DL power stored for already existing DCH type CTrCHs for this Node B Communication Context shall be applied.]
- [3.84 Mcps TDD - If the *DL CTrCH To Add* IE is included, the Node B shall determine the minimum CTrCH DL power for the DCH type CTrCH by the following rule: If the *CTrCH Minimum DL Transmission Power* IE is included for that CTrCH, then the Node B shall use that power for the minimum CTrCH DL power, otherwise the minimum CTrCH DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. If no *Minimum Downlink Power* IE is included (even if *CTrCH Minimum DL Transmission Power* IEs are included), any minimum DL power stored for already existing DCH type CTrCHs for this Node B Communication Context shall be applied.]
- [3.84 Mcps TDD - If the *DL CTrCH To Modify* IE is included and *Maximum CTrCH DL Power to Modify* IE and/or *Minimum CTrCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DCH type CTrCH. If the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values for all other DCH type CTrCHs of the radio link.]
- [1.28 Mcps TDD - If the *DL CTrCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DCH type CTrCH by the following rule: If the *Maximum DL Power* IE is included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL DPCH. If no *Maximum Downlink Power* IE is included, any maximum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD - If the *DL CTrCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DCH type CTrCH by the following rule: If the *Minimum DL Power* IE is

- included in the *DL Timeslot Information LCR* IE for that timeslot, then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL DPCH. If no *Minimum Downlink Power* IE is included, any minimum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD - If the *DL CTrCH To Modify* IE is included and *Maximum DL Power to Modify LCR* IE and/or *Minimum DL Power to Modify LCR* IE are included, the Node B shall apply the values in the new configuration for this timeslot, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
  - [3.84Mcps TDD – If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial CTrCH DL power for each DCH type CTrCH by the following rule: If the *CTrCH Initial DL Transmission Power* IE is included for that CTrCH, then the Node B shall use that power for the initial CTrCH DL power, otherwise the initial CTrCH DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the determined initial CTrCH DL power to the transmission on each DPCH of the CTrCH when starting transmission on a new CTrCH until the UL synchronisation on the Uu interface is achieved for the CTrCH. If no *Initial DL Transmission Power* IE is included with a new CTrCH (even if *CTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing CTrCHs when starting transmission for a new CTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 4.2.3.4).]
  - [3.84Mcps TDD - The initial power, maximum power, and minimum power for a DSCH type CTrCH to be added or modified, shall be determined as follows:
    - If the DSCH type CTrCH is paired with an uplink CTrCH(s) for inner loop power control, the minimum, maximum and initial power for each PDSCH is determined in the same way as described above for DCH type CTrCHs.
    - If the DSCH type CTrCH is not paired with an uplink CTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CTrCHs. The minimum and initial powers, however, are subject to control by the CRNC via the frame protocol].
  - [1.28 Mcps TDD – If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot in a DCH type CTrCH by the following rule: If the *Initial DL Transmission Power* IE is included in the *DL Timeslot Information LCR* IE, then the Node B shall use that power for the initial DL power, otherwise the initial DL power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. The Node B shall apply the given power to the transmission on each DL DPCH and on each Time Slot of the CTrCH when starting transmission until the UL synchronisation on the Uu interface is achieved for the CTrCH. If no *Initial DL Transmission Power* IE is included, the Node B shall use any transmission power level currently used on already existing timeslots for this Node B Communication Context. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]
  - [1.28Mcps TDD - If the *RL Information* IE includes the *Initial DL Transmission Power* IE, the Node B shall determine the initial DL power for each timeslot within the DSCH type CTrCH by the following rule: If both the *CTrCH Initial DL Transmission Power* IE and the *DL Time Slot ISCP Info LCR* IE are included then the Node B shall use that power for the PDSCH power, otherwise the PDSCH power is the *Initial DL Transmission Power* IE included in the *RL Information* IE. If *DL Time Slot ISCP info LCR* IE is present, the Node B shall use the indicated value when deciding the initial DL TX Power for each timeslot as specified in [21], it shall reduce the DL TX power in those downlink timeslots of the radio link where the interference is low, and increase the DL TX power in those timeslots where the interference is high, while keeping the total downlink power in the radio link unchanged. The Node B shall apply the given power to the transmission on each PDSCH and on each timeslot of the CTrCH when starting transmission on a new CTrCH until the UL synchronisation on the Uu interface is achieved for the CTrCH. If no *Initial DL Transmission Power* IE is included with a new CTrCH (even if *CTrCH Initial DL Transmission Power* IEs are included), the Node B shall use any transmission power level currently used on already existing RL/timeslots when starting transmission for a new CTrCH. No inner loop power control shall be performed during this period. The DL power shall then vary according to the inner loop power control (see ref.[21], subclause 5.1.2.4).]

- [1.28 Mcps TDD - If the *DL CTrCH To Add* IE is included, the Node B shall determine the maximum DL power for each timeslot within a DSCH type CTrCH by the following rule: If the *CTrCH Maximum DL Transmission Power* IE is included then the Node B shall use that power for the maximum DL power, otherwise the maximum DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a higher power on any applicable DL PDSCH. If no *Maximum Downlink Power* IE is included, any maximum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD - If the *DL CTrCH To Add* IE is included, the Node B shall determine the minimum DL power for each timeslot within a DSCH type CTrCH by the following rule: If the *CTrCH Minimum DL Transmission Power* IE is included then the Node B shall use that power for the minimum DL power, otherwise the minimum DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. The Node B shall store this value and not transmit with a lower power on any applicable DL PDSCH. If no *Minimum Downlink Power* IE is included, any minimum DL power stored for already existing timeslots for this Node B Communication Context shall be applied.]
- [1.28 Mcps TDD - If the *DL CTrCH To Modify* IE is included and the *Maximum CTrCH DL Power to Modify* IE and/or the *Minimum CTrCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DSCH type CTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [FDD- If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the Node B shall adjust the timing of the radio link accordingly in the new configuration.]
- [1.28Mcps TDD – If the *RL Information* IE message contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]

#### [TDD - PDSCH RL ID]:

- [TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *PDSCH RL ID* IE then in the new configuration the Node B shall use the PDSCH and/or PUSCH in this radio link.]

#### Signalling bearer rearrangement:

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Signalling Bearer Request Indicator* IE the Node B shall, if supported, allocate a new Communication Control Port for the control of the Node B Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION READY message.

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

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH Information To Add* IE or *HS-DSCH Information To Modify* IE or *HS-DSCH Information To Delete* IE, then the Node B shall use this information to add/modify/delete the indicated HS-DSCH channel to/from the radio link when the radio link on which the HS-PDSCH is mapped is in the Node B. Otherwise, the Node B shall update the configuration of the HS-DSCH according to the received *HS-DSCH Information To Modify*, *HS-DSCH Information To Add* or *HS-DSCH Information to Delete* IEs. Node B shall store the latest HS-DSCH configuration until the Node B Communication Context is deleted.

[FDD - If the *HS-DSCH To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH codes corresponding to the HS-DSCH. The Node B shall then report the codes which are used in the new configuration specified in *HS-SCCH Specific Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

[TDD - If the *HS-DSCH To Modify* IE includes the *HS-SCCH Code Change Grant* IE, then the Node B may modify the HS-SCCH parameters codes corresponding to the HS-DSCH. The Node B shall then report the values for the parameters which are used in the new configuration specified in the [3.84Mcps TDD - *HS-SCCH Specific Information Response*] [1.28Mcps TDD - *HS-SCCH Specific Information Response LCR*] IEs in the RADIO LINK RECONFIGURATION READY message.]

[FDD – If the *HS-SCCH Power Offset* IE is included in the *HS-DSCH Information To Add* IE or *HS-DSCH Information To Modify* IE, the Node B may use this value to determine the HS-SCCH power. The HS-SCCH Power Offset should be applied for any HS-SCCH transmission to this UE.]

[FDD – If the RADIO LINK RECONFIGURATION PREPARE message includes the *CQI Feedback Cycle k* IE, the *CQI Repetition Factor* IE, the *ACK-NACK Repetition Factor* IE, the *ACK Power Offset* IE, the *NACK Power Offset* IE or the *CQI Power Offset* IE in the *HS-DSCH Information To Modify* IE, then the DRNS shall use the indicated CQI Feedback Cycle *k* value, the CQI Repetition Factor or the ACK-NACK Repetition Factor, ACK Power Offset, the NACK Power Offset or the CQI Power Offset in the new configuration.]

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

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-PDSCH RL ID* IE, then the Node B shall configure the HS-PDSCH in the radio link indicated by this IE, while removing any existing HS-PDSCH resources from other radio links associated with the Node B Communication Context.

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

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

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

The Node B shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for each MAC-d flow, if the Node B allows the CRNC to start transmission of MAC-d PDUs before the Node B has allocated capacity on user plane as described in [24].

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

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes *Measurement Power Offset* IE in the *HS-DSCH Information To Add* IE or the *HS-DSCH Information To Modify* IE, then the Node B shall use the measurement power offset as described in [10] subclause 6A.2.]

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

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

## General

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IEs in the *DSCHs To Modify*, *DSCHs To Add*, [TDD - *USCHs To Modify*, *USCHs To Add*], *HS-DSCH Information To Modify*, *HS-DSCH Information To Add* or in the *RL Specific DCH Information* IEs, the Node B may use the transport layer address and the binding identifier received from the CRNC when establishing a transport bearer for any Transport Channel or HS-DSCH MAC-d flow being added, or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

If the requested modifications are allowed by the Node B and the Node B has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the CRNC with the RADIO LINK RECONFIGURATION READY message. When this procedure has been completed successfully there exists a Prepared Reconfiguration, as defined in subclause 3.1.

The Node B shall include in the RADIO LINK RECONFIGURATION READY message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel or HS-DSCH MAC-d flow being added or any Transport Channel or HS-DSCH MAC-d flow being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE.

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

In the case of a Radio Link being combined with another Radio Link within the Node B, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

*/\* partly omitted \*/*

## 8.3.5 Unsynchronised Radio Link Reconfiguration

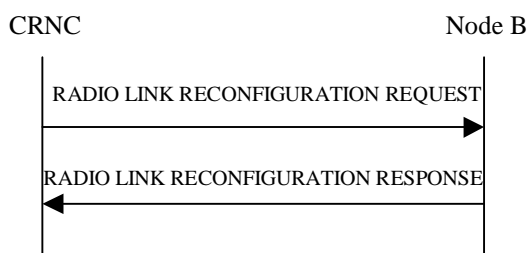
### 8.3.5.1 General

The Unsynchronised Radio Link Reconfiguration procedure is used to reconfigure Radio Link(s) related to one UE-UTRAN connection within a Node B.

The Unsynchronised Radio Link Reconfiguration procedure is used when there is no need to synchronise the time of the switching from the old to the new configuration in one Node B used for a UE-UTRAN connection with any other Node B also used for the UE-UTRAN connection.

The Unsynchronised Radio Link Reconfiguration procedure shall not be initiated if a Prepared Reconfiguration exists, as defined in subclause 3.1.

### 8.3.5.2 Successful Operation



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

The Unsynchronised Radio Link Reconfiguration procedure is initiated by the CRNC by sending the RADIO LINK RECONFIGURATION REQUEST message to the Node B. The message shall use the Communication Control Port assigned for this Node B Communication Context.

Upon reception, the Node B shall modify the configuration of the Radio Link(s) according to the parameters given in the message. Unless specified below, the meaning of parameters is specified in other specifications.

The Node B shall prioritise resource allocation for the RL(s) to be modified according to Annex A.

#### **DCH Modification:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCHs To Modify* IE then the Node B shall treat them each as follows:

- If the *DCHs To Modify* IE includes the *Frame Handling Priority* IE, the Node B should store this information for this DCH in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the UL, the Node B shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs To Modify* IE includes the *Transport Format Set* IE for the DL, the Node B shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs to Modify* IE includes the *Allocation/Retention Priority* IE for a DCH, the Node B shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.

- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs, then the Node B shall treat the DCHs in the *DCHs To Modify* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- If the *DCHs To Modify* IE includes the *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWS* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWS in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE includes the *ToAWE* IE for a DCH or a set of co-ordinated DCHs, the Node B shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Downlink of this DCH in the new configuration.]
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be modified, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

#### **DCH Addition:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any *DCH To Add* IE, the Node B shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCHs in the new configuration. In particular:

- If a *DCHs To Add* IE includes multiple *DCH Specific Info* IEs for a DCH to be added, the Node B shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The Node B shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD - For DCHs which do not belong to a set of co-ordinated DCHs with the *QE-Selector* IE set to "selected", the Node B shall use the Transport channel BER from that DCH as the base for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If the *QE-Selector* IE is set to "non-selected", the Physical channel BER shall be used for the QE in the UL data frames, ref. [16].]
- For a set of co-ordinated DCHs, the Node B shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" as the QE in the UL data frames [16]. [FDD – If no Transport channel BER is available for the selected DCH, the Physical channel BER shall be used for the QE [16]. If all DCHs have the *QE-Selector* IE set to "non-selected", the Physical channel BER shall be used for the QE [16].]
- The Node B should store the *Frame Handling Priority* IE received for a DCH to be added in the new configuration. The received Frame Handling Priority should be used when prioritising between different frames in the downlink on the Uu interface in congestion situations within the Node B once the new configuration has been activated.
- The Node B shall use the included *UL FP Mode* IE for a DCH or a set of co-ordinated DCHs to be added as the new FP Mode in the Uplink of the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWS* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window Start Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- The Node B shall use the included *ToAWE* IE for a DCH or a set of co-ordinated DCHs to be added as the new Time of Arrival Window End Point in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the DL of a DCH to be added, the Node B shall apply the new CCTrCH ID in the downlink of this DCH in the new configuration.]

- [TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *CCTrCH ID* IE for the UL of a DCH to be added, the Node B shall apply the new CCTrCH ID in the Uplink of this DCH in the new configuration.]

#### **DCH Deletion:**

If the RADIO LINK RECONFIGURATION REQUEST message includes any DCH to be deleted from the Radio Link(s), the Node B shall not include this DCH in the new configuration.

If all of the DCHs belonging to a set of co-ordinated DCHs are requested to be deleted, the Node B shall not include this set of co-ordinated DCHs in the new configuration.

#### **[FDD - Physical Channel Modification]:**

[FDD - If the RADIO LINK RECONFIGURATION REQUEST message includes an *UL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD - If the *UL DPCH Information* IE includes the *TFCS* IE for the UL, the Node B shall apply the new TFCS in the Uplink of the new configuration.]

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes a *DL DPCH Information* IE, then the Node B shall apply the parameters to the new configuration as follows:]

- [FDD – If the *DL DPCH Information* IE includes on the *TFCS* IE for the DL, the Node B shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *TFCI Signalling Mode* IE, the Node B shall use the information when building TFCIs in the new configuration.
  - [FDD – If the *Length Of TFCI2* IE is included, then the Node B shall apply the length of TFCI (field 2) indicated in the message in the new configuration.]
  - [FDD – If the *Length Of TFCI2* IE is not included and the *Split Type* IE is present with the value "Hard", then the Node B shall assume the value of the TFCI (field 2) is 5 bits in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the Node B shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD – If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the Node B shall not use Limited Power Increase for the inner loop DL power control in the new configuration.]

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

#### **[TDD – UL/DL CCTrCH Modification]**

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

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

[1.28Mcps TDD - If the *UL CCTrCH To Modify* IE includes *UL SIR Target* IE, the Node B shall apply this value as the new configuration and use it for the UL inner loop power control according [19] and [21].]

#### **[TDD – UL/DL CCTrCH Deletion]**

[TDD – If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH To Delete* IE or *DL CCTrCH To Delete* IE, the Node B shall not include this CCTrCH in the new configuration.]

#### **DL Power Control:**

- [FDD – If the *Radio Link Information* IE includes the *DL Reference Power* IE and the power balancing is active, the Node B shall update the reference power of the power balancing in the indicated RL(s), if updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported, using the *DL Reference Power* IE in the RADIO LINK RECONFIGURATION REQUEST message. The updated reference power shall be used from the next adjustment period.]

[FDD – If updating of power balancing parameters by the RADIO LINK RECONFIGURATION REQUEST message is supported by the Node B, the Node B shall include the *DL Power Balancing Updated Indicator* IE in the *RL Information Response* IE for each affected RL in the RADIO LINK RECONFIGURATION RESPONSE message.]

#### RL Information:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *RL Information* IE, the Node B shall treat it as follows:

- [FDD - If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and not transmit with a higher power on any Downlink DPCH of the Radio Link once the new configuration is being used. During compressed mode, the  $\delta P_{curr}$  as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [FDD - If the *RL Information* IE includes the *Minimum DL Power* IE, the Node B shall apply this value to the new configuration and never transmit with a lower power on any Downlink Channelisation Code of the Radio Link once the new configuration is being used.]
- [3.84 Mcps TDD - If ~~the *Maximum* CTrCH *Maximum DL Transmission Power* IE~~ and/or ~~the *Minimum* CTrCH *Minimum DL Transmission Power* IE~~ are included, the Node B shall apply the values in the new configuration for this DCH type CTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other DCH type CTrCHs.]
- [3.84 Mcps TDD – The maximum power and minimum power for a DSCH type CTrCH to be modified, shall be determined as follows:
  - If the DSCH type CTrCH is paired with an uplink CTrCH(s) for inner loop power control, the minimum and maximum power for each PDSCH is determined in the same way as described above for DCH type CTrCHs.
  - If the DSCH type CTrCH is not paired with an uplink CTrCH(s) for inner loop power control, the PDSCH transmission power is DSCH Data Frame Protocol signalled [24], with the maximum value determined in the same way as described above for DCH type CTrCHs. The minimum power, however, is subject to control by the CRNC via the frame protocol].
- [1.28 Mcps TDD - If *Maximum DL Power* IE and/or *Minimum DL Power* IE are included within *DL Timeslot Information LCR* IE, the the Node B shall apply the values in the new configuration for this timeslot within a DCH type CTrCH, if the *RL Information* IE includes *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for all other timeslots.]
- [1.28 Mcps TDD - If the *CTrCH Maximum DL Transmission Power* IE and/or the *CTrCH Minimum DL Transmission Power* IE are included, the Node B shall apply the values in the new configuration for this DSCH type CTrCH, if the *RL Information* IE includes the *Maximum Downlink Power* and/or the *Minimum Downlink Power* IEs, the Node B shall apply the values in the new configuration for other timeslots.]
- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]
- [1.28Mcps TDD – If the *RL Information* IE contains the *Uplink Synchronisation Parameters LCR* IE, the Node B shall use the indicated values of *Uplink Synchronisation Stepsize* IE and *Uplink Synchronisation Frequency* IE when evaluating the timing of the UL synchronisation.]

#### Signalling Bearer Re-arrangement:

If the RADIO LINK RECONFIGURATION REQUEST message includes the *Signalling Bearer Request Indicator* IE, the Node B shall, if supported, allocate a new Communication Control Port for the control of the Node B



Communication Context and include the *Target Communication Control Port ID* IE in the RADIO LINK RECONFIGURATION RESPONSE message.

### General

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

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

The Node B shall include in the RADIO LINK RECONFIGURATION RESPONSE message the *Transport Layer Address* IE and the *Binding ID* IE for any Transport Channel being added or any Transport Channel being modified for which a new transport bearer was requested with the *Transport Bearer Request Indicator* IE. The detailed frame protocol handling during transport bearer replacement is described in [16], subclause 5.10.1.

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

In the case of a Radio Link being combined with another Radio Link within the Node B, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included only for one of the combined Radio Links.

In the case of a signalling bearer re-arrangement, the new Communication Control Port shall be used once the Node B has sent the RADIO LINK RECONFIGURATION RESPONSE message via the old Communication Control Port.

/\* partly omitted \*/

## 9.1.36 RADIO LINK SETUP REQUEST

/\* partly omitted \*/

## 9.1.36.2 TDD message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
CRNC Communication Context ID	M		9.2.1.18	The reserved value "All CRNCCC" shall not be used.	YES	reject
<b>UL CCTrCH Information</b>		<i>0..&lt;maxno CCTrCH&gt;</i>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
<b>&gt;UL DPCH Information</b>		<i>0..1</i>		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
<b>&gt;UL DPCH Information LCR</b>		<i>0..1</i>		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>TDD TPC UL Step Size	O		9.2.3.21a	Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
<b>DL CCTrCH Information</b>		<i>0..&lt;maxno CCTrCH&gt;</i>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	M		9.2.1.58		–	
>TFCI Coding	M		9.2.3.22		–	
>Puncture Limit	M		9.2.1.50		–	
>TDD TPC DL Step Size	M		9.2.3.21		–	
<b>&gt;TPC CCTrCH List</b>		<i>0..&lt;maxno CCTrCH&gt;</i>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
<b>&gt;DL DPCH information</b>		<i>0..1</i>		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	

>>DL Timeslot Information	M		9.2.3.4E		–	
<b>&gt;DL DPCH information LCR</b>		0..1		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
>>TSTD Indicator	M		9.2.1.64		–	
>CCTrCH Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH Applicable to 3.84Mcps TDD only	YES	ignore
>CCTrCH Maximum DL Transmission Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH Applicable to 3.84Mcps TDD only	YES	ignore
>CCTrCH Minimum DL Transmission Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH Applicable to 3.84Mcps TDD only	YES	ignore
DCH Information	O		DCH TDD Information 9.2.3.4C		YES	reject
DSCH Information	O		DSCH TDD Information 9.2.3.5A		YES	reject
USCH Information	O		9.2.3.28		YES	reject
<b>RL Information</b>		1			YES	reject
>RL ID	M		9.2.1.53		–	
>C-ID	M		9.2.1.9		–	
>Frame Offset	M		9.2.1.31		–	
>Special Burst Scheduling	M		9.2.3.18A		–	
>Initial DL Transmission Power	M		DL Power 9.2.1.21	Initial power on DPCH	–	
>Maximum DL Power	M		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum DL Power	M		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>DL Time Slot ISCP Info	O		9.2.3.4F	Applicable to 3.84Mcps TDD only	–	
>DL Time Slot ISCP Info LCR	O		9.2.3.4P	Applicable to 1.28Mcps TDD only	YES	reject
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
>Delayed Activation	O		9.2.1.24C		YES	reject
<b>&gt;UL Synchronisation Parameters LCR</b>		0..1		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>Uplink Synchronisation Step Size	M		9.2.3.26H		–	

>>Uplink Synchronisation Frequency	M		9.2.3.26G		–	
HS-DSCH Information	O		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH-RNTI	C-InfoHSDSCH		9.2.1.31J		YES	reject
HS-PDSCH RL ID	C-InfoHSDSCH		RL ID 9.2.1.53		YES	reject
PDSCH-RL-ID	O		RL ID 9.2.1.53		YES	ignore

Range Bound	Explanation
<i>MaxnoCCTrCH</i>	Number of CCTrCHs for one UE

Condition	Explanation
InfoHSDSCH	The IE shall be present if <i>HS-DSCH Information</i> IE is present.

/\* partly omitted \*/

### 9.1.39 RADIO LINK ADDITION REQUEST

/\* partly omitted \*/

## 9.1.39.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
<b>UL CCTrCH Information</b>		<i>0..&lt;maxno CCTrCH&gt;</i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
<b>&gt;UL DPCH Information</b>		<i>0..1</i>		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information	M		9.2.3.26C		–	
<b>&gt;UL DPCH Information LCR</b>		<i>0..1</i>		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>UL Timeslot Information LCR	M		9.2.3.26E		–	
>TDD TPC UL Step Size	O		9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	reject
<b>DL CCTrCH Information</b>		<i>0..&lt;maxno CCTrCH&gt;</i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
<b>&gt;DL DPCH information</b>		<i>0..1</i>		Applicable to 3.84Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
<b>&gt;DL DPCH information LCR</b>		<i>0..1</i>		Applicable to 1.28Mcps TDD only	YES	notify
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
>CCTrCH Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH Applicable to 3.84Mcps TDD only	YES	ignore
>TDD TPC DL Step Size	O		9.2.3.21		YES	reject
>CCTrCH Maximum DL Transmission Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH Applicable to	YES	ignore

				3.84Mcps TDD only		
>CCTrCH Minimum DL Transmission Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH Applicable to 3.84Mcps TDD only	YES	ignore
<b>RL Information</b>		1			YES	reject
>RL ID	M		9.2.1.53		-	
>C-ID	M		9.2.1.9		-	
>Frame Offset	M		9.2.1.31		-	
>Diversity Control Field	M		9.2.1.25		-	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	-	
>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	-	
>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	-	
>DL Time Slot ISCP Info	O		9.2.3.4F	Applicable to 3.84Mcps TDD only	-	
>DL Time Slot ISCP Info LCR	O		9.2.3.4P	Applicable to 1.28Mcps TDD only	YES	reject
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
>Delayed Activation	O		9.2.1.24C		YES	reject
<b>&gt;UL Synchronisation Parameters LCR</b>		0..1		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>Uplink Synchronisation Step Size	M		9.2.3.26H		-	
>>Uplink Synchronisation Frequency	M		9.2.3.26G		-	

Range Bound	Explanation
<i>maxnoCCTrCH</i>	Number of CCTrCH for one UE

/\* partly omitted \*/

### 9.1.42 RADIO LINK RECONFIGURATION PREPARE

/\* partly omitted \*/

## 9.1.42.2 TDD Message

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

Information						
<b>&gt;UL DPCH To Modify</b>		0..1			YES	reject
>>Repetition Period	O		9.2.3.16		-	
>>Repetition Length	O		9.2.3.15		-	
>>TDD DPCH Offset	O		9.2.3.19A		-	
<b>&gt;&gt;UL Timeslot Information</b>		0..<maxno ofULts>		Applicable to 3.84Mcps TDD only	-	
>>>Time Slot	M		9.2.3.23		-	
>>>Midamble Shift And Burst Type	O		9.2.3.7		-	
>>>TFCI Presence	O		9.2.1.57		-	
<b>&gt;&gt;&gt;UL Code Information</b>		0..<maxno ofDPCHs>			-	
>>>>DPCH ID	M		9.2.3.5		-	
>>>>TDD Channelisation Code	O		9.2.3.19		-	
<b>&gt;&gt;UL Timeslot Information LCR</b>		0..<maxno ofULtsLCR >		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>>>Time Slot LCR	M		9.2.3.24A		-	
>>>Midamble Shift LCR	O		9.2.3.7A		-	
>>>TFCI Presence	O		9.2.1.57		-	
<b>&gt;&gt;&gt;UL Code Information LCR</b>		0..<maxno OfDPCHLCR>			-	
>>>>DPCH ID	M		9.2.3.5		-	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		-	
>>>> TDD UL DPCH Time Slot Format LCR	O		9.2.3.21C		YES	reject
<b>&gt;UL DPCH To Delete</b>		0..<maxno ofDPCHs>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		-	
<b>&gt;UL DPCH To Add LCR</b>		0..1		Applicable to 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		-	
>>Repetition Length	M		9.2.3.15		-	
>>TDD DPCH Offset	M		9.2.3.19A		-	
>>UL Timeslot Information LCR	M		9.2.3.26E		-	
>TDD TPC UL Step Size	O		9.2.3.21a	Applicable to 1.28Mcps TDD only	YES	reject
<b>UL CCTrCH To Delete</b>		0..<maxno ofCCTrCH s>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		-	
<b>DL CCTrCH To Add</b>		0..<maxno ofCCTrCH s>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		-	
>TFCS	M		9.2.1.58		-	
>TFCI Coding	M		9.2.3.22		-	
>Puncture Limit	M		9.2.1.50		-	
<b>&gt;TPC CCTrCH List</b>		0..<maxno ofCCTrCH s>		List of uplink CCTrCH which provide TPC	-	
>>TPC CCTrCH ID	M		CCTrCH ID		-	



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

>CCTrCH Maximum DL Transmission Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH Applicable to 3.84 Mcps TDD only	YES	ignore
>CCTrCH Minimum DL Transmission Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH Applicable to 3.84 Mcps TDD only	YES	ignore
<b>DL CCTrCH To Modify</b>		<i>0..&lt;maxno of CCTrCHs&gt;</i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3.		–	
>TFCS	O		9.2.1.58		–	
>TFCI Coding	O		9.2.3.22		–	
>Puncture Limit	O		9.2.1.50		–	
<b>&gt;TPC CCTrCH List</b>		<i>0..&lt;maxno of CCTrCHs&gt;</i>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
<b>&gt;DL DPCH To Add</b>		<i>0..1</i>		Applicable to 3.84 Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
<b>&gt;DL DPCH To Modify</b>		<i>0..1</i>			YES	reject
>>Repetition Period	O		9.2.3.16		–	
>>Repetition Length	O		9.2.3.15		–	
>>TDD DPCH Offset	O		9.2.3.19A		–	
<b>&gt;&gt;DL Timeslot Information</b>		<i>0..&lt;maxno of DLts&gt;</i>		Applicable to 3.84 Mcps TDD only	–	
>>>Time Slot	M		9.2.3.23		–	
>>>Midamble Shift And Burst Type	O		9.2.3.7		–	
>>>TFCI Presence	O		9.2.1.57		–	
<b>&gt;&gt;&gt;DL Code Information</b>		<i>0..&lt;maxno of DPCHs&gt;</i>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
<b>&gt;&gt;DL Timeslot</b>		<i>0..&lt;maxno</i>		Applicable to	GLOBAL	reject

<b>Information LCR</b>		<i>ofDLtsLCR &gt;</i>		1.28Mcps TDD only		
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Midamble Shift LCR	O		9.2.3.7A			
>>>TFCI Presence	O		9.2.1.57		–	
<b>&gt;&gt;&gt;DL Code Information LCR</b>		<i>0..&lt;maxno ofDPCHsLCR&gt;</i>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code LCR	O		9.2.3.19a		–	
>>>>TDD DL DPCH Time Slot Format LCR	O		9.2.3.19D		YES	reject
>>>Maximum DL Power to Modify LCR	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	YES	ignore
>>>Minimum DL Power to Modify LCR	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	YES	ignore
<b>&gt;DL DPCH To Delete</b>		<i>0..&lt;maxno ofDPCHs&gt;</i>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
<b>&gt;DL DPCH To Add LCR</b>		<i>0..1</i>		Applicable to 1.28Mcps TDD only	YES	reject
>>Repetition Period	M		9.2.3.16		–	
>>Repetition Length	M		9.2.3.15		–	
>>TDD DPCH Offset	M		9.2.3.19A		–	
>>DL Timeslot Information LCR	M		9.2.3.4O		–	
>TDD TPC DL Step Size	O		9.2.3.21		YES	reject
>Maximum CCTrCH DL Power to Modify	O		DL Power 9.2.1.21	Maximum allowed power on DPCH Applicable to 3.84 Mcps TDD only	YES	ignore
>Minimum CCTrCH DL Power to Modify	O		DL Power 9.2.1.21	Minimum allowed power on DPCH Applicable to 3.84 Mcps TDD only	YES	ignore
<b>DL CCTrCH To Delete</b>		<i>0..&lt;maxno ofCCTrCHs&gt;</i>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
DCHs To Modify	O		DCHs TDD To Modify 9.2.3.4D		YES	reject
DCHs To Add	O		DCH TDD Information 9.2.3.4C		YES	reject
<b>DCHs To Delete</b>		<i>0..&lt;maxno ofDCHs&gt;</i>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
<b>DSCH To Modify</b>		<i>0..&lt;maxno ofDSCHs&gt;</i>			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
>CCTrCH ID	O		9.2.3.3	DL CCTrCH in which the DSCH is	–	

				mapped		
>Transport Format Set	O		9.2.1.59		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Frame Handling Priority	O		9.2.1.30		–	
>ToAWS	O		9.2.1.61		–	
>ToAWE	O		9.2.1.60		–	
>Transport Bearer Request Indicator	M		9.2.1.62A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
DSCH To Add	O		DSCH TDD Information 9.2.3.5A		YES	reject
<b>DSCH To Delete</b>		<i>0..&lt;maxno ofDSCHs&gt;</i>			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
<b>USCH To Modify</b>		<i>0..&lt;maxno ofUSCHs&gt;</i>			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
>Transport Format Set	O		9.2.1.59		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>CCTrCH ID	O		9.2.3.2	UL CCTrCH in which the USCH is mapped	–	
>Transport Bearer Request Indicator	M		9.2.1.62A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
USCH To Add	O		USCH Information 9.2.3.28		YES	reject
<b>USCH To Delete</b>		<i>0..&lt;maxno ofUSCHs&gt;</i>			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
<b>RL Information</b>		<i>0..1</i>			YES	reject
>RL ID	M		9.2.1.53		–	
>Maximum Downlink Power	O		DL Power 9.2.1.21	<del>Maximum allowed power on DPCH</del>	–	
>Minimum Downlink Power	O		DL Power 9.2.1.21	<del>Minimum allowed power on DPCH</del>	–	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	<del>Initial power on DPCH</del>	YES	ignore

>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
<b>&gt;UL Synchronisation Parameters LCR</b>		0..1		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>Uplink Synchronisation Step Size	M		9.2.3.26H		–	
>>Uplink Synchronisation Frequency	M		9.2.3.26G		–	
<a href="#">&gt;DL Time Slot ISCP Info LCR</a>	<a href="#">O</a>		<a href="#">9.2.3.4P</a>	<a href="#">Applicable to 1.28Mcps TDD only</a>	<a href="#">YES</a>	<a href="#">ignore</a>
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject
HS-DSCH Information To Modify	O		9.2.1.31H		YES	reject
HS-DSCH Information To Add	O		HS-DSCH TDD Information 9.2.3.5F		YES	reject
<b>HS-DSCH Information To Delete</b>		0..<maxno ofMACdFl ows>			GLOBAL	reject
>HS-DSCH MAC-D flow ID	M		9.2.1.31I		–	
HS-DSCH-RNTI	O		9.2.1.31J		YES	reject
HS-PDSCH RL ID	O		RL ID 9.2.1.53		YES	reject
PDSCH-RL-ID	O		RL ID 9.2.1.53		YES	ignore

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

/\* partly omitted \*/

## 9.1.47 RADIO LINK RECONFIGURATION REQUEST

/\* partly omitted \*/

## 9.1.47.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
<b>UL CCTrCH To Modify</b>		<i>0..&lt;maxno of CCTrCHs&gt;</i>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>Puncture Limit	O		9.2.1.50		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	reject
<b>UL CCTrCH To Delete</b>		<i>0..&lt;maxno of CCTrCHs&gt;</i>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
<b>DL CCTrCH To Modify</b>		<i>0..&lt;maxno of CCTrCHs&gt;</i>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>Puncture Limit	O		9.2.1.50		–	
<b>&gt;DL DPCH To Modify LCR</b>		<i>0..1</i>		Applicable to 1.28Mcps TDD only	YES	ignore
<b>&gt;&gt;DL Timeslot Information LCR</b>		<i>0..&lt;maxno of DLtsLCR&gt;</i>			–	
>>>Time Slot LCR	M		9.2.3.24A		–	
>>>Maximum DL Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>>>Minimum DL Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>CCTrCH Maximum DL Transmission Power	O		DL Power 9.2.1.21	<del>Maximum allowed power on DPCH</del> Applicable to 3.84 Mcps TDD only	YES	ignore
>CCTrCH Minimum DL Transmission Power	O		DL Power 9.2.1.21	<del>Minimum allowed power on DPCH</del> Applicable to 3.84 Mcps TDD only	YES	ignore
<b>DL CCTrCH To Delete</b>		<i>0..&lt;maxno of CCTrCHs&gt;</i>			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
DCHs To Modify	O		DCHs TDD To Modify 9.2.3.4D		YES	reject
DCHs To Add	O		DCH TDD Information		YES	reject

			9.2.3.4C			
<b>DCHs To Delete</b>		<i>0..&lt;maxno ofDSCHs&gt;</i>			GLOBAL	reject
>DCH ID	M		9.2.1.20		-	
<b>RL Information</b>		<i>0..1</i>			YES	reject
>RL ID	M		9.2.1.53		-	
>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on-DPCH	-	
>Minimum Downlink Power	O		DL Power 9.2.1.21	Minimum allowed power on-DPCH	-	
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
<b>&gt;UL Synchronisation Parameters LCR</b>		<i>0..1</i>		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>Uplink Synchronisation Step Size	M		9.2.3.26H		-	
>>Uplink Synchronisation Frequency	M		9.2.3.26G		-	
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject

Range Bound	Explanation
<i>maxnoofCCTrCHs</i>	Maximum number of CCTrCHs for a UE
<i>maxnoofDLtsLCR</i>	Maximum number of Downlink time slots per Radio Link for 1.28Mcps TDD

/\* partly omitted \*/

### 9.2.1.21 DL Power

The *DL Power* IE indicates a power level relative to the [FDD - primary CPICH power] [TDD - primary CCPCH power] configured in a cell. [FDD - If referred to a DPCH, it indicates the power of the transmitted DPDCH symbols.] [FDD - If referred to a DL-DPCCH for CPCH, it indicates the power of the transmitted pilot symbols].

[TDD - If referred to a DPCH or PDSCH, it indicates the power of a spreading factor 16 code, the power for a spreading factor 1 code would be 12 dB higher. If referred to a SCCPCH, the *DL Power* IE specifies the maximum power of the SCCPCH.]

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description
DL Power			INTEGER (-350..150)	Value = DL Power /10 Unit: dB Range: -35.0 .. +15.0 dB Step: 0.1dB

/\* partly omitted \*/

### 9.3.3 PDU Definitions

**/\* partly omitted \*/**

```
CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD,
  id-CCTrCH-Minimum-DL-Power-RL-SetupRqstTDD,
  id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD,
  id-CCTrCH-Minimum-DL-Power-RL-AdditionRqstTDD,
  id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD,
  id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD,
  id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfPrepTDD,
  id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfPrepTDD,
  id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD,
  id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD,
  id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD,
  id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD,
  id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD,
  id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD,
  id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRqstTDD,
  id-TDD-TPC-DownlinkStepSize-RL-AdditionRqstTDD,
  id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD,
  id-TDD-TPC-UplinkStepSize-InformationModify-LCR-RL-ReconfPrepTDD,
  id-TDD-TPC-DownlinkStepSize-InformationModify-RL-ReconfPrepTDD,
  id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD,
  id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD,

  maxNrOfCCTrCHs,
  maxNrOfCellSyncBursts,
  maxNrOfCodes,
  maxNrOfCPCHs,
  maxNrOfDCHs,
```

**/\* partly omitted \*/**

```
-- *****
--
-- RADIO LINK SETUP REQUEST TDD
--
-- *****
```

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

```
RadioLinkSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
```



```

    { ID id-CRNC-CommunicationContextID
CommunicationContextID PRESENCE mandatory }|
    { ID id-UL-CCTrCH-InformationList-RL-SetupRqstTDD
RL-SetupRqstTDD PRESENCE optional }|
    { ID id-DL-CCTrCH-InformationList-RL-SetupRqstTDD
RL-SetupRqstTDD PRESENCE optional }|
    { ID id-DCH-TDD-Information
    CRITICALITY reject TYPE DCH-TDD-Information PRESENCE optional
    }|
    { ID id-DSCH-TDD-Information
    CRITICALITY reject TYPE DSCH-TDD-Information PRESENCE optional }|
    { ID id-USCH-Information
    CRITICALITY reject TYPE USCH-Information PRESENCE optional }|
    { ID id-RL-Information-RL-SetupRqstTDD
    CRITICALITY reject TYPE RL-Information-RL-
SetupRqstTDD PRESENCE mandatory },
    ...
}

RadioLinkSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-HSDSCH-TDD-Information
  CRITICALITY reject EXTENSION HSDSCH-TDD-Information PRESENCE optional }|
  { ID id-HSDSCH-RNTI
  CRITICALITY reject EXTENSION HSDSCH-RNTI PRESENCE conditional }|
  -- The IE shall be present if HS-DSCH Information IE is present
  { ID id-HSPDSCH-RL-ID
  CRITICALITY reject EXTENSION RL-ID PRESENCE conditional }|
  -- The IE shall be present if HS-DSCH Information IE is present
  { ID id-PDSCH-RL-ID
  CRITICALITY ignore EXTENSION RL-ID PRESENCE optional },
  ...
}

UL-CCTrCH-InformationList-RL-SetupRqstTDD ::= SEQUENCE (SIZE(1..maxNrOfCCTrCHs)) OF
  ProtocolIE-ContainerSingle{{ UL-CCTrCH-InformationItemIE-RL-SetupRqstTDD }}

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

UL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCTrCH-ID
  cCTrCH-ID,
  tFCS
  TFCS,
  tFCI-Coding
  TFCI-Coding,
  punctureLimit
  PunctureLimit,
  uL-DPCH-Information
  UL-DPCH-Information-RL-SetupRqstTDD OPTIONAL, -- Applicable to 3.84Mcps TDD only
  iE-Extensions
  ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

UL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-DPCH-LCR-Information-RL-SetupRqstTDD
  CRITICALITY notify EXTENSION UL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE
optional }| -- Applicable to 1.28Mcps TDD only
  { ID id-UL-SIRTarget
  CRITICALITY reject EXTENSION UL-SIR PRESENCE optional }|
  -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD.
  { ID id-TDD-TPC-UplinkStepSize-LCR-RL-SetupRqstTDD
  CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR PRESENCE optional },
  -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD.
  ...
}

```

```

UL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ UL-DPCH-InformationIE-RL-SetupRqstTDD }}

UL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-DPCH-InformationList-RL-SetupRqstTDD      CRITICALITY notify   TYPE UL-DPCH-InformationItem-RL-SetupRqstTDD      PRESENCE
  mandatory }
}

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

UL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

UL-DPCH-LCR-Information-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  uL-TimeslotLCR-Information  UL-TimeslotLCR-Information,
  iE-Extensions         ProtocolExtensionContainer { { UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs} }
  OPTIONAL,
  ...
}

UL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

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

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

DL-CCTrCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  cCTrCH-ID      CCTrCH-ID,
  tFCS           TFCS,
  tFCI-Coding    TFCI-Coding,
  punctureLimit  PunctureLimit,
  tdd-TPC-DownlinkStepSize  TDD-TPC-DownlinkStepSize,
  cCTrCH-TPCList  CCTrCH-TPCList-RL-SetupRqstTDD      OPTIONAL,
  dL-DPCH-Information  DL-DPCH-Information-RL-SetupRqstTDD      OPTIONAL, -- Applicable to 3.84Mcps TDD only
  iE-Extensions   ProtocolExtensionContainer { { DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs} }  OPTIONAL,
  ...
}

```

```
DL-CCTrCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  optional { ID id-DL-DPCH-LCR-Information-RL-SetupRqstTDD CRITICALITY notify EXTENSION DL-DPCH-LCR-Information-RL-SetupRqstTDD PRESENCE
  |  { ID id-CCTrCH-Initial-DL-Power-RL-SetupRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional } |
  |  { ID id-CCTrCH-Maximum-DL-Power-RL-SetupRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional } |
  |  { ID id-CCTrCH-Minimum-DL-Power-RL-SetupRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
  ...
}
```

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

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

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

```
DL-DPCH-Information-RL-SetupRqstTDD ::= ProtocolIE-Single-Container{{ DL-DPCH-InformationIE-RL-SetupRqstTDD }}
```

```
DL-DPCH-InformationIE-RL-SetupRqstTDD NBAP-PROTOCOL-IES ::= {
  mandatory { ID id-DL-DPCH-InformationList-RL-SetupRqstTDD CRITICALITY notify TYPE DL-DPCH-InformationItem-RL-SetupRqstTDD PRESENCE
  }
}
```

```
DL-DPCH-InformationItem-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-DPCHOffset TDD-DPCHOffset,
  dl-Timeslot-Information DL-Timeslot-Information,
  iE-Extensions ProtocolExtensionContainer { { DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}
```

```
DL-DPCH-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}
```

```
DL-DPCH-LCR-Information-RL-SetupRqstTDD ::= SEQUENCE {
  repetitionPeriod RepetitionPeriod,
  repetitionLength RepetitionLength,
  tdd-DPCHOffset TDD-DPCHOffset,
  dl-TimeslotLCR-Information DL-TimeslotLCR-Information,
  tstdIndicator TSTD-Indicator,
  iE-Extensions ProtocolExtensionContainer { { DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs } }
  OPTIONAL,
}
```

```

    ...
}

DL-DPCH-LCR-InformationItem-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

RL-Information-RL-SetupRqstTDD ::= SEQUENCE {
    rL-ID                RL-ID,
    c-ID                C-ID,
    frameOffset         FrameOffset,
    specialBurstScheduling SpecialBurstScheduling,
    initialDL-transmissionPower DL-Power,
    maximumDL-power     DL-Power,
    minimumDL-power     DL-Power,
    dL-TimeSlotISCPInfo DL-TimeSlotISCPInfo OPTIONAL, -- Applicable to 3.84Mcps TDD only
    iE-Extensions       ProtocolExtensionContainer { { RL-Information-RL-SetupRqstTDD-ExtIEs } } OPTIONAL,
    ...
}

RL-Information-RL-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TimeSlotISCP-LCR-InfoList-RL-SetupRqstTDD CRITICALITY reject EXTENSION DL-TimeSlotISCPInfoLCR PRESENCE optional }|
    -- Applicable to 1.28Mcps TDD only
    { ID id-RL-Specific-DCH-Info CRITICALITY ignore EXTENSION RL-Specific-DCH-Info PRESENCE optional }|
    { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional }|
    { ID id-UL-Synchronisation-Parameters-LCR CRITICALITY ignore EXTENSION UL-Synchronisation-Parameters-LCR PRESENCE optional }, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    ...
}

```

**/\* partly omitted \*/**

```

-- *****
--
-- RADIO LINK ADDITION REQUEST TDD
--
-- *****

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

RadioLinkAdditionRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-NodeB-CommunicationContextID CRITICALITY reject TYPE NodeB-CommunicationContextID PRESENCE mandatory }|
    { ID id-UL-CCTrCH-InformationList-RL-AdditionRqstTDD CRITICALITY reject TYPE UL-CCTrCH-InformationList-RL-AdditionRqstTDD PRESENCE optional }|
    { ID id-DL-CCTrCH-InformationList-RL-AdditionRqstTDD CRITICALITY reject TYPE DL-CCTrCH-InformationList-RL-AdditionRqstTDD PRESENCE optional }|
}

```

```

    { ID id-RL-Information-RL-AdditionRqstTDD
AdditionRqstTDD PRESENCE mandatory }, CRITICALITY reject TYPE RL-Information-RL-
    ...
}

RadioLinkAdditionRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

UL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF UL-CCTrCH-InformationItem-RL-AdditionRqstTDD

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID CCTrCH-ID,
    uL-DPCH-Information UL-DPCH-InformationList-RL-AdditionRqstTDD OPTIONAL, -- Applicable to 3.84cps TDD only
    iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs } }
    OPTIONAL,
    ...
}

UL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD CRITICALITY notify EXTENSION UL-DPCH-
InformationItem-LCR-RL-AdditionRqstTDD PRESENCE optional } | -- Applicable to 1.28cps TDD only
    { ID id-TDD-TPC-UplinkStepSize-LCR-RL-AdditionRqstTDD CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR PRESENCE optional
    },
    -- Applicable to 1.28cps TDD only
    ...
}

UL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationItemIE-RL-AdditionRqstTDD }}

UL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-UL-DPCH-InformationItem-RL-AdditionRqstTDD CRITICALITY notify TYPE UL-DPCH-
InformationItem-RL-AdditionRqstTDD PRESENCE optional } -- For 3.84Mcps TDD only
}

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

UL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationList-RL-AdditionRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF DL-CCTrCH-InformationItem-RL-AdditionRqstTDD

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD ::= SEQUENCE {
    cCTrCH-ID CCTrCH-ID,
    dL-DPCH-Information DL-DPCH-InformationList-RL-AdditionRqstTDD OPTIONAL,

```

```

    iE-Extensions
    OPTIONAL,
    ...
}

DL-CCTrCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD
    CRITICALITY notify
    EXTENSION DL-DPCH-
InformationItem-LCR-RL-AdditionRqstTDD
    PRESENCE optional } | -- Applicable to 1.28Mcps TDD only
  { ID id-CCTrCH-Initial-DL-Power-RL-AdditionRqstTDD
    CRITICALITY ignore
    EXTENSION DL-Power
    PRESENCE optional } |
  { ID id-TDD-TPC-DownlinkStepSize-RL-AdditionRqstTDD
    CRITICALITY reject
    EXTENSION TDD-TPC-DownlinkStepSize
    PRESENCE optional } |
  Applicable to 3.84Mcps TDD only, this is a DCN type CCTrCH power
  { ID id-CCTrCH-Maximum-DL-Power-RL-AdditionRqstTDD
    CRITICALITY ignore
    EXTENSION DL-Power
    PRESENCE optional } |
  Applicable to 3.84Mcps TDD only, this is a DCN type CCTrCH power
  { ID id-CCTrCH-Minimum-DL-Power-RL-AdditionRqstTDD
    CRITICALITY ignore
    EXTENSION DL-Power
    PRESENCE optional },
  ...
}

DL-DPCH-InformationList-RL-AdditionRqstTDD ::= ProtocolIE-Single-Container { { DL-DPCH-InformationItemIE-RL-AdditionRqstTDD } }

DL-DPCH-InformationItemIE-RL-AdditionRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-DPCH-InformationItem-RL-AdditionRqstTDD
    CRITICALITY notify
    TYPE DL-DPCH-
InformationItem-RL-AdditionRqstTDD
    PRESENCE mandatory } -- Applicable to 3.84Mcps TDD only
}

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

DL-DPCH-InformationItem-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

RL-Information-RL-AdditionRqstTDD ::= SEQUENCE {
  rL-ID
    RL-ID,
  c-ID
    C-ID,
  frameOffset
    FrameOffset,
  diversityControlField
    DiversityControlField,
  initial-DL-Transmission-Power
    DL-Power
    OPTIONAL,
  maximumDL-Power
    DL-Power
    OPTIONAL,
  minimumDL-Power
    DL-Power
    OPTIONAL,
  dL-TimeSlotISCPInfo
    DL-TimeslotISCPInfo
    OPTIONAL,
  iE-Extensions
    ProtocolExtensionContainer { { RL-information-RL-AdditionRqstTDD-ExtIEs } }
  OPTIONAL,
  ...
}

```

```

RL-InformationRL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeslotISCP-InformationList-LCR-RL-AdditionRqstTDD      CRITICALITY reject      EXTENSION DL-
TimeslotISCPInfoLCR      PRESENCE optional } | -- Applicable to 1.28Mcps TDD only
  { ID id-RL-Specific-DCH-Info      CRITICALITY ignore      EXTENSION RL-Specific-DCH-Info      PRESENCE optional } |
  { ID id-DelayedActivation CRITICALITY reject EXTENSION DelayedActivation PRESENCE optional } |
  { ID id-UL-Synchronisation-Parameters-LCR      CRITICALITY ignore      EXTENSION UL-Synchronisation-Parameters-LCR      PRESENCE
optional      }, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
  ...
}

```

```

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  uL-TimeslotLCR-Information      UL-TimeslotLCR-Information,
  iE-Extensions          ProtocolExtensionContainer { { UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs } }
  OPTIONAL,
  ...
}

```

```

UL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

```

DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD ::= SEQUENCE {
  repetitionPeriod      RepetitionPeriod,
  repetitionLength      RepetitionLength,
  tdd-DPCHOffset        TDD-DPCHOffset,
  dL-TimeslotLCR-Information      DL-TimeslotLCR-Information,
  iE-Extensions          ProtocolExtensionContainer { { DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs } }
  OPTIONAL,
  ...
}

```

```

DL-DPCH-InformationItem-LCR-RL-AdditionRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

```

**/\* partly omitted \*/**

```

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

```

```

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

```

```

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

```

```

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

```



```

    ...
}

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

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

UL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-UL-DPCH-LCR-InformationAddListIE-RL-ReconfPrepTDD CRITICALITY reject EXTENSION UL-DPCH-LCR-InformationAddList-RL-
    ReconfPrepTDD PRESENCE optional }| -- Applicable to 1.28Mcps TDD only
    { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional }|
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD.
    { ID id-TDD-TPC-UplinkStepSize-InformationAdd-LCR-RL-ReconfPrepTDD CRITICALITY reject EXTENSION TDD-TPC-UplinkStepSize-LCR PRESENCE
    optional },
    -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD.
    ...
}

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

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

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

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

UL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD ::= SEQUENCE {
    repetitionPeriod      RepetitionPeriod,
    repetitionLength      RepetitionLength,
    tdd-DPCHOffset        TDD-DPCHOffset,
    ul-Timeslot-InformationLCR  UL-TimeslotLCR-Information,

```

```

    iE-Extensions
    OPTIONAL,
    ...
}

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

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

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

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

UL-DPCH-InformationModify-AddList-RL-ReconfPrepTDD ::= ProtocolIE-Single-Container {{ UL-DPCH-InformationModify-AddListIEs-RL-ReconfPrepTDD
}}

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

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

```

```

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

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

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

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

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

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

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

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

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

```

```

    ...
}

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

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

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

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

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

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

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

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

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

UL-Code-InformationModify-ModifyItem-RL-ReconfPrepTDDLPCR-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {

```

```

    { ID id-UL-DPCH-TimeSlotFormat-LCR-ModifyItem-RL-ReconfPrepTDD  CRITICALITY reject  EXTENSION TDD-UL-DPCH-TimeSlotFormat-LCR  PRESENCE
optional},

    ...
}

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

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

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

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

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

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

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

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

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

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

```

```

}

DL-CCTrCH-InformationAddItem-RL-ReconfPrepTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-DL-DPCH-LCR-InformationAddList-RL-ReconfPrepTDD  CRITICALITY reject  EXTENSION  DL-DPCH-LCR-InformationAddList-RL-
ReconfPrepTDD  PRESENCE optional }|  -- Applicable to 1.28Mcps TDD only
  { ID id-CCTrCH-Initial-DL-Power-RL-ReconfPrepTDD  CRITICALITY ignore  EXTENSION DL-Power  PRESENCE optional }|
  { ID id-TDD-TPC-DownlinkStepSize-InformationAdd-RL-ReconfPrepTDD  CRITICALITY reject  EXTENSION  TDD-TPC-DownlinkStepSize  PRESENCE
optional}|
  { ID id-CCTrCH-Maximum-DL-Power-InformationAdd-RL-ReconfPrepTDD  CRITICALITY ignore  EXTENSION DL-Power  PRESENCE optional }|
  { ID id-CCTrCH-Minimum-DL-Power-InformationAdd-RL-ReconfPrepTDD  CRITICALITY ignore  EXTENSION DL-Power  PRESENCE optional },
  ...
}
CCTrCH-TPCAddList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF CCTrCH-TPCAddItem-RL-ReconfPrepTDD  -- Applicable to
3.84Mcps TDD only

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

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

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

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

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

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

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

```

```

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

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

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

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

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

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

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

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

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

```

```

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

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

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

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

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

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

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

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

```



```

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

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

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

DL-Timeslot-InformationModify-ModifyItem-RL-ReconfPrepTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-Maximum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional } |
  -- Applicable to 1.28Mcps TDD only
  { ID id-Minimum-DL-Power-Modify-LCR-InformationModify-RL-ReconfPrepTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
  -- Applicable to 1.28Mcps TDD only
  ...
}

DL-Code-InformationModify-ModifyList-RL-ReconfPrepTDD ::= SEQUENCE (SIZE (0..maxNrOfDPCHs)) OF DL-Code-InformationModify-ModifyItem-RL-
ReconfPrepTDD

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

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

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

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

```

```

    ...
}

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

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

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

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

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

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

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

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

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

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

```

```

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

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

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

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

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

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

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

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

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

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

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

```

```

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

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

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

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

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

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

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

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

HSDSCH-DeleteItem-RL-ReconfPrepTDD ::= SEQUENCE {

```

```

hsDSCH-MACdFlow-ID
iE-Extensions
...
}

```

```

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

```

**/\* partly omitted \*/**

```

-- *****
--
-- RADIO LINK RECONFIGURATION REQUEST TDD
--
-- *****

```

```

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

```

```

RadioLinkReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
  { ID id-NodeB-CommunicationContextID          CRITICALITY reject          TYPE NodeB-
CommunicationContextID          PRESENCE mandatory } |
  { ID id-UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD          PRESENCE optional } |
  { ID id-UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD          PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE DL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD          PRESENCE optional } |
  { ID id-DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD          CRITICALITY notify          TYPE DL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD          PRESENCE optional } |
  { ID id-TDD-DCHs-to-Modify          CRITICALITY reject          TYPE TDD-DCHs-to-Modify          PRESENCE
optional } |
  { ID id-DCHs-to-Add-TDD          CRITICALITY reject          TYPE
PRESENCE optional } |
  { ID id-DCH-DeleteList-RL-ReconfRqstTDD          CRITICALITY reject          TYPE DCH-DeleteList-RL-
ReconfRqstTDD          PRESENCE optional } |
  { ID id-RL-Information-RL-ReconfRqstTDD          CRITICALITY reject          TYPE
ReconfRqstTDD          PRESENCE optional },
  ...
}

```

```

RadioLinkReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-SignallingBearerRequestIndicator          CRITICALITY reject EXTENSION SignallingBearerRequestIndicator          PRESENCE
optional },
  ...
}

```

```

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD CRITICALITY notify TYPE UL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD PRESENCE mandatory}
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID CCTrCH-ID,
  tFCS TFCS OPTIONAL,
  punctureLimit PunctureLimit OPTIONAL,
  iE-Extensions ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
  OPTIONAL,
  ...
}

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-UL-SIRTarget CRITICALITY reject EXTENSION UL-SIR PRESENCE optional },
  -- Applicable to 1.28Mcps TDD only
  ...
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ UL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

UL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD CRITICALITY notify TYPE UL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD PRESENCE mandatory}
}

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

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

DL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationModifyItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationModifyItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
  { ID id-DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD CRITICALITY notify TYPE DL-CCTrCH-
InformationModifyItem-RL-ReconfRqstTDD PRESENCE mandatory}
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
  cCTrCH-ID CCTrCH-ID,
  tFCS TFCS OPTIONAL,

```

```

    punctureLimit
    iE-Extensions
        OPTIONAL,
    ...
}

DL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD CRITICALITY ignore EXTENSION DL-DPCH-LCR-InformationModify-
ModifyList-RL-ReconfRqstTDD PRESENCE optional }| -- Applicable to 1.28Mcps TDD only
    { ID id-CCTrCH-Maximum-DL-Power-InformationModify-RL-ReconfRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional }|
    Applicable to 3.84Mcps TDD only, this is a DCII type CCTrCH power
    { ID id-CCTrCH-Minimum-DL-Power-InformationModify-RL-ReconfRqstTDD CRITICALITY ignore EXTENSION DL-Power PRESENCE optional },
    Applicable to 3.84Mcps TDD only, this is a DCII type CCTrCH power
    ...
}

DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD ::= SEQUENCE {
    dL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD DL-Timeslot-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD
    OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD-ExtIEs }
}
    OPTIONAL,
    ...
}

DL-DPCH-LCR-InformationModify-ModifyList-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR TimeSlotLCR,
    maxPowerLCR DL-Power OPTIONAL,
    minPowerLCR DL-Power OPTIONAL,
    iE-Extensions ProtocolExtensionContainer { { DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRqstTDD-
ExtIEs } }
    OPTIONAL,
    ...
}

DL-Timeslot-LCR-InformationModify-ModifyItem-RL-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD ::= SEQUENCE (SIZE (1..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container {{ DL-CCTrCH-
InformationDeleteItemIE-RL-ReconfRqstTDD}}

DL-CCTrCH-InformationDeleteItemIE-RL-ReconfRqstTDD NBAP-PROTOCOL-IES ::= {
    { ID id-DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD CRITICALITY notify TYPE DL-CCTrCH-
InformationDeleteItem-RL-ReconfRqstTDD PRESENCE mandatory}
}

DL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD ::= SEQUENCE {

```

```

    cCTrCH-ID
    iE-Extensions
        OPTIONAL,
    ...
}

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

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

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

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

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

RL-InformationItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-RL-Specific-DCH-Info
      CRITICALITY ignore
      EXTENSION
      RL-Specific-DCH-Info
      PRESENCE optional } |
    { ID id-UL-Synchronisation-Parameters-LCR
      CRITICALITY ignore
      EXTENSION
      UL-Synchronisation-Parameters-LCR
      PRESENCE optional }, -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    ...
}

```

**/\* partly omitted \*/**

### 9.3.6 Constant Definitions

**/\* partly omitted \*/**

```

id-Maximum-DL-Power-TimeslotLCR-InformationItem
id-Minimum-DL-Power-TimeslotLCR-InformationItem
id-HS-DSCHProvidedBitRate
id-HS-DSCHProvidedBitRateValue
id-HS-DSCHRequiredPower
ProtocolIE-ID ::= 581
ProtocolIE-ID ::= 582
ProtocolIE-ID ::= 583
ProtocolIE-ID ::= 584
ProtocolIE-ID ::= 585

```



```
id-HS-DSCHRequiredPowerValue ProtocolIE-ID ::= 586
id-TransmittedCarrierPowerOfAllCodesNotUsedForHS-PDSCHOrHS-SCCHTransmission ProtocolIE-ID ::= 587
id-HS-SICH-Reception-Quality ProtocolIE-ID ::= 588
id-HS-SICH-Reception-Quality-Measurement-Value ProtocolIE-ID ::= 589
id-HSSICH-Info-DM-Rprt ProtocolIE-ID ::= 590
id-HSSICH-Info-DM-Rqst ProtocolIE-ID ::= 591
id-HSSICH-Info-DM-Rsp ProtocolIE-ID ::= 592
| id-TimeslotISCP-LCR-InfoList-RL-ReconfPrepTDD ProtocolIE-ID ::= 599
```

END

## CHANGE REQUEST

⌘ **25.433 CR 888** ⌘ rev **1** ⌘ Current version: **5.5.0** ⌘

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

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

<b>Title:</b>	⌘ Correction for the start code number of HS-PDSCH		
<b>Source:</b>	⌘ RAN3		
<b>Work item code:</b>	⌘ HSDPA-lublur	<b>Date:</b>	⌘ 25/08/2003
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)		2 (GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)		R96 (Release 1996)
	<b>B</b> (addition of feature),		R97 (Release 1997)
	<b>C</b> (functional modification of feature)		R98 (Release 1998)
	<b>D</b> (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

<b>Reason for change:</b>	⌘ There is an inconsistency about the start code number of HS-PDSCH between TS25.433 and TS25.212. In TS25.212, it is assumed that Cch,16,0 is not allocated to HS-PDSCH with any number of multi-codes. However, in TS25.433, it is allowed to allocate Cch,16,0. If Cch,16,0 can be used for HS-PDSCH transmission, the multi-code information that is different from the encoded one would be given to the UE. In this case, the UE would not have correct information on the code offset used by the Node B transmitter. See R3-031032.
<b>Summary of change:</b>	⌘ <u>Rev.1</u> In stead of adding the semantics description, the minimum start code number of HS-PDSCH FDD Code is changed from 0 to 1
	<u>Rev.0</u> The semantics description, which the value 0 shall not be used, is added in the tabular format of the HS-PDSCH FDD Code Information. The same note is added to the corresponding ASN.1 part as well.
	<u>Impact Analysis:</u> Impact assessment towards the previous version of the specification (same release):  This CR has [isolated impact] with the previous version of the specification (same release) because it might affect implementations supporting HSDPA.  This CR has an impact under [functional] point of view. The impact [can] be considered isolated because the change affects [one] [system function] namely HSDPA.

**Consequences if not approved:** ⌘ If this CR is not approved, the inconsistency between TS25.212 and TS25.433 will still remain. As a result, UE would fail to decode HS-PDSCH.

**Clauses affected:** ⌘ 9.2.2.18F and 9.3.4

	Y	N		
<b>Other specs affected:</b>		X	Other core specifications	⌘
		X	Test specifications	
		X	O&M Specifications	

**Other comments:** ⌘

**How to create CRs using this form:**

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

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

Number Of HS-PDSCH Codes	M		INTEGER (0..maxCodeNumComp-1)
Start Code Number	C-NumCodes		INTEGER (0..maxCodeNumComp-1)

Condition	Explanation
NumCodes	The IE shall be present if the <i>Number of HS-PDSCH Codes</i> IE is set to a value greater than 0.

Range Bound	Explanation
MaxCodeNumComp	Maximum number of codes at the defined spreading factor, within the complete code tree

<not affected part is omitted>

### 9.3.4 Information Elements Definitions

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

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

```
DEFINITIONS AUTOMATIC TAGS ::=
BEGIN
```

<not affected part is omitted>

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

```
HS-PDSCH-Start-code-number ::= INTEGER (0..maxHS-PDSCHCodeNrComp-1)
```

## CHANGE REQUEST

# 25.433 CR 894 # rev - # Current version: 5.5.0 #

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

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

<b>Title:</b>	#	Correction of CR 609 implementation error on definition of end of audit sequence indicator and dwPCH power	
<b>Source:</b>	#	RAN3	
<b>Work item code:</b>	#	TEI5	<b>Date:</b> # 23/07/2003
<b>Category:</b>	#	<b>F</b>	<b>Release:</b> # Rel-5
		Use <u>one</u> of the following categories: <b>F</b> (correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (addition of feature), <b>C</b> (functional modification of feature) <b>D</b> (editorial modification) Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

<b>Reason for change:</b>	#	Wrong implementation of CR609. When the CR was implemented, that change got mistakenly made to the end-of-audit-sequence-indicator instead of DwPCH. As a consequence, the definition of end-of-audit-sequence-indicator is now a integer with range instead of the boolean value as originally. Also change to dwPCH was not made.
<b>Summary of change:</b>	#	End-Of-Audit-Sequence-Indicator changed back to an enumeration with two values as in R99 and Rel-4. DwPCH also updated according to CR609.
<b>Consequences if not approved:</b>	#	Rel-5 ASN.1 is not usable for audit using the present definition, as there is no way to determine when the audit sequence ends. Impact assessment towards the previous version of the specification (same release):  This CR has non-isolated impact with the previous version of the specification (same release) because the audit procedure and LCR TDD are affected.  This CR has an impact under protocol point of view as this change will prevent interoperation for the audit procedure with previous versions of Rel-5 and Rel-4 or R99, and with Rel-4 for LCR TDD.  The impact cannot be considered isolated because it affects more than one feature.

<b>Clauses affected:</b>	#	9.3.4
--------------------------	---	-------

<b>Other specs affected:</b>		<b>Y</b>	<b>N</b>	
	⌘		<b>N</b>	Other core specifications ⌘
			<b>N</b>	Test specifications
			<b>N</b>	O&M Specifications
<b>Other comments:</b>	⌘			

**How to create CRs using this form:**

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

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

## 9.3.4 Information Elements Definitions

\*\*\*\* Unchanged ASN.1 deleted \*\*\*\*

```
DwPCH-Power ::= INTEGER (-150..400,...) ENUMERATED {minus10, minus9, minus8, minus7, minus6, minus5,
minus4, minus3, minus2, minus1, zero, plus1, plus2, plus3, plus4, plus5, ...}
-- DwPCH-power = power * 10
-- If power <= -15 DwPCH shall be set to -150
-- If power >= 40 DwPCH shall be set to 400
-- Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
```

```
-- =====
-- E
-- =====
```

```
End-Of-Audit-Sequence-Indicator ::= ENUMERATED {INTEGER (-150..400,...)
end-of-audit-sequence,
not-end-of-audit-sequence
}
```

```
DwPCH-power = power * 10
If power <= -15 DwPCH shall be set to -150
If power >= 40 DwPCH shall be set to 400
Unit dBm, Range -15dBm .. +40 dBm, Step +0.1dB
```

```
EnhancedDSCHPC ::= SEQUENCE {
    enhancedDSCHPCWnd EnhancedDSCHPCWnd,
    enhancedDSCHPCCounter EnhancedDSCHPCCounter,
    enhancedDSCHPowerOffset EnhancedDSCHPowerOffset,
    ...
}
```

CR-Form-v7

## CHANGE REQUEST

⌘ **25.433 CR 898** ⌘ rev **2** ⌘ Current version: **5.5.0** ⌘

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

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

<b>Title:</b>	⌘ Clarification to the Constant Value for TDD		
<b>Source:</b>	⌘ RAN3		
<b>Work item code:</b>	⌘ TEI5	<b>Date:</b>	⌘ 26/08/2003
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)	2	(GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)	R96	(Release 1996)
	<b>B</b> (addition of feature),	R97	(Release 1997)
	<b>C</b> (functional modification of feature)	R98	(Release 1998)
	<b>D</b> (editorial modification)	R99	(Release 1999)
	Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Rel-4	(Release 4)
		Rel-5	(Release 5)
		Rel-6	(Release 6)

<b>Reason for change:</b>	⌘ The DPCH, PUSCH and PRACH constant values were moved from SIB14 to SIB5 in TS 25.331. SIB14 is a Node B generated SIB and it is necessary to send the constant values to Node B. However SIB5 is a RNC generated SIB and it is not necessary to send these constant values to the Node B in NBAP signaling.
<b>Summary of change:</b>	⌘ If Node B receives any of the <i>DPCH/PUSCH/PRACH Constant Value</i> IEs, the Node B shall ignore them.
<b>Consequences if not approved:</b>	⌘ If this document is not approved, the DPCH, PUSCH and PRACH constant values would be ambiguous for TDD.  Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects only the use of Constant Values by the Node B for TDD.

<b>Clauses affected:</b>	⌘ 8.2.12, 8.2.13, 9.1.24, 9.1.27, 9.3.3						
<b>Other specs affected:</b>	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications	⌘
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<input checked="" type="checkbox"/>	Test specifications					
	<input checked="" type="checkbox"/>	O&M Specifications					
<b>Other comments:</b>	⌘						

**How to create CRs using this form:**



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

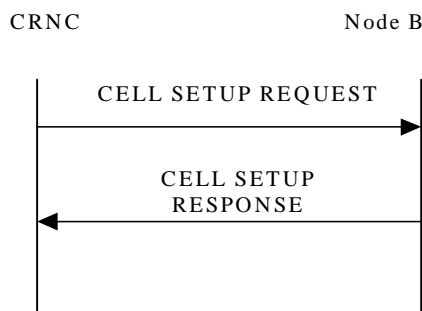
- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes")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

## 8.2.12 Cell Setup

### 8.2.12.1 General

This procedure is used to set up a cell in the Node B. The CRNC takes the cell, identified via the *C-ID* IE, into service and uses the resources in the Node B identified via the *Local Cell ID* IE.

### 8.2.12.2 Successful Operation



**Figure 16: Cell Setup procedure, Successful Operation**

The procedure is initiated with a CELL SETUP REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon Reception, the Node B shall reserve the necessary resources and configure the new cell according to the parameters given in the message.

[FDD - If the CELL SETUP REQUEST message includes one or more *Secondary CPICH Information* IE, the Node B shall configure and activate the Secondary CPICH(s) in the cell according to received configuration data.]

The *Maximum Transmission Power* IE value shall be stored in the Node B and, at any instance of time, the total maximum output power in the cell shall not be above this value.

[FDD - If the *Closed Loop Timing Adjustment Mode* IE is included in the CELL SETUP REQUEST message, the value shall be stored in the Node B and applied when closed loop Feed-Back mode diversity is used on DPCH.]

[TDD - If the *Reference SFN Offset* IE is included in the CELL SETUP REQUEST message, the Node B where a reference clock is connected shall consider the SFN derived from the synchronisation port and the reference offset for reference time setting. All other Node Bs shall ignore the *Reference SFN Offset* IE if included.]

[FDD - If the *IPDL Parameter Information* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL shall be stored in the Node B and applied according to the *IPDL Indicator* IE value. If the *Burst Mode Parameters* IE is included in the *IPDL FDD Information* IE, the IPDL shall be operated in burst mode according to ref [10].]

[3.84Mcps TDD - If the *IPDL Parameter Information* IE containing *IPDL TDD parameters* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL in 3.84Mcps TDD mode shall be stored in the Node B and applied according to the *IPDL Indicator* IE value. If the *Burst Mode Parameters* IE is included in the *IPDL TDD Information* IE, the IPDL shall be operated in burst mode according to ref [21].]

[1.28Mcps TDD - If the *IPDL Parameter Information LCR* IE containing *IPDL TDD parameters LCR* IE is included in the CELL SETUP REQUEST message, the parameters defining IPDL in 1.28Mcps TDD mode shall be stored in the Node B and applied according to the *IPDL Indicator* IE value. If the *Burst Mode Parameters* IE is included in the *IPDL TDD Information LCR* IE, the IPDL shall be operated in burst mode according to ref [21].]

When the cell is successfully configured, the Node B shall store the *Configuration Generation ID* IE value and send a CELL SETUP RESPONSE message as a response.

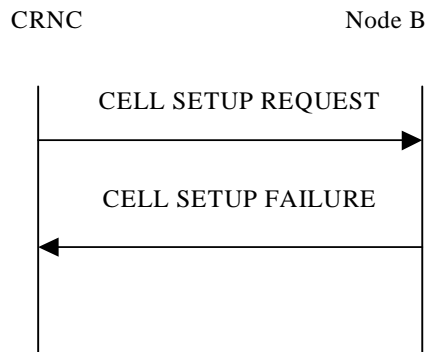
[FDD - When the cell is successfully configured the CPICH(s), Primary SCH, Secondary SCH, Primary CCPCH and BCH exist.][3.84Mcps TDD - When the cell is successfully configured the SCH, Primary CCPCH and BCH exist and the switching-points for the 3.84Mcps TDD frame structure are defined.] [1.28Mcps TDD - When the cell is

successfully configured, the DwPCH, Primary CCPCH and BCH exist and the switching-points for the 1.28Mcps TDD frame structure are defined.] The cell and the channels shall be set to the state Enabled [6].

[FDD - If the CELL SETUP REQUEST message includes the *Maximum PDSCH Power* IE, the Node B shall, if supported, store the values in the Node B and apply the indicated maximum power levels to the PDSCH.]

[TDD - The Node B shall ignore the *DPCH/PUSCH/PRACH Constant Value* IEs.]

### 8.2.12.3 Unsuccessful Operation



**Figure 17: Cell Setup procedure: Unsuccessful Operation**

If the Node B cannot set up the cell according to the information given in CELL SETUP REQUEST message the CELL SETUP FAILURE message shall be sent to the CRNC.

In this case, the cell is Not Existing in the Node B. The Configuration Generation ID shall not be changed in the Node B.

The *Cause* IE shall be set to an appropriate value.

Typical cause values are as follows:

**Radio Network Layer Cause:**

- S-CPICH not supported
- Requested Tx Diversity Mode not supported
- Power level not supported
- Node B Resources unavailable
- IPDL not supported

**Miscellaneous Cause:**

- O&M Intervention
- Control processing overload
- HW failure

### 8.2.12.4 Abnormal Conditions

If the state of the cell already is Enabled or Disabled [6] when the CELL SETUP REQUEST message is received in the Node B, it shall reject the configuration of the cell and all channels in the CELL SETUP REQUEST message by sending a CELL SETUP FAILURE message with the *Cause* IE set to "Message not compatible with receiver state".

If the Local Cell on which the cell is mapped does not belong to a Power Local Cell Group and the requested maximum transmission power indicated by the *Maximum Transmission Power* IE exceeds the Maximum DL Power Capability of

the Local Cell, the Node B shall consider the procedure as having failed and send a CELL SETUP FAILURE message to the CRNC.

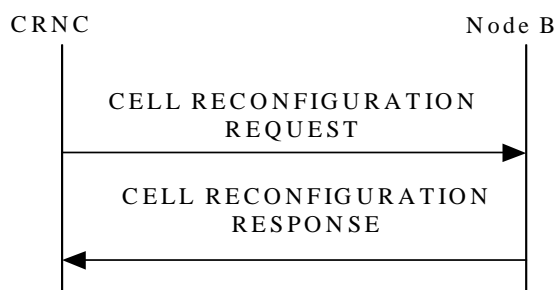
If the Local Cell on which the cell is mapped belongs to a Power Local Cell Group and the requested maximum transmission power indicated by *Maximum Transmission Power* IE exceeds the Maximum DL Power Capability of the Power Local Cell Group, the Node B shall consider the procedure as having failed and send a CELL SETUP FAILURE message to the CRNC.

## 8.2.13 Cell Reconfiguration

### 8.2.13.1 General

This procedure is used to reconfigure a cell in the Node B.

### 8.2.13.2 Successful Operation



**Figure 18: Cell Reconfiguration procedure, Successful Operation**

The procedure is initiated with a CELL RECONFIGURATION REQUEST message sent from the CRNC to the Node B using the Node B Control Port. Upon Reception, the Node B shall reconfigure the cell according to the parameters given in the message.

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary SCH Information* IE, the Node B shall reconfigure the Primary SCH power in the cell according to *Primary SCH Power* IE value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Secondary SCH Information* IE, the Node B shall reconfigure the Secondary SCH power in the cell according to the *Secondary SCH Power* IE value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CPICH Information* IE, the Node B shall reconfigure the Primary CPICH power in the cell according to the *Primary CPICH Power* IE value. The Node B shall adjust all the transmitted power levels relative to the Primary CPICH power according to the new value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes one or more *Secondary CPICH Information* IE, the Node B shall reconfigure the power for each Secondary CPICH in the cell according to their *Secondary CPICH Power* IE value.]

[3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *SCH Information* IE, the Node B shall reconfigure the SCH power in the cell according to the *SCH Power* IE value.]

[3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *Timing Advance Applied* IE, the Node B shall apply the necessary functions for Timing Advance in that cell including reporting of the Rx Timing Deviation measurement, according to the *Timing Advance Applied* IE value.]

[FDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CCPCH Information* IE, the Node B shall reconfigure the BCH power in the cell according to the *BCH Power* IE value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes the *Primary CCPCH Information IE*, the Node B shall reconfigure the P-CCPCH power in the cell according to the *PCCPCH Power IE* value. The Node B shall adjust all the transmitted power levels relative to the Primary CPPCH power according to the new value.]

If the CELL RECONFIGURATION REQUEST message includes the *Maximum Transmission Power IE*, the value shall be stored in the Node B and at any instance of time the total maximum output power in the cell shall not be above this value.

[3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *Time Slot Configuration IE*, the Node B shall reconfigure switching-point structure in the cell according to the *Time Slot IE* value.]

[1.28Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *Time Slot Configuration LCR IE*, the Node B shall reconfigure switching-point structure in the cell according to the *Time Slot LCR IE* value.]

[TDD - If the CELL RECONFIGURATION REQUEST message includes any of the *DPCH/PUSCH/PRACH Constant Value IEs*, the Node B shall ignore them ~~use these values when generating the appropriate SIB.~~]

[1.28Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *DwPCH Information IE*, the Node B shall reconfigure the DwPCH power in the Cell according to the *DwPCH Power IE*]

[FDD -If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information IE* with the *IPDL Indicator IE* set to the value "Active" the Node B shall apply the IPDL in that cell according to the latest received parameters defined by the *IPDL FDD Parameters IE*. If the *Burst Mode Parameters IE* is included in the *IPDL FDD Information IE*, the IPDL shall be operated in burst mode according to ref [10].]

[3.84Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information IE* with the *IPDL Indicator IE* set to the value "Active", the Node B shall apply the IPDL in that cell according to the latest received parameters defined by the *IPDL TDD Parameters IE*. If the *Burst Mode Parameters IE* is included in the *IPDL TDD Information LCR IE*, the IPDL shall be operated in burst mode according to ref [21].]

[1.28Mcps TDD - If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information LCR IE* with the *IPDL Indicator IE* set to the value "Active", the Node B shall apply the IPDL in that cell according to the latest received parameters defined by the *IPDL TDD Parameters LCR IE*. If the *Burst Mode Parameters IE* is included in the *IPDL TDD Information LCR IE*, the IPDL shall be operated in burst mode according to ref [21].]

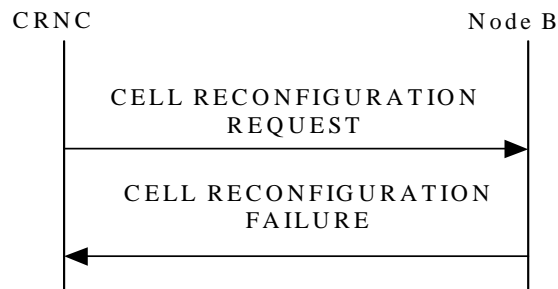
If the CELL RECONFIGURATION REQUEST message includes the *IPDL Parameter Information IE* with the *IPDL Indicator IE* set to the value "Inactive", the Node B shall deactivate the ongoing IPDL.

When the cell is successfully reconfigured, the Node B shall store the new *Configuration Generation ID IE* value and send a CELL RECONFIGURATION RESPONSE message as a response.

If the CELL RECONFIGURATION REQUEST message includes the *Synchronisation Configuration IE*, the Node B shall reconfigure the indicated parameters in the cell according to the value of the *N\_INSYNC\_IND*, *N\_OUTSYNC\_IND* and *T\_RLFAILURE IEs*. When the parameters in the *Synchronisation Configuration IE* affect the thresholds applied to a RL set, the Node B shall immediately apply the new thresholds. When applying the new thresholds, the Node B shall not change the state or value of any of the timers and counters for which the new thresholds apply.

[FDD – If the CELL RECONFIGURATION REQUEST message includes the *Maximum PDSCH Power IE*, the Node B shall, if supported, store the values in the Node B and apply the indicated maximum power levels to the PDSCH. For spreading factors for which a maximum PDSCH power level was already configured and the CELL RECONFIGURATION REQUEST does not provide a new value for the concerning spreading factor, the Node B shall continue to use the existing value.]

### 8.2.13.3 Unsuccessful Operation



**Figure 19: Cell Reconfiguration procedure: Unsuccessful Operation**

If the Node B cannot reconfigure the cell according to the information given in CELL RECONFIGURATION REQUEST message, the CELL RECONFIGURATION FAILURE message shall be sent to the CRNC.

In this case, the Node B shall keep the old configuration of the cell and the Configuration Generation ID shall not be changed in the Node B.

The *Cause* IE shall be set to an appropriate value.

Typical cause values are as follows:

**Radio Network Layer Cause:**

- Power level not supported
- Node B Resources unavailable
- IPDL not supported

**Miscellaneous Cause:**

- O&M Intervention
- Control processing overload
- HW failure

### 8.2.13.4 Abnormal Conditions

If the *IPDL Indicator* IE set to the value "Active" is included in the CELL RECONFIGURATION REQUEST message and there is active IPDL ongoing in the Node B, the Node B shall respond with the CELL RECONFIGURATION FAILURE message with the cause value "IPDL already activated".

If the *IPDL Indicator* IE set to the value "Active" is included in the CELL RECONFIGURATION REQUEST message and there is no IPDL stored in the Node B defining the IPDL, the Node B shall respond with the CELL RECONFIGURATION FAILURE message with the cause value "IPDL parameters not available".

If the Local Cell on which the cell is mapped does not belong to of a Power Local Cell Group and the requested maximum transmission power indicated by the *Maximum Transmission Power* IE exceeds the Maximum DL Power Capability of the Local Cell, the Node B shall consider the procedure as having failed and send a CELL RECONFIGURATION FAILURE message to the CRNC.

If the Local Cell on which the cell is mapped belongs to a Power Local Cell Group and the requested maximum transmission power indicated by *Maximum Transmission Power* IE exceeds the Maximum DL Power Capability of the

Power Local Cell Group, the Node B shall consider the procedure as having failed and send a CELL RECONFIGURATION FAILURE message to the CRNC.

## 9.1.24 CELL SETUP REQUEST

/\*partly omitted\*/



## 9.1.24.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Local Cell ID	M		9.2.1.38		YES	reject
C-ID	M		9.2.1.9		YES	reject
Configuration Generation Id	M		9.2.1.16		YES	reject
UARFCN	M		9.2.1.65	Corresponds to Nt [15]	YES	reject
Cell Parameter ID	M		9.2.3.4		YES	reject
Maximum Transmission Power	M		9.2.1.40		YES	reject
Transmission Diversity Applied	M		9.2.3.26	On DCHs	YES	reject
Sync Case	M		9.2.3.18		YES	reject
<b>Synchronisation Configuration</b>		1			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
DPCH Constant Value	M		Constant Value 9.2.3.4A	<a href="#">This IE shall be ignored by the Node B.</a>	YES	reject
PUSCH Constant Value	M		Constant Value 9.2.3.4A	<a href="#">This IE shall be ignored by the Node B.</a>	YES	reject
PRACH Constant Value	M		Constant Value 9.2.3.4A	<a href="#">This IE shall be ignored by the Node B.</a>	YES	reject
Timing Advance Applied	M		9.2.3.22A		YES	reject
<b>SCH Information</b>		0..1		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>CHOICE Sync Case	M				YES	reject
>>Case 1					–	
>>>Time Slot	M		9.2.3.23		–	
>>Case 2					–	
>>>SCH Time Slot	M		9.2.3.17		–	
>SCH Power	M		DL Power 9.2.1.21		–	
>TSTD Indicator	M		9.2.1.64		–	
<b>PCCPCH Information</b>		0..1		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>TDD Physical Channel Offset	M		9.2.3.20		–	
>Repetition Period	M		9.2.3.16		–	
>Repetition Length	M		9.2.3.15		–	
>PCCPCH Power	M		9.2.3.9		–	
>SCTD Indicator	M		9.2.3.30		–	
<b>Time Slot Configuration</b>		0..15		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps	GLOBAL	reject

				TDD.		
>Time Slot	M		9.2.3.23		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
<b>Time Slot Configuration LCR</b>		0..7		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
<b>PCCPCH Information LCR</b>		0..1		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>TDD Physical Channel Offset	M		9.2.3.20		–	
>Repetition Period	M		9.2.3.16		–	
>Repetition Length	M		9.2.3.15		–	
>PCCPCH Power	M		9.2.3.9		–	
>SCTD Indicator	M		9.2.3.30		–	
>TSTD Indicator	M		9.2.1.64		–	
<b>DwPCH Information</b>		0..1		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>TSTD Indicator	M		9.2.1.64		–	
>DwPCH Power	M		9.2.3.5B		–	
Reference SFN Offset	O		9.2.3.14B		YES	ignore
<b>IPDL Parameter Information</b>		0..1		Applicable to 3.84 Mcps TDD only	YES	reject
>IPDL TDD Parameters	M		9.2.3.5D		–	
>IPDL Indicator	M		9.2.1.36F		–	
<b>IPDL Parameter Information LCR</b>		0..1		Applicable to 1.28Mcps TDD only	YES	reject
>IPDL TDD Parameters LCR	M		9.2.3.5H		–	
>IPDL Indicator	M		9.2.1.36F		–	

## 9.1.27 CELL RECONFIGURATION REQUEST

/\*partly omitted\*/

## 9.1.27.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
C-ID	M		9.2.1.9		YES	reject
Configuration Generation ID	M		9.2.1.16		YES	reject
<b>Synchronisation Configuration</b>		0..1			YES	reject
>N_INSYNC_IND	M		9.2.1.47A		–	
>N_OUTSYNC_IND	M		9.2.1.47B		–	
>T_RLFAILURE	M		9.2.1.56A		–	
Timing Advance Applied	O		9.2.3.22A	Applicable to 3.84Mcps TDD only	YES	reject
<b>SCH Information</b>		0..1		Applicable to 3.84Mcps TDD only	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>SCH Power	M		DL Power 9.2.1.21		–	
<b>PCCPCH Information</b>		0..1			YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>PCCPCH Power	M		9.2.3.9		–	
Maximum Transmission Power	O		9.2.1.40		YES	reject
DPCH Constant Value	O		Constant Value 9.2.3.4A	<a href="#">This IE shall be ignored by the Node B.</a>	YES	reject
PUSCH Constant Value	O		Constant Value 9.2.3.4A	<a href="#">This IE shall be ignored by the Node B.</a>	YES	reject
PRACH Constant Value	O		Constant Value 9.2.3.4A	<a href="#">This IE shall be ignored by the Node B.</a>	YES	reject
<b>Time Slot Configuration</b>		0..15		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	GLOBAL	reject
>Time Slot	M		9.2.3.23		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
<b>Time Slot Configuration LCR</b>		0..7		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		–	
>Time Slot Status	M		9.2.3.25		–	
>Time Slot Direction	M		9.2.3.24		–	
<b>DwPCH Information</b>		0..1		Applicable to 1.28Mcps TDD only.	YES	reject
>Common Physical Channel ID	M		9.2.1.13		–	
>DwPCH Power	M		9.2.3.5B		–	
<b>IPDL Parameter Information</b>		0..1		Applicable to 3.84Mcps TDD only	YES	reject
>IPDL TDD Parameters	O		9.2.3.5D		–	

>IPDL Indicator	M		9.2.1.36F		–	
<b>IPDL Parameter Information LCR</b>		<i>0..1</i>		Applicable to 1.28Mcps TDD only	YES	reject
>IPDL TDD Parameters LCR	O		9.2.3.5H		–	
>IPDL Indicator	M		9.2.1.36F		–	

## 9.3.3 PDU Definitions

/\*partly omitted\*/

```

-- *****
--
-- CELL SETUP REQUEST TDD
--
-- *****

```

```

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

```

```

CellSetupRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-Local-Cell-ID                CRITICALITY  reject      TYPE          Local-Cell-ID
      PRESENCE  mandatory    }|
    { ID      id-C-ID                        CRITICALITY  reject      TYPE          C-ID
      PRESENCE  mandatory    }|
    { ID      id-ConfigurationGenerationID    CRITICALITY  reject      TYPE          ConfigurationGenerationID
      PRESENCE  mandatory    }|
    { ID      id-UARFCNforNt                 CRITICALITY  reject      TYPE          UARFCN
      PRESENCE  mandatory    }|
    { ID      id-CellParameterID             CRITICALITY  reject      TYPE          CellParameterID
      PRESENCE  mandatory    }|
    { ID      id-MaximumTransmissionPower     CRITICALITY  reject      TYPE          MaximumTransmissionPower
      PRESENCE  mandatory    }|
    { ID      id-TransmissionDiversityApplied CRITICALITY  reject      TYPE          TransmissionDiversityApplied
      PRESENCE  mandatory    }|
    { ID      id-SyncCase                    CRITICALITY  reject      TYPE          SyncCase
      PRESENCE  mandatory    }|
    { ID      id-Synchronisation-Configuration-Cell-SetupRqst CRITICALITY  reject      TYPE          Synchronisation-Configuration-
Cell-SetupRqst PRESENCE  mandatory    }|
    { ID      id-DPCHConstant                CRITICALITY  reject      TYPE          ConstantValue
      PRESENCE  mandatory    }| -- This IE shall be ignored by the Node B.
    { ID      id-PUSCHConstant               CRITICALITY  reject      TYPE          ConstantValue
      PRESENCE  mandatory    }| -- This IE shall be ignored by the Node B.
    { ID      id-PRACHConstant               CRITICALITY  reject      TYPE          ConstantValue
      PRESENCE  mandatory    }| -- This IE shall be ignored by the Node B.
    { ID      id-TimingAdvanceApplied        CRITICALITY  reject      TYPE          TimingAdvanceApplied
      PRESENCE  mandatory    }|
    { ID      id-SCH-Information-Cell-SetupRqstTDD CRITICALITY  reject      TYPE          SCH-Information-Cell-SetupRqstTDD
      PRESENCE  optional    }| -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
    { ID      id-PCCPCH-Information-Cell-SetupRqstTDD CRITICALITY  reject      TYPE          PCCPCH-Information-Cell-
SetupRqstTDD PRESENCE  optional    }| -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
    { ID      id-TimeSlotConfigurationList-Cell-SetupRqstTDD CRITICALITY  reject      TYPE          TimeSlotConfigurationList-Cell-
SetupRqstTDD PRESENCE  optional    }, -- Mandatory for 3.84Mcps TDD, Not Applicable to 1.28Mcps TDD
    ...
}

```

```

CellSetupRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
  { ID id-TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD      CRITICALITY reject EXTENSION      TimeSlotConfigurationList-LCR-
Cell-SetupRqstTDD      PRESENCE optional }| -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
  { ID id-PCCPCH-LCR-Information-Cell-SetupRqstTDD            CRITICALITY reject EXTENSION      PCCPCH-LCR-Information-Cell-
SetupRqstTDD          PRESENCE optional }| -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
  { ID id-DwPCH-LCR-Information-Cell-SetupRqstTDD            CRITICALITY reject EXTENSION      DwPCH-LCR-Information-Cell-
SetupRqstTDD          PRESENCE optional }| -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
  { ID id-ReferenceSFNoffset      CRITICALITY ignore EXTENSION ReferenceSFNoffset      PRESENCE optional }|
  { ID id-IPDLParameter-Information-Cell-SetupRqstTDD        CRITICALITY reject EXTENSION      IPDLParameter-Information-
Cell-SetupRqstTDD PRESENCE optional }| -- Applicable to 3.84Mcps TDD only
  { ID id-IPDLParameter-Information-LCR-Cell-SetupRqstTDD    CRITICALITY reject EXTENSION      IPDLParameter-
Information-LCR-Cell-SetupRqstTDD PRESENCE optional }, -- Applicable to 1.28Mcps TDD only
  ...
}

SCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
  commonPhysicalChannelID      CommonPhysicalChannelID,
  syncCaseIndicator            SyncCaseIndicator-Cell-SetupRqstTDD-PSCH,
  sCH-Power                    DL-Power,
  tSTD-Indicator                TSTD-Indicator,
  iE-Extensions                ProtocolExtensionContainer { { SCH-Information-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

SCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

SyncCaseIndicator-Cell-SetupRqstTDD-PSCH ::= ProtocolIE-Single-Container {{ SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH }}

SyncCaseIndicatorIE-Cell-SetupRqstTDD-PSCH NBAP-PROTOCOL-IES ::= {
  { ID id-SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH CRITICALITY reject TYPE SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH PRESENCE
mandatory }
}

SyncCaseIndicatorItem-Cell-SetupRqstTDD-PSCH ::= CHOICE {
  case1      Case1-Cell-SetupRqstTDD,
  case2      Case2-Cell-SetupRqstTDD,
  ...
}

Case1-Cell-SetupRqstTDD ::= SEQUENCE {
  timeSlot      TimeSlot,
  iE-Extensions ProtocolExtensionContainer { { Case1Item-Cell-SetupRqstTDD-ExtIEs } } OPTIONAL,
  ...
}

Case1Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
  ...
}

Case2-Cell-SetupRqstTDD ::= SEQUENCE {

```

```

    sCH-TimeSlot          SCH-TimeSlot,
    iE-Extensions        ProtocolExtensionContainer { { Case2Item-Cell-SetupRqstTDD-ExtIEs} }      OPTIONAL,
    ...
}

Case2Item-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCCPCH-Information-Cell-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    tdd-PhysicalChannelOffset    TDD-PhysicalChannelOffset,
    repetitionPeriod             RepetitionPeriod,
    repetitionLength             RepetitionLength,
    pCCPCH-Power                 PCCPCH-Power,
    sCTD-Indicator               SCTD-Indicator,
    iE-Extensions                ProtocolExtensionContainer { { PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs} }  OPTIONAL,
    ...
}

PCCPCH-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-SetupRqstTDD

TimeSlotConfigurationItem-Cell-SetupRqstTDD ::= SEQUENCE {
    timeSlot                    TimeSlot,
    timeSlotStatus              TimeSlotStatus,
    timeSlotDirection           TimeSlotDirection,
    iE-Extensions                ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs} }  OPTIONAL,
    ...
}

TimeSlotConfigurationItem-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-LCR-Cell-SetupRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD

TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD ::= SEQUENCE {
    timeSlotLCR                 TimeSlotLCR,
    timeSlotStatus              TimeSlotStatus,
    timeSlotDirection           TimeSlotDirection,
    iE-Extensions                ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs} }  OPTIONAL,
    ...
}

TimeSlotConfigurationItem-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

```

PCCPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    tdd-PhysicalChannelOffset     TDD-PhysicalChannelOffset,
    repetitionPeriod              RepetitionPeriod,
    repetitionLength              RepetitionLength,
    pCCPCH-Power                  PCCPCH-Power,
    sCTD-Indicator                SCTD-Indicator,
    tSTD-Indicator                TSTD-Indicator,
    iE-Extensions                 ProtocolExtensionContainer { { PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

PCCPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DwPCH-LCR-Information-Cell-SetupRqstTDD ::= SEQUENCE {
    commonPhysicalChannelId      CommonPhysicalChannelID,
    tSTD-Indicator                TSTD-Indicator,
    dwPCH-Power                  DwPCH-Power,
    iE-Extensions                 ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs } }    OPTIONAL,
    ...
}

DwPCH-LCR-Information-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

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

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

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

IPDLParameter-Information-LCR-Cell-SetupRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
/*partly omitted*/
-- *****
--
-- CELL RECONFIGURATION REQUEST TDD
--

```



-- \*\*\*\*\*

```

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

CellReconfigurationRequestTDD-IEs NBAP-PROTOCOL-IES ::= {
    { ID      id-C-ID
      PRESENCE mandatory }|
    { ID      id-ConfigurationGenerationID
      PRESENCE mandatory }|
    { ID      id-Synchronisation-Configuration-Cell-ReconfRqst
      PRESENCE optional }|
    { ID      id-TimingAdvanceApplied
      PRESENCE optional }| -- Applicable to 3.84Mcps TDD only
    { ID      id-SCH-Information-Cell-ReconfRqstTDD
      PRESENCE optional }| -- Applicable to 3.84Mcps TDD only
    { ID      id-PCCPCH-Information-Cell-ReconfRqstTDD
      PRESENCE optional }|
    { ID      id-MaximumTransmissionPower
      PRESENCE optional }|
    { ID      id-DPCHConstant
      PRESENCE optional }| -- This IE shall be ignored by the Node B.
    { ID      id-PUSCHConstant
      PRESENCE optional }| -- This IE shall be ignored by the Node B.
    { ID      id-PRACHConstant
      PRESENCE optional }| -- This IE shall be ignored by the Node B.
    { ID      id-TimeSlotConfigurationList-Cell-ReconfRqstTDD
      PRESENCE optional }, -- Applicable to 3.84Mcps TDD only
    ...
}

CellReconfigurationRequestTDD-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID      id-TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD
      PRESENCE optional}| -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    { ID      id-DwPCH-LCR-Information-Cell-ReconfRqstTDD
      PRESENCE optional}| -- Mandatory for 1.28Mcps TDD, Not Applicable to 3.84Mcps TDD
    { ID      id-IPDLParameter-Information-Cell-ReconfRqstTDD
      PRESENCE optional }| -- Applicable to 3.84Mcps TDD only
    { ID      id-IPDLParameter-Information-LCR-Cell-ReconfRqstTDD
      PRESENCE optional }, -- Applicable to 1.28Mcps TDD only
    ...
}

SCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    sCH-Power                    DL-Power,
    iE-Extensions                ProtocolExtensionContainer { { PSCH-Information-Cell-ReconfRqstTDD-ExtIEs } }
    ...
}

```

```

PSCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    pCCPCH-Power                 PCCPCH-Power,
    iE-Extensions                ProtocolExtensionContainer { { PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

PCCPCH-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..15)) OF TimeSlotConfigurationItem-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlot                     TimeSlot,
    timeSlotStatus               TimeSlotStatus,
    timeSlotDirection            TimeSlotDirection,
    iE-Extensions                ProtocolExtensionContainer { { TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

TimeSlotConfigurationItem-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

TimeSlotConfigurationList-LCR-Cell-ReconfRqstTDD ::= SEQUENCE (SIZE (1..7)) OF TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD ::= SEQUENCE {
    timeSlotLCR                  TimeSlotLCR,
    timeSlotStatus               TimeSlotStatus,
    timeSlotDirection            TimeSlotDirection,
    iE-Extensions                ProtocolExtensionContainer { { TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

TimeSlotConfigurationItem-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

DwPCH-LCR-Information-Cell-ReconfRqstTDD ::= SEQUENCE {
    commonPhysicalChannelID      CommonPhysicalChannelID,
    dwPCH-Power                  DwPCH-Power,
    iE-Extensions                ProtocolExtensionContainer { { DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs} }    OPTIONAL,
    ...
}

DwPCH-LCR-Information-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}

```

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

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

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

IPDLParameter-Information-LCR-Cell-ReconfRqstTDD-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
```