

TSG RAN Meeting #20
Hämeenlinna, Finland, 3 - 6 June, 2003

RP-030333

Title CR (Rel-5 only) to TS 25.423 and 25.433 on HSDPA General Corrections
Source TSG RAN WG3
Agenda Item 7.3.6

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-030561	25.423	5.5.0	5.6.0	REL-5	816	-	F	HSDPA General Corrections	HSDPA-lublur
R3-030560	25.433	5.4.0	5.5.0	REL-5	835	-	F	HSDPA General Corrections	HSDPA-lublur

CHANGE REQUEST

⌘ **25.423 CR 816** ⌘ 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

Title:	⌘ HSPDA General Corrections		
Source:	⌘ RAN WG3		
Work item code:	⌘ HSPDA-lublur	Date:	⌘ 19/05/2003
Category:	⌘ F	Release:	⌘ Rel-5
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)

Reason for change:	⌘ There are many minor inconsistencies in 25.423 concerning the correct definition/handling of HSDPA related IEs.		
Summary of change:	⌘ <ol style="list-style-type: none"> 1. Consistent use of IE names between tabular and procedure text generally throughout the specification, IE names are aligned between 25.433 and 25.423 2. Fix IE references in tabular format throughout 3. Other various minor editorial changes. <p>Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects the newly added HS-DSCH.</p>		
Consequences if not approved:	⌘ Inconsistencies in the definition and use of HSDPA IEs would remain.		

Clauses affected:	⌘ 8.3.4, 8.3.21, 9.1.11, 9.1.21, 9.2.1.30Q, 9.2.2.19a, 9.2.3.3aa, 9.2.3.3ab										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> </table> Other core specifications	Y	N		X		X		X	⌘	
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	X										
	X										

Other comments: ☹

How to create CRs using this form:

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

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

8.3.4 Synchronised Radio Link Reconfiguration Preparation

8.3.4.1 General

The Synchronised Radio Link Reconfiguration Preparation procedure is used to prepare a new configuration of Radio Link(s) related to one UE-UTRAN connection within a DRNS.

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

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

8.3.4.2 Successful Operation

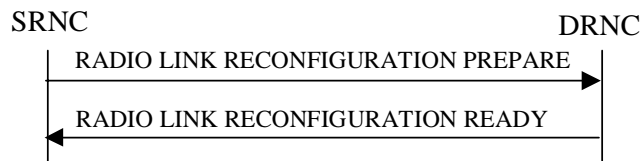


Figure 10: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

The Synchronised Radio Link Reconfiguration Preparation procedure is initiated by the SRNC by sending the RADIO LINK RECONFIGURATION PREPARE message to the DRNC.

Upon receipt, the DRNS 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.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Allowed Queuing Time* IE the DRNS may queue the request the time corresponding to the value of the *Allowed Queuing Time* IE before starting to execute the request.

The DRNS 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* IEs, the DRNS shall treat them each as follows:

- If the *DCHs To Modify* IE includes multiple *DCH Specific Info* IEs then the DRNS shall treat the DCHs in the *DCHs To Modify* IE as a set of co-ordinated DCHs. The DRNS 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 to be modified, the DRNS 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 to be modified, the DRNS 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 to be modified, the DRNS shall apply the new ToAWE in the user plane for the DCH or the set of co-ordinated DCHs in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Frame Handling Priority* IE for a DCH to be modified, the DRNS 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 DRNS once the new configuration has been activated.

- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Traffic Class* IE for a DCH to be modified, the DRNS should store this information for this DCH in the new configuration. The *Traffic Class* IE should be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Transport Format Set* IE for the UL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Uplink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Transport Format Set* IE for the DL of a DCH to be modified, the DRNS shall apply the new Transport Format Set in the Downlink of this DCH in the new configuration.
- If the *DCHs To Modify* IE contains a *DCH Specific Info* IE which includes the *Allocation/Retention Priority* IE, the DRNS shall apply the new Allocation/Retention Priority to this DCH in the new configuration according to Annex A.
- [FDD - If the *DCHs To Modify* IE contains a *DRAC Control* IE set to "requested" and if the DRNS supports the DRAC, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE for the FACH in which the DRAC information is sent, for each Radio Link established in a cell in which DRAC is active. If the DRNS does not support DRAC, DRNC shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]
- [TDD - If the *DCHs to Modify* IE includes the *CCTrCH ID* IE for the UL, the DRNS shall map the DCH onto the referenced UL CCTrCH. in the new configuration]
- [TDD - If the *DCH s to Modify* IE includes the *CCTrCH ID* IE for the DL, the DRNS shall map the DCH onto the referenced DL CCTrCH in the new configuration.]
- If the *DCHs to Modify* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
 - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.
 - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate in the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate.

DCH Addition:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs To Add* IEs, the DRNS shall treat them each as follows:

- The DRNS shall reserve necessary resources for the new configuration of the Radio Link(s) according to the parameters given in the message and include these DCH in the new configuration.
- If the *DCH Information* IE includes a *DCHs To Add* IE with multiple *DCH Specific Info* IEs, the DRNS shall treat the DCHs in the *DCHs To Add* IE as a set of co-ordinated DCHs. The DRNS shall include these DCHs in the new configuration only if it can include all of them in the new configuration.
- [FDD - For each DCH which do not belong to a set of co-ordinated DCHs and which includes a *QE-Selector* IE set to "selected", the DRNS shall use the Transport channel BER from that DCH for the QE in the UL data frames. If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, ref. [4]. If the *QE-Selector* IE is set to "non-selected", the DRNS shall use the Physical channel BER for the QE in the UL data frames, ref. [4].]

- For a set of co-ordinated DCHs, the DRNS shall use the Transport channel BER from the DCH with the *QE-Selector* IE set to "selected" for the QE in the UL data frames, ref. [4]. [FDD - If no Transport channel BER is available for the selected DCH, the DRNS shall use the Physical channel BER for the QE, ref. [4]. If all DCHs have the *QE-Selector* IE set to "non-selected" , the DRNS shall use the Physical channel BER for the QE, ref. [4]. [TDD - If no Transport channel BER is available for the selected DCH, the DRNS shall use 0 for the QE, ref. [4].]
- The DRNS 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 DRNS once the new configuration has been activated.
- The DRNS should store the *Traffic Class* IE received for a DCH to be added in the new configuration. The *Traffic Class* IE should be used to determine the transport bearer characteristics to apply between DRNC and Node B for the related DCH or set of co-ordinated DCHs.
- The DRNS 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 DRNS 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 DRNS 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 DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if at least one DSCH or USCH exists in the new configuration.]
- [FDD - If the *DRAC Control* IE is set to "requested" in the *DCH Specific Info* IE for at least one DCH and if the DRNS supports the DRAC, the DRNC shall indicate in the RADIO LINK RECONFIGURATION READY message the *Secondary CCPCH Info* IE for the FACH in which the DRAC information is sent, for each radio link supported by a cell in which DRAC is active. If the DRNS does not support DRAC, the DRNC shall not provide these IEs in the RADIO LINK RECONFIGURATION READY message.]
- If the *DCHs to Add* IE contains a *DCH Specific Info* IE which includes the *Guaranteed Rate Information* IE, the DRNS shall treat the included IEs according to the following:
 - If the *Guaranteed Rate Information* IE includes the *Guaranteed UL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the uplink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the uplink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the uplink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCHs to Add* IE does not include the *Guaranteed UL Rate* IE, the DRNS shall not limit the user rate of the uplink of the DCH.
 - If the *Guaranteed Rate Information* IE includes the *Guaranteed DL Rate* IE, the DRNS shall apply the new Guaranteed Rate in the downlink of this DCH in the new configuration. The DRNS may decide to request the SRNC to limit the user rate of the downlink of the DCH at any point in time after activating the new configuration. The DRNS may request the SRNC to reduce the user rate of the downlink of the DCH below the guaranteed bit rate, however, whenever possible the DRNS should request the SRNC to reduce the user rate between the maximum bit rate and the guaranteed bit rate. If the *DCH Specific Info* IE in the *DCHs to Add* IE does not include the *Guaranteed DL Rate* IE, the DRNS shall not limit the user rate of the downlink of the DCH.
- [TDD - The DRNS shall apply the *CCTrCH ID* IE (for the DL) in the Downlink of this DCH in the new configuration.]
- [TDD - The DRNS shall apply the *CCTrCH ID* IE (for the UL) in the Uplink of this DCH in the new configuration configuration.]

DCH Deletion:

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCH To Delete*, the DRNS 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 DRNS 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*, the DRNS shall apply the parameters to the new configuration as follows:]

- [FDD - If the *UL DPCH Information IE* includes the *Uplink Scrambling Code IE*, the DRNS 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 DRNS shall apply the new Min UL Channelisation Code Length in the new configuration. The DRNS 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 *TFCS IE*, the DRNS shall use the *TFCS IE* for the UL when reserving resources for the uplink of the new configuration. The DRNS shall apply the new TFCS in the uplink of the new configuration.]
- [FDD - If the *UL DPCH Information IE* includes the *UL DPCCH Slot Format IE*, the DRNS shall apply the new Uplink DPCCH Slot Format to the new configuration.]
- [FDD - If the *UL DPCH Information IE* includes the *UL SIR Target IE*, the DRNS 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 DRNS shall apply the value in the uplink of the new configuration.]
- [FDD - If the *UL DPCH Information IE* includes the *Diversity Mode IE*, the DRNS 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 DRNS shall apply the values in the new configuration.]

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

- [FDD - If the *DL DPCH Information IE* includes the *Number of DL Channelisation Codes IE*, the DRNS shall allocate given number of Downlink Channelisation Codes per Radio Link and apply the new Downlink Channelisation Code(s) to the new configuration. Each Downlink Channelisation Code allocated for the new configuration shall be included in the RADIO LINK RECONFIGURATION READY message within the *DL Code Information IE* as a *FDD DL Channelisation Code Number IE* when sent to the SRNC. If some Transmission Gap Pattern sequences using 'SF/2' method are already initialised in the DRNS, DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information IE* in the RADIO LINK RECONFIGURATION READY message in case the DRNS selects to change the Scrambling code change method for one or more DL Channelisation Code.]
- [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 *DL DPCH Information IE* includes the *TFCS IE*, the DRNS shall use the *TFCS IE* for the DL when reserving resources for the downlink of the new configuration. The DRNS shall apply the new TFCS in the Downlink of the new configuration.]
- [FDD - If the *DL DPCH Information IE* includes the *DL DPCH Slot Format IE*, the DRNS shall apply the new slot format used in DPCH in DL.]
- [FDD - If the *DL DPCH Information IE* includes the *TFCI Signalling Mode IE*, the DRNS shall apply the new signalling mode of the TFCI.]

- [FDD - If the *DL DPCH Information* IE includes the *Multiplexing Position* IE, the DRNS shall apply the new parameter to define whether fixed or flexible positions of transport channels shall be used in the physical channel.]
- [FDD - If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Used", the DRNS shall, if supported, use Limited Power Increase according to ref. [10] subclause 5.2.1 for the inner loop DL power control in the new configuration.]
- [FDD - If the *DL DPCH Information* IE includes the *Limited Power Increase* IE set to "Not Used", the DRNS shall not use Limited Power Increase for the inner loop DL power control 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 DRNS shall assume the length of the TFCI (field 2) is 5 bits.]
- [FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes *Split Type* IE, then the DRNS shall apply this information to the new configuration of TFCI.]
- [FDD - If the *DL DPCH Information* IE includes the *Length of TFCI2* IE, the DRNS shall apply this information to the length of TFCI(field 2) in the new configuration.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE, the DRNS 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 DRNS until the next Compressed Mode Configuration is configured in the DRNS or until the last Radio Link is deleted.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transmission Gap Pattern Sequence Information* IE and the *Downlink Compressed Mode Method* IE in one or more Transmission Gap Pattern Sequence within the *Transmission Gap Pattern Sequence Information* IE is set to 'SF/2', the DRNC shall include the *Transmission Gap Pattern Sequence Scrambling Code Information* IE in the RADIO LINK RECONFIGURATION READY message indicating for each Channelisation Code whether the alternative scrambling code shall be used or not].

[TDD - UL/DL CCTrCH Modification]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCTrCH To Modify* IEs or *DL CCTrCH To Modify* IEs, then the DRNS shall treat them each as follows:]

- [TDD - If any of the *UL CCTrCH To Modify* IEs or *DL CCTrCH To Modify* IEs includes any of the *TFCS* IE, *TFCI coding* IE, *Puncture limit* IE, or *TPC CCTrCH ID* IEs the DRNS shall apply these as the new values, otherwise the previous values specified for this CCTrCH are still applicable.]
- [TDD - If any of the following listed DPCH information IEs are modified in the new prepared configuration, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the IEs indicating the new values: *Repetition Period* IE, *Repetition Length* IE, *TDD DPCH Offset* IE, [3.84Mcps TDD - *UL Timeslot Information* IE,] [1.28Mcps TDD - *UL Timeslot Information LCR* IE,] [3.84Mcps TDD - *DL Timeslot Information* IE,] [1.28Mcps TDD - *DL Timeslot Information LCR* IE,] [3.84Mcps TDD - *Midamble Shift And Burst Type* IE,] [1.28Mcps TDD - *Midamble Shift LCR* IE,] *TFCI Presence* IE, [3.84Mcps TDD - *TDD Channelisation Code* IE,] [1.28Mcps TDD - and/or *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].]
- [1.28Mcps TDD - If the *UL CCTrCH To Modify* IE includes the *UL SIR Target* IE, the DRNS shall use the value for the UL inner loop power control according [12] and [22] in the new configuration.]
- [TDD - If any of the *DL CCTrCH To Modify* IEs includes any *TPC CCTrCH ID* IEs, the DRNS shall apply these as the new values, otherwise the previous values specified for this CCTrCH are still applicable.]
- [1.28Mcps TDD - If the *UL CCTrCH to Modify* IE includes the *TDD TPC Uplink Step Size* IE, the DRNS shall apply this value to the uplink TPC step size in the new configuration.]
- [TDD - If the *DL CCTrCH to Modify* IE includes the *TDD TPC Downlink Step Size* IE, the DRNS shall apply this value to the downlink TPC step size in the new configuration.]

[TDD - UL/DL CCTrCH Addition]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCH To Add* IEs or *DL CCH To Add* IEs, the DRNS shall include this CCH in the new configuration.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *DCHs to Add* IEs, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the DPCH information in [3.84Mcps TDD - *UL DPCH to be Added* IE/*DL DPCH to be Added* IEs] [1.28Mcps TDD - *UL DPCH to be Added* LCR IE/*DL DPCH to be Added* LCR IEs] [3.84Mcps TDD - If no UL DPCH is active before a reconfiguration which adds an UL DPCH, and if a valid Rx Timing Deviation measurement is known in DRNC, then the DRNC shall include the *Rx Timing Deviation* IE in the RADIO LINK RECONFIGURATION READY message.]

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

[1.28Mcps TDD - The DRNS 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 [12] and [22] in the new configuration.]

[TDD - If any of the *DL CCH To Add* IEs includes any *TPC CCH ID* IEs, the DRNS shall configure the identified UL CCHs with TPC according to the parameters given in the message.]

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

[TDD - UL/DL CCH Deletion]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *UL CCH To Delete* IEs or *DL CCH To Delete* IEs, the DRNS shall remove this CCH in the new configuration, and the DRNC shall include in the RADIO LINK RECONFIGURATION READY message corresponding *UL DPCH to be Deleted* IEs and *DL DPCH to be Deleted* IEs.]

SSDT Activation/Deactivation:

- [FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE", then in the new configuration the DRNS shall activate SSDT, if supported, using the *SSDT Cell Identity* IE in *RL Information* IE, and the *SSDT Cell Identity Length* IE in *UL DPCH Information* IE.]
- [FDD - If the *RL Information* IE includes the *Qth Parameter* IE and the *SSDT Indication* IE set to "SSDT Active in the UE", the DRNS shall use the *Qth Parameter* IE, if Qth 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 DRNS shall deactivate SSDT in the new configuration.]

DL Power Control:

- [FDD - If the *RL Information* IE includes the *DL Reference Power* IEs and power balancing is active, DRNS 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 8.3.15, 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 DRNS, the DRNC 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* IEs, then the DRNS 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.

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Add* IE, then the DRNS shall use the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE and *TrCH Source Statistics Descriptor* IE to define a set of DSCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.

The DRNC 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 added DSCH.

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Add* IE, then the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related DSCHs.

[FDD - If the *DSCHs To Add* IE includes the *Enhanced DSCH PC* IE, the DRNS 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* 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 PC Mode 2 is supported, the primary/secondary status determination in the enhanced DSCH power control shall be applied to the TFCI power control in DSCH hard split mode.]

If the RADIO LINK RECONFIGURATION PREPARE message includes any *DSCH To Modify* IE, then the DRNS shall treat them each as follows:

- The DRNC shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for any new transport bearer to be established for each modified DSCH.
- [FDD - If the *DSCH To Modify* IE includes any *DSCH Info* IEs, then the DRNS shall treat them each as follows:]
 - [FDD - If the *DSCH Info* IE includes any of the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE or *TrCH Source Statistics Descriptor* IE, the DRNS shall use them to update the set of DSCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.]
 - [FDD - If the *DSCH Info* IE includes any of the *Transport Format Set* IE or *BLER* IE, the DRNS shall apply the parameters to the new configuration.]
 - [FDD - If the *DSCH Info* IE includes the *Traffic Class* IE, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related DSCHs.]
- [FDD - If the *DSCH To Modify* IE includes the *PDSCH RL ID* IE, then the DRNS shall use it as the new DSCH RL identifier.]
- [FDD - If the indicated PDSCH RL ID is in the DRNS and there was no DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a DSCH-RNTI to the UE Context and include the *DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD - If the indicated PDSCH RL ID is in the DRNS and there was a DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a new DSCH-RNTI to the UE Context, release the old DSCH-RNTI and include the *DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.]
- [FDD - If the indicated PDSCH RL ID is not in the DRNS and there was a DSCH-RNTI allocated to the UE Context, the DRNC shall release this DSCH-RNTI.]
- [FDD - If the *DSCH To Modify* IE includes the *Transport Format Combination Set* IE, then the DRNS shall use it as the new Transport Format Combination Set associated with the DSCH.]
- [TDD - If the *DSCHs To Modify* IE includes the *CCTrCH ID* IE, then the DRNS shall map the DSCH onto the referenced DL CCTrCH.]

- [TDD - If the *DSCHs To Modify* IE includes any of the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE or *TrCH Source Statistics Descriptor* IE, the DRNS shall use them to update the set of DSCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.]
- [TDD - If the *DSCHs To Modify* IE includes any of the *Transport Format Set* IE or *BLER* IE, the DRNS shall apply the parameters to the new configuration.]
- [TDD - If the *DSCHs To Modify* IE includes the *Traffic Class* IE, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related DSCHs.]
- [FDD - If the *DSCHs To Modify* IE includes the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC Active in the UE", the DRNS 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 *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* 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 *DSCHs To Modify* IE includes the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC not Active in the UE", the DRNS shall deactivate enhanced DSCH power control in the new configuration.]

[FDD - If the enhanced DSCH power control is activated and the TFCI PC Mode 2 is supported, the primary/secondary status determination in the enhanced DSCH power control shall be applied to the TFCI power control in DSCH hard split mode.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a *DSCHs To Delete* IE requesting the deletion of all DSCH resources for the UE Context, then the DRNC shall release the DSCH-RNTI allocated to the UE Context, if there was one.]

[3.84 Mcps TDD - The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if a DSCH is added and at least one DCH exists in the new configuration. The DRNC shall also include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]

[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 DRNS shall deactivate enhanced DSCH power control in the new configuration.]

If the requested modifications are allowed by the DRNS and the DRNS has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the SRNC with the RADIO LINK RECONFIGURATION READY message.

The DRNC shall include the *DSCH Initial Window Size* IE in the RADIO LINK RECONFIGURATION READY message for each DSCH, if the DRNS allows the SRNC to start transmission of MAC-c/sh SDUs before the DRNS has allocated capacity on user plane as described in [32].

[TDD USCH Addition/Modification/Deletion]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *USCH To Modify*, *USCH To Add* or *USCH To Delete* IEs, then the DRNS 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 - If the RADIO LINK RECONFIGURATION PREPARE message includes any *USCH To Add* IE, then, the DRNS shall use the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE and *TrCH Source Statistics Descriptor* IE to define a set of USCH Priority classes each of which is associated with a set of supported MAC-c/sh SDU lengths.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *USCH To Add* IE, then the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related USCHs.]

[TDD - The DRNC 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 added USCH.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes any *USCH To Modify* IE, then the DRNS shall treat them each as follows:]

- [TDD - If the *USCH To Modify* IE includes any of the *Allocation/Retention Priority* IE, *Scheduling Priority Indicator* IE or *TrCH Source Statistics Descriptor* IE, the DRNS shall use them to update the set of USCH Priority classes.]
- [TDD - If the *USCH To Modify* IE includes any of the *CCTrCH ID* IE, *Transport Format Set* IE, *BLER* IE or *RB Info* IE, the DRNS shall apply the parameters to the new configuration.]
- [TDD - If the *USCHs To Modify* IE includes the *Traffic Class* IE, the DRNS may use this information to determine the transport bearer characteristics to apply between DRNC and Node B for the related USCHs.]
- [TDD - The DRNC shall include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if a USCH is added and at least one DCH exists in the new configuration. The DRNC shall also include the *Secondary CCPCH Info TDD* IE in the RADIO LINK RECONFIGURATION READY message if the SHCCH messages for this radio link will be transmitted over a different secondary CCPCH than selected by the UE from system information.]
- [TDD - The DRNC shall include in the RADIO LINK RECONFIGURATION READY message both the *Transport Layer Address* IE and the *Binding ID* IE for any new transport bearer to be established for each modified USCH.]

RL Information:

[FDD- If the *RL Information* IE includes the *DL DPCH Timing Adjustment* IE, the DRNS shall adjust the timing of the radio link accordingly in the new configuration.]

HS-DSCH Information Addition/Modification/Deletion:

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

If the RADIO LINK RECONFIGURATION PREPARE message includes an *HS-DSCH Information to Delete* IE requesting the deletion of all HS-DSCH resources for the UE Context, then the DRNC shall release the HS-DSCH-RNTI allocated to the UE Context, if there was one.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *HS-PDSCH RL ID* IE and there is a HS-DSCH existing in the UE Context after reconfiguration, then:

- If the indicated HS-PDSCH RL ID is in the DRNS and there was no HS-DSCH-RNTI allocated to the UE Context, the DRNC shall allocate an HS-DSCH-RNTI to the UE Context and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.
- If the indicated HS-PDSCH RL ID is in the DRNS and there was an HS-DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a new HS-DSCH-RNTI to the UE Context, release the old HS-DSCH-RNTI and include the *HS-DSCH-RNTI* IE in the RADIO LINK RECONFIGURATION READY message.
- If the indicated HS-PDSCH RL ID is not in the DRNS and there was an HS-DSCH-RNTI allocated to the UE Context, the DRNC shall release this HS-DSCH-RNTI.
- If a reset of the MAC-hs is not required the DRNC shall include the *MAC-hs Reset Indicator* IE in the RADIO LINK RECONFIGURATION READY message.
- [FDD - If the indicated HS-PDSCH RL ID is in the DRNS and is different from previous one, then the DRNC shall include the *Measurement Power Offset* IE in the *HS-DSCH Information Response* IE in the RADIO LINK RECONFIGURATION READY message.]

If the RADIO LINK RECONFIGURATION PREPARE message includes any *HS-DSCH Information To Add* IE or *HS-DSCH Information To Modify* IE, then the DRNS may use the *Traffic Class* IE to determine the transport bearer characteristics to apply between DRNC and Node B for the related MAC-d flows.

[FDD - If the 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.]

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

The DRNC shall include the *HS-DSCH Initial Capacity Allocation* IE in the RADIO LINK RECONFIGURATION READY message for each MAC-d flow, if the DRNS allows the SRNC to start transmission of MAC-d PDUs before the DRNS has allocated capacity on user plane as described in [32].

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 DRNS 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 DRNS shall use the indicated T1 value in the new configuration.

[1.28Mcps TDD - Uplink Synchronisation Parameters LCR]:

[1.28Mcps TDD -If the *Uplink Synchronisation Parameters LCR* IE is present, the DRNC shall use the indicated values of *Uplink synchronisation stepsize* IE and *Uplink synchronisation frequency* IE when evaluating the timing of the UL synchronisation.]

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

[1.28Mcps TDD - The DRNC shall include the *Uplink Timing Advance Control LCR* IE in the RADIO LINK RECONFIGURATION READY message, if the Uplink Timing Advance Control parameters have been changed.]

[TDD] DSCH RNTI Addition/Deletion

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the PDSCH RL ID IE, then the DRNS shall use it as the new RL identifier for PDSCH and PUSCH..]

- [TDD - If the indicated PDSCH RL ID is in the DRNS and there was no DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a DSCH-RNTI to the UE Context and include the DSCH-RNTI IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD - If the indicated PDSCH RL ID is in the DRNS and there was a DSCH-RNTI allocated to the UE Context, the DRNC shall allocate a new DSCH-RNTI to the UE Context, release the old DSCH-RNTI and include the DSCH-RNTI IE in the RADIO LINK RECONFIGURATION READY message.]
- [TDD - If the indicated PDSCH RL ID is not in the DRNS and there was a DSCH-RNTI allocated to the UE Context, the DRNC shall release this DSCH-RNTI.]

[TDD - If the RADIO LINK RECONFIGURATION PREPARE message includes a DSCHs to Delete IE and/or a USCHs to Delete IE which results in the deletion of all DSCH and USCH resources for the UE Context, then the DRNC shall release the DSCH-RNTI allocated to the UE Context, if there was one.]

General

If the requested modifications are allowed by the DRNC and the DRNC has successfully reserved the required resources for the new configuration of the Radio Link(s), it shall respond to the SRNC 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.

If the RADIO LINK RECONFIGURATION PREPARE message includes the *Transport Layer Address* IE and *Binding ID* IE in the *DSCHs To Modify* IE, *DSCHs To Add* IE, [TDD - *USCHs To Modify* IE, *USCHs To Add* IE], *HS-DSCH Information To Modify* IE, *HS-DSCH Information To Add* IE or in the *RL Specific DCH Information* IEs, the DRNC may use the transport layer address and the binding identifier received from the SRNC 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.

The DRNC shall include the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* 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 Iur interface, the *Transport Layer Address* IE and the *Binding ID* IE in the *DCH Information Response* IE shall be included for only one of the DCHs in the set of co-ordinated DCHs.

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

Any allowed rate for the uplink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the uplink of a DCH due to congestion caused by the UL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Allowed UL Rate* IE in the *DCH Information Response* IE for this Radio Link.

Any allowed rate for the downlink of a modified DCH provided for the old configuration will not be valid for the new configuration. If the DRNS needs to limit the user rate in the downlink of a DCH due to congestion caused by the DL UTRAN Dynamic Resources (see subclause 9.2.1.79) in the new configuration for a Radio Link, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Allowed DL Rate* IE in the *DCH Information Response* IE for this Radio Link.

The DRNS decides the maximum and minimum SIR for the uplink of the Radio Link(s) and the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum Uplink SIR* IE and *Minimum Uplink SIR* IE for each Radio Link when these values are changed.

[FDD - If the DL TX power upper or lower limit has been re-configured, the DRNC shall include in the RADIO LINK RECONFIGURATION READY message the *Maximum DL TX Power* IE and *Minimum DL TX Power* IE respectively. The DRNS shall not transmit with a higher power than indicated by the *Maximum DL TX Power* IE or lower than indicated by the *Minimum DL TX Power* IE on any DL DPCH of the RL -except during compressed mode, when the δP_{curr} , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]

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

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

[TDD - If the *Primary CCPCH RSCP* IE and/or the [3.84Mcps TDD - *DL Time Slot ISCP Info* IE][1.28Mcps TDD - *DL Time Slot ISCP Info LCR* IE] are present, the DRNC should use the indicated values when deciding the Initial DL TX Power.]

8.3.4.3 Unsuccessful Operation

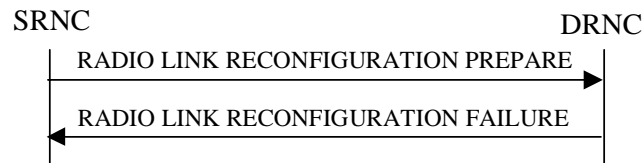


Figure 11: Synchronised Radio Link Reconfiguration Preparation procedure, Unsuccessful Operation

If the DRNS cannot reserve the necessary resources for all the new DCHs of a set of co-ordinated DCHs requested to be added, it shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed.

If the requested Synchronised Radio Link Reconfiguration Preparation procedure fails for one or more RLs, the DRNC shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC, indicating the reason for failure for each failed radio link in a *Cause IE*.

Typical cause values are:

Radio Network Layer Causes:

- UL Scrambling Code Already in Use;
- DL Radio Resources not Available;
- UL Radio Resources not Available;
- Requested Configuration not Supported;
- Number of DL Codes not Supported;
- Number of UL Codes not Supported;
- Dedicated Transport Channel Type not Supported;
- DL Shared Channel Type not Supported;
- [TDD - UL Shared Channel Type not Supported];
- [FDD - UL Spreading Factor not Supported];
- [FDD - DL Spreading Factor not Supported];
- CM not Supported;
- RL Timing Adjustment not Supported.

Miscellaneous Causes:

- Control Processing Overload;
- Not enough User Plane Processing Resources.

8.3.4.4 Abnormal Conditions

If only a subset of all the DCHs belonging to a set of co-ordinated DCHs is requested to be deleted, the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and shall send the RADIO LINK RECONFIGURATION FAILURE message to the SRNC.

If more than one DCH of a set of co-ordinated DCHs has the *QE-Selector IE* set to "selected" [TDD - or no DCH of a set of co-ordinated DCHs has the *QE-Selector IE* set to "selected"] the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure and the DRNC shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *SSDT Indication* IE set to "SSDT Active in the UE" and SSDT is not active in the current configuration, the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure if the *UL DPCH Information* IE does not include the *SSDT Cell Identity Length* IE. The DRNC shall then respond with a RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the *DSCHs To Add* IE includes the *Enhanced DSCH PC* IE and the *DSCH To Modify* IE include the *Enhanced DSCH PC Indicator* IE set to "Enhanced DSCH PC not Active in the UE", then the DRNS shall deactivate enhanced DSCH power control in the new configuration.]

[FDD - If both the *DSCHs To Add* IE and the *DSCH To Modify* IE include *Enhanced DSCH PC* IE, then the DRNS shall ignore the *Enhanced DSCH PC* IE in the *DSCH To Add* IE.]

If the RADIO LINK RECONFIGURATION PREPARE message includes a *DCHs To Modify* IE or *DCHs To Add* IE with multiple *DCH Specific Info* IEs, and if the DCHs in the *DCHs To Modify* IE or *DCHs To Add* IE do not have the same *Transmission Time Interval* IE in the *Semi-static Transport Format Information* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.

[FDD - If the *RL Information* IE includes the *DL Reference Power* IEs, but the power balancing is not active in the indicated RL(s), the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the DRNC shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the power balancing is active with the Power Balancing Adjustment Type of the UE Context set to "Common" in the existing RL(s) but the *RL Information* IE includes more than one *DL Reference Power* IEs, the DRNS shall reject the Synchronised Radio Link Reconfiguration Preparation procedure as having failed and the DRNC shall respond with the RADIO LINK RECONFIGURATION FAILURE message with the cause value "Power Balancing status not compatible".]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Split Type* IE but includes *TFCI Signalling Mode* IE set to "Split", then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Length of TFCI2* IE but the *Split type* IE is set to "Logical", then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message includes the *Split Type* IE set to the value "Hard" and the *Length Of TFCI2* IE set to the value "1", "2", "5", "8", "9" or "10", then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

[FDD - If the RADIO LINK RECONFIGURATION PREPARE message does not include the *Split Type* IE but includes the *Length of TFCI2* IE, then the DRNC shall reject the procedure using the RADIO LINK RECONFIGURATION FAILURE message.]

If the RADIO LINK RECONFIGURATION PREPARE message contains the *Transport Layer Address* IE or the *Binding ID* IE 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., and not both are present for a transport bearer intended to be established, the DRNC shall reject the Synchronised Radio Link Reconfiguration Preparation procedure and the DRNC shall respond with a RADIO LINK RECONFIGURATION FAILURE message.

8.3.21 Radio Link Parameter Update

8.3.21.1 General

The Radio Link Parameter Update procedure is executed by the DRNS to update parameters related to HS-DSCH on a radio link for a UE-UTRAN connection.

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

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

8.3.21.2 Successful Operation



Figure 26E: Radio Link Parameter Update Indication, Successful Operation

The Radio Link Parameter Update procedure is initiated by the DRNS by sending the RADIO LINK PARAMETER UPDATE INDICATION message to the SRNC.

The message contains suggested value(s) of the HS-DSCH related parameter(s) that should be reconfigured on the radio link.

- | If [the](#) DRNS needs to update HS-DSCH related parameters, [the](#) DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including [FDD - *HS-DSCH FDD Update Information IE*] [TDD - *HS-DSCH TDD Update Information IE*].
- | If [the](#) DRNS needs to allocate new HS-SCCH Codes, [the](#) DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-SCCH Code Change Indicator IE*.
- | [FDD - If [the](#) DRNS needs to update the CQI Feedback Cycle k , CQI Repetition Factor, ACK-NACK Repetition Factor, CQI Power Offset, ACK Power Offset and/or NACK Power Offset, [the](#) DRNS shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *CQI Feedback Cycle k IE*, *CQI Repetition Factor IE*, *ACK-NACK Repetition Factor IE*, *CQI Power Offset IE*, *ACK Power Offset IE* and/or *NACK Power Offset IE*.]

9.1.11 RADIO LINK RECONFIGURATION PREPARE

9.1.11.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Type	M		9.2.1.40		YES	reject
Transaction ID	M		9.2.1.59		–	
Allowed Queuing Time	O		9.2.1.2		YES	reject
UL DPCH Information		0..1			YES	reject
>UL Scrambling Code	O		9.2.2.53		–	
>UL SIR Target	O		Uplink SIR 9.2.1.69		–	
>Min UL Channelisation Code Length	O		9.2.2.25		–	
>Max Number of UL DPDCHs	C – CodeLen		9.2.2.24		–	
>Puncture Limit	O		9.2.1.46	For the UL.	–	
>TFCS	O		9.2.1.63	TFCS for the UL.	–	
>UL DPCCH Slot Format	O		9.2.2.52		–	
>Diversity Mode	O		9.2.2.8		–	
>SSDT Cell Identity Length	O		9.2.2.41		–	
>S-Field Length	O		9.2.2.36		–	
DL DPCH Information		0..1			YES	reject
>TFCS	O		9.2.1.63	TFCS for the DL.	–	
>DL DPCH Slot Format	O		9.2.2.9		–	
>Number of DL Channelisation Codes	O		9.2.2.26A		–	
>TFCI Signalling Mode	O		9.2.2.46		–	
>TFCI Presence	C- SlotFormat		9.2.1.55		–	
>Multiplexing Position	O		9.2.2.26		–	
>Limited Power Increase	O		9.2.2.21A		–	
>Split Type	O		9.2.2.39a		YES	reject
>Length of TFCI2	O		9.2.2.21C		YES	reject
DCHs To Modify	O		FDD DCHs To Modify 9.2.2.13C		YES	reject
DCHs To Add	O		DCH FDD Information 9.2.2.4A		YES	reject
DCHs to Delete		0..<maxnoof DCHs>			GLOBAL	reject
>DCH ID	M		9.2.1.16		–	
DSCHs To Modify		0..1			YES	reject
>DSCH Info		0..<maxnoof DSCHs>			–	
>>DSCH ID	M		9.2.1.26A		–	
>>TrCH Source Statistics Descriptor	O		9.2.1.65		–	
>>Transport Format Set	O		9.2.1.64	For DSCH	–	
>>Allocation/Retention Priority	O		9.2.1.1		–	
>>Scheduling	O		9.2.1.51A		–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Priority Indicator						
>>BLER	O		9.2.1.4		–	
>>Transport Bearer Request Indicator	M		9.2.1.61		–	
>>Traffic Class	O		9.2.1.58A		YES	ignore
>>Binding ID	O		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>>Transport Layer Address	O		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	YES	ignore
>PDSCH RL ID	O		RL ID 9.2.1.49		–	
>TFCS	O		9.2.1.63	For DSCH	–	
>Enhanced DSCH PC Indicator	O		9.2.2.13F		YES	ignore
>Enhanced DSCH PC	C-EDSCHPC On		9.2.2.13D		YES	ignore
DSCHs To Add	O		DSCH FDD Information 9.2.2.13A		YES	reject
DSCHs to Delete		0..1			YES	reject
>DSCH Info		1..<maxnoof DSCHs>			–	
>>DSCH ID	M		9.2.1.26A		–	
RL Information		0..<maxnoof RLS>			EACH	reject
>RL ID	M		9.2.1.49		–	
>SSDT Indication	O		9.2.2.42		–	
>SSDT Cell Identity	C - SSDTIndON		9.2.2.40		–	
>Transmit Diversity Indicator	C – Diversity mode		9.2.2.48		–	
>SSDT Cell Identity for EDSCHPC	C-EDSCHPC		9.2.2.40A		YES	ignore
>DL Reference Power	O		DL Power 9.2.1.21A	Power on DPCH	YES	ignore
>RL Specific DCH Information	O		9.2.1.49A		YES	ignore
>DL DPCH Timing Adjustment	O		9.2.2.9A	Required RL Timing Adjustment	YES	reject
>Qth Parameter	O		9.2.2.34a		YES	ignore
Transmission Gap Pattern Sequence Information	O		9.2.2.47A		YES	reject
HS-DSCHs Information To Modify	O		HS-DSCH Information To modify 9.2.1.30Q		YES	reject
HS-DSCHs Information To Add	O		HS-DSCH FDD Information 9.2.2.19a		YES	reject

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCHs Information To Delete		0..<maxnoof MACdFlows >			GLOBAL	reject
>HS-DSCH MAC-d Flow ID	M		9.2.1.300		–	
HS-PDSCH RL ID	O		RL ID 9.2.1.49		YES	reject

Condition	Explanation
SSTIndON	The IE shall be present if the <i>SSTD Indication</i> IE is set to "SSDT Active in the UE".
CodeLen	The IE shall be present only if the <i>Min UL Channelisation Code length</i> IE equals to 4.
SlotFormat	The IE shall only be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if <i>Diversity Mode</i> IE is present in the <i>UL DPCH Information</i> IE and is not equal to "none".
EDSCHPCOn	The IE shall be present if the <i>Enhanced DSCH PC Indicator</i> IE is set to "Enhanced DSCH PC Active in the UE".
EDSCHPC	The IE shall be present if <i>Enhanced DSCH PC</i> IE is present in either the <i>DSCHs To Modify</i> IE or the <i>DSCHs To Add</i> IE.

Range bound	Explanation
<i>maxnoofDCHs</i>	Maximum number of DCHs for a UE.
<i>maxnoofDSCHs</i>	Maximum number of DSCHs for one UE.
<i>maxnoofRLs</i>	Maximum number of RLs for a UE.
<i>maxnoofMACdFlows</i>	Maximum number of HS-DSCH MAC-d flows

9.1.21 PHYSICAL CHANNEL RECONFIGURATION REQUEST

9.1.21.1 FDD Message

9.1.21.2 TDD Message

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

Information LCR		<i>OfTSLCR</i> >		1.28Mcps TDD only		
>>>>Time Slot LCR	M		9.2.3.12a		–	
>>>>Midamble Shift LCR	O		9.2.3.4C		–	
>>>>TFCI Presence	O		9.2.1.55		–	
>>>>DL Code Information LCR	O		TDD DL Code Information LCR 9.2.3.8D		–	
>HS-PDSCH Timeslot Specific Information		0..<maxno ofDLts>		Applicable to 3.84Mcps TDD only.	GLOBAL	reject
>>Time Slot	M		9.2.1.56 3.2 3		–	
>>Midamble Shift And Burst Type	M		9.2.3.74		–	
>HS-PDSCH Timeslot Specific Information LCR		0..<maxno ofDLtsLCR >		Applicable to 1.28Mcps TDD only	GLOBAL	reject
>>Time Slot LCR	M		9.2.3.24a 1 2a		–	
>>Midamble Shift LCR	M		9.2.3.7A 4C		–	

Range bound	Explanation
<i>maxnoofCCTrCHs</i>	Maximum number of CCTrCHs for a UE.
<i>maxnoofTS</i>	Maximum number of Timeslots for a UE for 3.84Mcps TDD.
<i>maxnoofTSLCR</i>	Maximum number of Timeslots for a UE for 1.28Mcps TDD.
<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.

9.2.1.30Q HS-DSCH Information To Modify

The *HS-DSCH Information To Modify* IE provides information for HS-DSCH to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		<i>0..<maxno ofMACdFlows></i>			–	
>HS-DSCH MAC-d Flow ID	M		9.2.1.30O		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Transport Bearer Request Indicator	M		9.2.1.61		–	
>Traffic Class	O		9.2.1.58A		–	
>Binding ID	O		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	–	
>Transport Layer Address	O		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	–	
>Priority Queue Information		<i>0..<maxno ofPrioQueues></i>			–	
>>Priority Queue ID	M		9.2.1.45A		–	
>>Scheduling Priority Indicator	O		9.2.1.51A		–	
>>T1	O		9.2.1.54A		–	
>>MAC-hs Window Size	O		9.2.1.34C		–	
>>MAC-hs Guaranteed Bit Rate	O		9.2.1.34Aa		–	
>>MAC-d PDU Size Index		<i>0..<maxno ofMACdPDUindexes></i>			–	
>>>SID	M		9.2.1.52D		–	
>>>MAC-d PDU Size	O		9.2.1.34A		–	
CQI Feedback Cycle k	O		9.2.2.24a	For FDD only	–	
CQI Repetition Factor	O		9.2.2.24c	For FDD only	–	
ACK-NACK Repetition Factor	O		9.2.2.a	For FDD only	–	
CQI Power Offset	O		9.2.2.24b	For FDD only	–	
ACK Power Offset	O		9.2.2.b	For FDD only	–	
NACK Power Offset	O		9.2.2.26a	For FDD only	–	
HS-SCCH Power Offset	O		9.2.2.19d	For FDD only	–	

Range bound	Explanation
<i>maxnoofMACdFlows</i>	Maximum number of MAC-d flows.
<i>maxnoofPrioQueues</i>	Maximum number of Priority Queues.
<i>maxnoofMACdPDUindexes</i>	Maximum number of MAC-d PDU Size Indexes (SIDs).

9.2.2.19a HS-DSCH FDD Information

The *HS-DSCH FDD Information* IE provides information for HS-DSCH MAC-d flows to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		1..<maxno ofMACdFlows>			–	
>HS-DSCH MAC-d Flow ID	M		9.2.1.30O		–	
>Allocation/Retention Priority	M		9.2.1.1A		–	
>Traffic Class	M		9.2.1.58A		–	
>Binding ID	O		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	–	
>Transport Layer Address	O		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	–	
>Priority Queue Information		1..<maxno ofPrioQueues>			–	
>>Priority Queue ID	M		9.2.1.45A		–	
>>Scheduling Priority Indicator	M		9.2.1.51A		–	
>>T1	M		9.2.1.54A		–	
>>MAC-hs Window Size	M		9.2.1.34C		–	
>>MAC-hs Guaranteed Bit Rate	O		9.2.1.34Aa		–	
>>MAC-d PDU Size Index		1..<maxno ofMACdPDUindexes>			–	
>>>SID	M		9.2.1.52D		–	
>>>MAC-d PDU Size	M		9.2.1.34A		–	
UE Capabilities information		1			–	
>HS-DSCH TrCH Bits per HS-DSCH TTI	M		ENUMERATED (7300, 14600, 20456, 28800,...)		–	
>HS-DSCH multi-code capability	M		ENUMERATED (5, 10, 15,...)		–	
>Min Inter-TTI Interval	M		INTEGER (1..3,...)		–	
>MAC-hs reordering buffer size	M		INTEGER (1..300,...)	The total buffer size defined in UE capability minus the RLC AM buffer	–	
HARQ Information		1..<maxno ofHARQprocesses>			–	
>Process memory size	M		INTEGER (1..172800,...)	Number of soft channel bits per process.	–	
CQI Feedback Cycle k	M		9.2.2.24a		–	
CQI Repetition Factor	C-		9.2.2.24c		–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
	CQICyclek					
ACK-NACK Repetition Factor	M		9.2.2.a		–	
CQI Power Offset	M		9.2.2.24b		–	
ACK Power Offset	M		9.2.2.b		–	
NACK Power Offset	M		9.2.2.26a		–	
HS-SCCH Power Offset	O		9.2.2.19d		–	

Condition	Explanation
CQICyclek	The IE shall be present if the <i>CQI Feedback Cycle k</i> IE is set to a value greater than 0.

Range bound	Explanation
<i>maxnoofMACdFlows</i>	Maximum number of MAC-d flows.
<i>maxnoofPrioQueues</i>	Maximum number of Priority Queues.
<i>maxnoofMACdPDUindexes</i>	Maximum number of MAC-d PDU Size Indexes (SIDs).
<i>maxnoofHARQprocesses</i>	Maximum number of HARQ processes.

9.2.3.3aa HS-DSCH TDD Information

The *HS-DSCH TDD Information* IE provides information for HS-DSCH to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		1..<maxno ofMACdFlows>			-	
>HS-DSCH MAC-d Flow ID	M		9.2.1.30O		-	
>Allocation/Retention Priority	M		9.2.1.1A		-	
>Traffic Class	M		9.2.1.58A		-	
>Binding ID	O		9.2.1.3	Shall be ignored if bearer establishment with ALCAP.	-	
>Transport Layer Address	O		9.2.1.62	Shall be ignored if bearer establishment with ALCAP.	-	
>Priority Queue Information		1..<maxno ofPrioQueues>			-	
>>Priority Queue ID	M		9.2.1.45A		-	
>>Scheduling Priority Indicator	M		9.2.1.51A			
>>T1	M		9.2.1.54A			
>>MAC-hs Window Size	M		9.2.1.34C		-	
>>MAC-hs Guaranteed Bit Rate	O		9.2.1.34Aa			
>>MAC-d PDU Size Index		1..<maxno ofMACdPDUindexes>				
>>>SID	M		9.2.1.52D		-	
>>>MAC-d PDU Size	M		9.2.1.34A		-	
UE Capabilities information		1			-	
>HS-DSCH TrCH Bits per HS-DSCH TTI	M		ENUMERATED (7040, 10228, 14080,...)		-	
>HS-DSCH multi-code capability	M		ENUMERATED (8, 12, 16,...)		-	
>MAC-hs reordering buffer size	M		INTEGER (1..300,...)	The total buffer size defined in UE capability minus the RLC AM buffer		
HARQ Information		1..<maxno ofHARQprocesses>			-	
>Process memory size	M		INTEGER (1..168960,...)	Number of soft channel bits per process.	-	

Range bound	Explanation
<i>maxnoofMACdFlows</i>	Maximum number of MAC-d flows.
<i>maxnoofPrioQueues</i>	Maximum number of Priority Queues.
<i>maxnoofMACdPDUindexes</i>	Maximum number of MAC-d PDU Size Indexes (SIDs).
<i>maxnoofHARQprocesses</i>	Maximum number of HARQ processes.

9.2.3.3ab HS-DSCH TDD Information Response

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

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information Response		<i>1..<maxno ofMACdFlows></i>			–	
>HS-DSCH MAC-d Flow ID	M		9.2.1.30O		–	
>Binding ID	O		9.2.1.3		–	
>Transport Layer Address	O		9.2.1.62		–	
>HS-DSCH Initial Capacity Allocation	O		9.2.1.30Na		–	
HS-SCCH Specific Information Response		<i>0..<maxno ofHSSCC Hcodes></i>		Mandatory for 3.84 Mcps TDD, not applicable to 1.28 Mcps TDD	–	
>Time Slot	M		9.2.3.23 9.2.1.56			
>Midamble Shift And Burst Type	M		9.2.3.74			
>TDD Channelisation Code	M		9.2.3.498			
>HS-SICH Information		1				
>>HS SICH ID	M		9.2.3.3ad			
>>Time Slot	M		9.2.1.56 9.2.3.23			
>>Midamble Shift And Burst Type	M		9.2.3.74			
>>TDD Channelisation Code	M		9.2.3.498			
HS-SCCH Specific Information Response LCR		<i>0..<maxno ofHSSCC Hcodes></i>		Mandatory for 1.28 Mcps TDD, not applicable to 3.84 Mcps TDD	–	
>Time Slot LCR	M		9.2.3.24a12a			
>Midamble shift LCR	M		9.2.3.4C7A			
>First TDD Channelisation Code LCR	M		TDD Channelisation Code LCR 9.2.3.49a8a			
>Second TDD Channelisation Code LCR	M		TDD Channelisation Code LCR 9.2.3.49a8a			
>HS-SICH Information LCR		1				
>>HS SICH ID	M		9.2.3.3ad			
>>Time Slot LCR	M		9.2.3.12a24a			
>>Midamble shift LCR	M		9.2.3.7A4C			
>>TDD Channelisation Code LCR	M		9.2.3.49a8a			
HS-PDSCH Timeslot Specific Information Response		<i>0..<maxno ofDLts></i>		Mandatory for 3.84Mcps TDD. Not Applicable to 1.28Mcps TDD.	–	
>Time Slot	M		9.2.1.56 9.2		–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
			3.23			
>Midamble Shift And Burst Type	M		9.2.3.49.2-3.7		–	
HS-PDSCH Timeslot Specific Information Response LCR		$0..<maxno\ of\ DLtsLCR >$		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	–	
>Time Slot LCR	M		9.2.3.12a24a		–	
>Midamble Shift LCR	M		9.2.3.4C7A		–	

Range bound	Explanation
<i>maxnoofMACdFlows</i>	Maximum number of MAC-d flows.
<i>maxnoofHSSCCHcodes</i>	Maximum number of HS-SCCH codes.
<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.

CHANGE REQUEST

⌘ **25.433 CR 835** ⌘ rev **-** ⌘ Current version: **5.4.0** ⌘

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

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

Title:	⌘ HSPDA General Corrections	
Source:	⌘ RAN WG3	
Work item code:	⌘ HSPDA-lublur	Date: ⌘ 19/05/2003
Category:	⌘ F	Release: ⌘ Rel-5
	Use <u>one</u> of the following categories:	Use <u>one</u> of the following releases:
	F (correction)	2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)	R96 (Release 1996)
	B (addition of feature),	R97 (Release 1997)
	C (functional modification of feature)	R98 (Release 1998)
	D (editorial modification)	R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .	Rel-4 (Release 4)
		Rel-5 (Release 5)
		Rel-6 (Release 6)

Reason for change:	⌘ There are many minor inconsistencies in 25.433 concerning the correct definition/handling of HSDPA related IEs.
Summary of change:	⌘ <ul style="list-style-type: none"> 1. Consistent use of IE names between tabular and procedure text generally throughout the specification, IE names are aligned between 25.433 and 25.423 2. Procedure text handling of one TDD IE in the Physical shared channel reconfiguration procedure is aligned with other similar IEs and adds handling when it is not present. 3. FDD and TDD IEs in the common RADIO LINK RECONFIGURATION READY message are properly labeled. 4. Fix IE references in tabular format throughout 5. Other various minor editorial changes. <p>Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects the newly added HS-DSCH.</p>
Consequences if not approved:	⌘ Inconsistencies in the definition and use of HSDPA IEs would remain.

Clauses affected:	⌘ 8.2.18, 8.3.2, 8.3.19, 9.1.42, 9.1.43, 9.2.1.31H, 9.2.1.31Ha, 9.2.2.18D, 9.2.3.56, 9.3.4
--------------------------	--

Other specs affected:	⌘	Y	N	Other core specifications	⌘	
			X			Test specifications
			X			
Other comments:	⌘					

How to create CRs using this form:

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

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

8.2.18 Physical Shared Channel Reconfiguration

8.2.18.1 General

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

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

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

8.2.18.2 Successful Operation

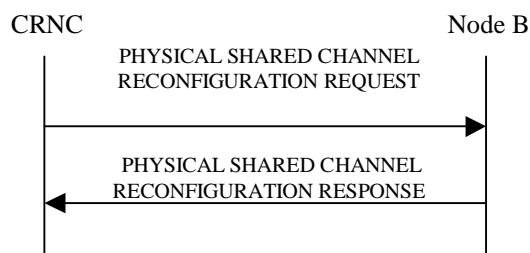


Figure 26: Physical Shared Channel Reconfiguration, Successful Operation

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

If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes an *SFN* IE, the Node B shall activate the new configuration on that specified SFN.

HS-DSCH Resources:

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

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

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

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

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

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

~~[TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message includes *HS-SCCH Maximum Power* IE, the Node B shall not exceed this power for each HS-SCCH code.]~~

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

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

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

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

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

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

[TDD - PDSCH/PUSCH Addition]:

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

[TDD - PDSCH/PUSCH Modification]:

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

[TDD - PDSCH/PUSCH Deletion]:

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

[1.28 Mcps TDD – Uplink Synchronisation Parameters LCR]:

[1.28Mcps TDD - If the PHYSICAL SHARED CHANNEL RECONFIGURATION 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.]

Response Message:

HS-DSCH/HS-SCCH Resources:

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

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

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

8.2.18.3 Unsuccessful Operation

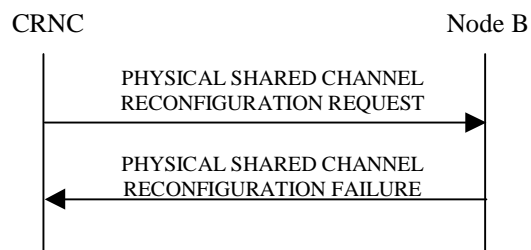


Figure 27: Physical Shared Channel Reconfiguration procedure: Unsuccessful Operation

If the Node B is not able to support all parts of the configuration, it shall reject the configuration of all the channels in the PHYSICAL SHARED CHANNEL RECONFIGURATION REQUEST message. The *Cause* IE shall be set to an appropriate value either a single general cause value or PDSCH and PUSCH set specific cause values for each set that caused a failure within the *Unsuccessful Shared DL Channel Set* IE for PDSCH sets or *Unsuccessful Shared UL Channel Set* IE for PUSCH sets.

If the configuration was unsuccessful, the Node B shall respond with the PHYSICAL SHARED CHANNEL RECONFIGURATION FAILURE message:

Typical cause values are as follows:

Radio Network Layer Cause:

- Cell not available
- Node B Resources unavailable

Transport Layer Cause:

- Transport Resources Unavailable

Miscellaneous Cause:

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

8.2.18.4 Abnormal Conditions

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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

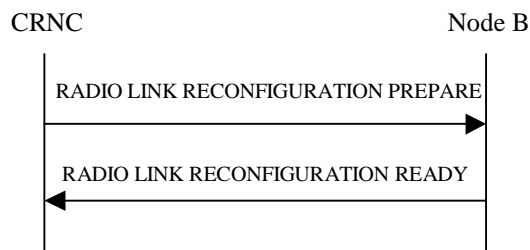


Figure 30: Synchronised Radio Link Reconfiguration Preparation procedure, Successful Operation

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 DPCCH Slot Format IE*, the Node B shall set the new Uplink DPCCH 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 CCTrCH 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 CCTrCH 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 CCTrCH 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 CCTrCH Addition]

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

[TDD – If the *UL/DL CCTrCH 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 CCTrCH To Add IE*, the Node B shall set the downlink TPC step size of that CCTrCH to that value, otherwise the Node B shall set the TPC step size of that CCTrCH to the same value as the lowest numbered DL CCTrCH in the current configuration.]

[1.28Mcps TDD - If the *UL CCTrCH 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 CCTrCH To Add IE* as the UL SIR value for the inner loop power control for this CCTrCH according [19] and [21] in the new configuration.]

[TDD – UL/DL CCTrCH Deletion]

[TDD – If the RADIO LINK RECONFIGURATION PREPARE message includes any UL or DL CCTrCH to be deleted, the Node B shall remove this CCTrCH 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 Qth 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 δP_{curr} , as described in ref.[10] subclause 5.2.1.3, shall be added to the maximum DL power for the associated compressed frame.]
- [3.84 Mcps TDD - If the *DL CCH To Add* IE is included, the Node B shall determine the maximum CCH DL power for the DCH type CCH by the following rule: If the *CCH Maximum DL Transmission Power* IE is included for that CCH, then the Node B shall use that power for the maximum CCH DL power, otherwise the maximum CCH DL power is the *Maximum Downlink Power* IE included in the *RL Information* IE. If no *Maximum Downlink Power* IE is included (even if *CCH Maximum DL Transmission Power* IEs are included), any maximum DL power stored for already existing DCH type CCHs for this Node B Communication Context shall be applied.]
- [3.84 Mcps TDD - If the *DL CCH To Add* IE is included, the Node B shall determine the minimum CCH DL power for the DCH type CCH by the following rule: If the *CCH Minimum DL Transmission Power* IE is included for that CCH, then the Node B shall use that power for the minimum CCH DL power, otherwise the minimum CCH DL power is the *Minimum Downlink Power* IE included in the *RL Information* IE. If no *Minimum Downlink Power* IE is included (even if *CCH Minimum DL Transmission Power* IEs are included), any minimum DL power stored for already existing DCH type CCHs for this Node B Communication Context shall be applied.]
- [3.84 Mcps TDD - If the *DL CCH To Modify* IE is included and *Maximum CCH DL Power to Modify* IE and/or *Minimum CCH DL Power to Modify* IE are included, the Node B shall apply the values in the new configuration for this DCH type CCH. 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 CCTrCHs of the radio link.]

- [1.28 Mcps TDD - If the *DL CCTrCH To Add* IE is included, 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 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 CCTrCH To Add* IE is included, 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 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 CCTrCH 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 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 determined initial CCTrCH DL power to the transmission on each DPCH of the CCTrCH when starting transmission on a new CCTrCH until the UL synchronisation on the Uu interface is achieved for the CCTrCH. If no *Initial DL Transmission Power* IE is included with a new CCTrCH (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 when starting transmission for a new 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).]
- [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 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, 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 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 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 *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 To Add~~ [HS-DSCH Information To Add](#) IE or ~~HS-DSCH To Modify~~ [HS-DSCH Information To Modify](#) IE or ~~HS-DSCH To Delete~~ [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.

[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.]

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 To Delete~~ [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 To Add~~ [HS-DSCH Information To Add](#) IE or the ~~HS-DSCH To Modify~~ [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 To Modify~~ [HS-DSCH Information To Modify](#), ~~HS-DSCH To Add~~ [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.

8.3.19 Radio Link Parameter Update

8.3.19.1 General

The Radio Link Parameter Update procedure is executed by the Node B when the update of HS-DSCH related radio link parameter values are needed on the Node B side. With this procedure, Node B can suggest some HS-DSCH related Radio Link Parameter values to RNC.

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

8.3.19.2 Successful Operation



Figure 48: Radio Link Parameter Update Indication, Successful Operation

The Node B initiates the Radio Link Parameter Update procedure by sending the RADIO LINK PARAMETER UPDATE INDICATION message to the CRNC. The message contains suggested value(s) of the HS-DSCH related parameter(s) that should be reconfigured on the radio link.

If [the](#) Node B needs to update HS-DSCH related parameters, [the](#) Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including [FDD - *HS-DSCH FDD Update Information IE*] [TDD - *HS-DSCH TDD Update Information IE*].

If [the](#) Node B needs to allocate new HS-SCCH Codes, [the](#) Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *HS-SCCH Code Change Indicator IE*.

[FDD - If [the](#) Node B needs to update the CQI Feedback Cycle k , CQI Repetition Factor, ACK-NACK Repetition Factor, CQI Power Offset, ACK Power Offset and/or NACK Power Offset, [the](#) Node B shall initiate RADIO LINK PARAMETER UPDATE INDICATION message including *CQI Feedback Cycle k IE*, *CQI Repetition Factor IE*, *ACK-NACK Repetition Factor IE*, *CQI Power Offset IE*, *ACK Power Offset IE* and/or *NACK Power Offset IE*.]

8.3.19.3 Abnormal Conditions

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9.1.42 RADIO LINK RECONFIGURATION PREPARE

9.1.42.1 FDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
UL DPCH Information		<i>0..1</i>			YES	reject
>UL Scrambling Code	O		9.2.2.59		–	
>UL SIR Target	O		UL SIR 9.2.1.67A		–	
>Min UL Channelisation Code Length	O		9.2.2.22		–	
>Max Number of UL DPDCHs	C-CodeLen		9.2.2.21		–	
>Puncture Limit	O		9.2.1.50	For UL	–	
>TFCS	O		9.2.1.58		–	
>UL DPCCH Slot Format	O		9.2.2.57		–	
>Diversity Mode	O		9.2.2.9		–	
>SSDT Cell Identity Length	O		9.2.2.45		–	
>S-Field Length	O		9.2.2.40		–	
DL DPCH Information		<i>0..1</i>			YES	reject
>TFCS	O		9.2.1.58		–	
>DL DPCH Slot Format	O		9.2.2.10		–	
>TFCI Signalling Mode	O		9.2.2.50		–	
>TFCI Presence	C-SlotFormat		9.2.1.57		–	
>Multiplexing Position	O		9.2.2.23		–	
>PDSCH Code Mapping	O		9.2.2.25		–	
>PDSCH RL ID	O		RL ID 9.2.1.53		–	
>Limited Power Increase	O		9.2.2.18A		–	
DCHs To Modify	O		DCHs FDD To Modify 9.2.2.4E		YES	reject
DCHs To Add	O		DCH FDD Information 9.2.2.4D		YES	reject
DCHs To Delete		<i>0..<maxno ofDCHs></i>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH To Modify		<i>0..<maxno ofDSCHs></i>			EACH	reject
>DSCH ID	M		9.2.1.27		–	
>Transport Format Set	O		9.2.1.59	For the DL.	–	
>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 FDD Information 9.2.2.13B		YES	reject
DSCH To Delete		<i>0..<maxno ofDSCHs></i>			EACH	reject
>DSCH ID	M		9.2.1.27		–	
TFCI2 Bearer Information		<i>0..1</i>			YES	reject
>CHOICE TFCI2 Bearer Action	M				–	
>>Add or modify					–	
>>>ToAWS	M		9.2.1.61		–	
>>>ToAWE	M		9.2.1.60		–	
>>> TFCI2 Bearer Request Indicator	O		9.2.1.56C		YES	reject
>>>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
>>Delete			NULL		–	
RL Information		<i>0..<maxno ofRLs></i>			EACH	reject
>RL ID	M		9.2.1.53		–	
>DL Code Information	O		FDD DL Code Information 9.2.2.14A		–	
>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	–	
>SSDT Indication	O		9.2.2.47		–	
>SSDT Cell Identity	C-SSDTIndO N		9.2.2.44		–	
>Transmit Diversity Indicator	CDiversity mode		9.2.2.53		–	
>SSDT Cell Identity For EDSCHPC	C-EDSCHPC		9.2.2.44A		YES	ignore
>DL Reference Power	O		DL Power 9.2.1.21	Power on DPCH	YES	ignore
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
>DL DPCH Timing Adjustment	O		9.2.2.10A	Required RL Timing Adjustment	YES	reject

>Qth Parameter	O		9.2.2.36A		YES	ignore
Transmission Gap Pattern Sequence Information	O		9.2.2.53A		YES	reject
DSCH Common Information	O		DSCH FDD Common Information 9.2.2.13D		YES	ignore
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject
HS-DSCH To Modify HS-DSCH Information To Modify	O		9.2.1.31H		YES	reject
HS-DSCH To Add HS-DSCH Information To Add	O		HS-DSCH FDD Information 9.2.2.18D		YES	reject
HS-DSCH To Delete HS-DSCH Information To Delete		<i>0..<maxno ofMACdFlows></i>			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

Condition	Explanation
SSDTIndON	The IE shall be present if the <i>SSDT Indication</i> IE is set to "SSDT Active in the UE".
CodeLen	The IE shall be present if the <i>Min UL Channelisation Code Length</i> IE is equal to 4.
SlotFormat	The IE shall be present if the <i>DL DPCH Slot Format</i> IE is equal to any of the values from 12 to 16.
Diversity mode	The IE shall be present if the <i>Diversity Mode</i> IE is present in the <i>UL DPCH Information</i> IE and is not set to "none".
EDSCHPC	The IE shall be present if the <i>Enhanced DSCH PC</i> IE is present in the <i>DSCH Common Information</i> IE.

Range Bound	Explanation
<i>maxnoofDCHs</i>	Maximum number of DCHs for a UE
<i>maxnoofDSCHs</i>	Maximum number of DSCHs for a UE
<i>maxnoofRLs</i>	Maximum number of RLs for a UE
<i>maxnoofMACdFlows</i>	Maximum number of MAC-d Flows

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
UL CCTrCH To Add		<i>0..<maxno of CCTrCHs></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		–	
>UL DPCH Information		<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		–	
>UL DPCH Information LCR		<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
UL CCTrCH To Modify		<i>0..<maxno of CCTrCHs></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
>UL DPCH To Add		<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						
>UL DPCH To Modify		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		–	
>>UL Timeslot Information		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		–	
>>>UL Code Information		0..<maxno ofDPCHs>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>>UL Timeslot Information LCR		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		–	
>>>UL Code Information LCR		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
>UL DPCH To Delete		0..<maxno ofDPCHs>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
>UL DPCH To Add 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		–	
>>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
UL CCTrCH To Delete		0..<maxno ofCCTrCH s>			GLOBAL	reject
>CCTrCH ID	M		9.2.3.3		–	
DL CCTrCH To Add		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		–	
>TPC CCTrCH List		0..<maxno ofCCTrCH s>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID		–	

			9.2.3.3			
>DL DPCH Information		<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		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH Information LCR		<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		–	
>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
DL CCTrCH To Modify		<i>0..<maxno ofCCTrCHs></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		–	
>TPC CCTrCH List		<i>0..<maxno ofCCTrCHs></i>		List of uplink CCTrCH which provide TPC	–	
>>TPC CCTrCH ID	M		CCTrCH ID 9.2.3.3		–	
>DL DPCH To Add		<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		–	
>>DL Timeslot Information	M		9.2.3.4E		–	
>DL DPCH To Modify		<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		–	
>>DL Timeslot Information		<i>0..<maxno ofDLts></i>		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		–	
>>>DL Code Information		<i>0..<maxno ofDPCHs></i>			–	
>>>>DPCH ID	M		9.2.3.5		–	
>>>>TDD Channelisation Code	O		9.2.3.19		–	
>>DL Timeslot Information LCR		<i>0..<maxno ofDLtsLCR></i>		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		–	
>>>DL Code Information LCR		<i>0..<maxno ofDPCHsLCR></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
>DL DPCH To Delete		<i>0..<maxno ofDPCHs></i>			GLOBAL	reject
>>DPCH ID	M		9.2.3.5		–	
>DL DPCH To Add LCR		<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 3.84Mcps TDD only	YES	ignore
DL CCTrCH To Delete		<i>0..<maxno ofCCTrCHs></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
DCHs To Delete		<i>0..<maxno ofDCHs></i>			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
DSCH To Modify		<i>0..<maxno ofDSCHs></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
DSCH To Delete		<i>0..<maxno ofDSCHs></i>			GLOBAL	reject
>DSCH ID	M		9.2.1.27		–	
USCH To Modify		<i>0..<maxno ofUSCHs></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
USCH To Delete		<i>0..<maxno ofUSCHs></i>			GLOBAL	reject
>USCH ID	M		9.2.3.27		–	
RL Information		<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	–	
>Initial DL Transmission Power	O		DL Power 9.2.1.21	Initial power on DPCH	YES	ignore
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
>UL Synchronisation Parameters LCR		<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	M		9.2.3.26G		–	

Frequency						
Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject
HS-DSCH To Modify HS-DSCH Information To Modify	O		9.2.1.31H		YES	reject
HS-DSCH To Add HS-DSCH Information To Add	O		HS-DSCH TDD Information 9.2.3.5F		YES	reject
HS-DSCH To Delete HS-DSCH Information To Delete		<i>0..<maxno ofMACdFlows></i>			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

9.1.43 RADIO LINK RECONFIGURATION READY

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	ignore
RL Information Response		<i>0..<maxno ofRLs></i>			EACH	ignore
>RL ID	M		9.2.1.53		–	
>DCH Information Response	O		9.2.1.20C		YES	ignore
>DSCH Information Response	O		9.2.1.27A		YES	ignore
>USCH Information Response	O		9.2.3.29	TDD only	YES	ignore
>TFCI2 Bearer Information Response	O		9.2.2.49A	FDD only. There shall be only one TFCI2 bearer per Node B Communication Context.	–	
>DL Power Balancing Updated Indicator	O		9.2.2.12D		YES	ignore
>HS-DSCH FDD Information Response	O		9.2.2.18E	FDD only	YES	ignore
>HS-DSCH TDD Information Response	O		9.2.3.5G	TDD only	YES	ignore
Criticality Diagnostics	O		9.2.1.17		YES	ignore
Target Communication Control Port ID	O		9.2.1.15		YES	ignore

Range Bound	Explanation
<i>maxnoofRLs</i>	Maximum number of RLs for a UE

9.2.1.31H ~~HS-DSCH To Modify~~ HS-DSCH Information To Modify

The ~~HS-DSCH to modify~~ HS-DSCH Information To Modify provides information for HS-DSCH to be modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		<i>0..<maxn oofMACd Flows></i>			–	
>HS-DSCH MAC-d Flow ID	M		9.2.1.31I		–	
>Allocation/Retention Priority	O		9.2.1.1A		–	
>Transport Bearer Request Indicator	M		9.2.1.62A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	–	
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	–	
>Priority Queue Information		<i>0..<maxn oofPrioQueues></i>			–	
>>Priority Queue ID	M		9.2.1.49C		–	
>>Scheduling Priority Indicator	O		9.2.1.53H		–	
>>T1	O		9.2.1.56a		–	
>>MAC-hs Window Size	O		9.2.1.38B		–	
>>MAC-hs Guaranteed Bit Rate	O		9.2.1.38Aa		–	
>>MAC-d PDU Size Index		<i>0..<maxn oofMACd PDUindexes></i>			–	
>>>SID	M		9.2.1.53I		–	
>>>MAC-d PDU Size	O		9.2.1.38A		–	
CQI Feedback Cycle k	O		9.2.2.21B	For FDD only	–	
CQI Repetition Factor	O		9.2.2.4Cb	For FDD only	–	
ACK-NACK Repetition Factor	O		9.2.2.a	For FDD only	–	
CQI Power Offset	O		9.2.2.4Ca	For FDD only	–	
ACK Power Offset	O		9.2.2.b	For FDD only	–	
NACK Power Offset	O		9.2.2.23a	For FDD only	–	
HS-SCCH Power Offset	O		9.2.2.18I	For FDD only	–	
Measurement Power Offset	O		9.2.2.21C	For FDD only	–	

9.2.1.31Ha HS-DSCH Initial Capacity Allocation

The *HS-DSCH Initial Capacity Allocation* IE provides flow control information for each scheduling priority class for the HS-DSCH FP over Iub.

IE/Group Name	Presence	Range	IE type and reference	Semantics description	Criticality	Assigned Criticality
HS-DSCH Initial Capacity Allocation		1..16			–	
>Scheduling Priority Indicator	M		9.2.1.51A5 3H		–	
>Maximum MAC-d PDU Size	M		MAC-d PDU Size 9.2.1.38A		–	
>HS-DSCH Initial Window Size	M		9.2.1.31Hb		–	

9.2.2.18D HS-DSCH FDD Information

The HS-DSCH Information provides information for HS-DSCH MAC-d flows to be established.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information		1..<max noofMACdFlows>			–	
>HS-DSCH MAC-d Flow ID	M		9.2.1.31I		–	
>Allocation/Retention Priority	M		9.2.1.1A		–	
>Binding ID	O		9.2.1.4	Shall be ignored if bearer establishment with ALCAP.	–	
>Transport Layer Address	O		9.2.1.63	Shall be ignored if bearer establishment with ALCAP.	–	
>Priority Queue Information	M	1..<max noofPriorityQueues>			–	
>>Priority Queue ID	M		9.2.1.49C		–	
>>Scheduling Priority Indicator	M		9.2.1.53H		–	
>>T1	M		9.2.1.56a		–	
>>MAC-hs Window Size	M		9.2.1.38B		–	
>>MAC-hs Guaranteed Bit Rate	O		9.2.1.38Aa		–	
>>MAC-d PDU Size Index		1..<max noofMACdPDUsIndexes>			–	
>>>SID	M		9.2.1.53I		–	
>>>MAC-d PDU Size	M		9.2.1.38A		–	
UE Capabilities Information		1			–	
>Max TrCH Bits Per HS-DSCH TTI	M		ENUMERATED (7300, 14600, 20456, 28800,...)		–	
>HS-DSCH Multi-Code Capability	M		ENUMERATED (5, 10, 15,...)		–	
>Min Inter-TTI Interval	M		INTEGER (1..3,...)		–	
>MAC-hs Reordering Buffer Size	M		INTEGER (1..300,...)	The total buffer size defined in UE capability minus the RLC AM buffer.	–	
HARQ Memory Partitioning		1..<max noofHARQprocesses>				
>Process Memory Size	M		INTEGER (1..172800,...)		–	
CQI Feedback-Cycle k	M		9.2.2.21B		–	
CQI Repetition Factor	M	C-CQICyclek	9.2.2.4Cb		–	
ACK-NACK Repetition Factor	M		9.2.2.a		–	
CQI Power Offset	M		9.2.2.4Ca		–	
ACK Power Offset	M		9.2.2.b		–	
NACK Power Offset	M		9.2.2.23a		–	

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-SCCH Power Offset	O		9.2.2.18I		–	
Measurement Power Offset	O		9.2.2.21C		–	

Condition	Explanation
CQICyclek	The IE shall be present if the <i>CQI Feedback Cycle k</i> IE is set to a value greater than 0. <u>is set to a value greater than 0.</u>

Range Bound	Explanation
<i>maxnoofMACdFlows</i>	Maximum number of HS-DSCH MAC-d flows
<i>maxnoofPrioQueues</i>	Maximum number of Priority Queues
<i>maxnoofHARQprocesses</i>	Maximum number of HARQ processes for one UE
<i>maxnoofMACdPDUindexes</i>	Maximum number of different MAC-d PDU SIDs
<i>maxAllowedinterTTI</i>	Maximum Inter-TTI Interval that should be supported by any UE
<i>maxRecordBuffSize</i>	Maximum MAC-hs re-ordering buffer size
<i>maxProcessMemSize</i>	Maximum HARQ process memory size

9.2.3.5G HS-DSCH TDD Information Response

The HS-DSCH TDD Information Response provides information for HS-DSCH MAC-d flows that have been established or modified.

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
HS-DSCH MAC-d Flow Specific Information Response		<i>1..<max noofMA CdFlows></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		–	
HS-SCCH Specific Information Response		<i>0..<max NoOfHS SCCHcodes></i>		Mandatory for 3.84 Mcps TDD, not applicable to 1.28 Mcps TDD	GLOBAL	reject
>Time Slot	M		9.2.3.23		–	
>Midamble Shift And Burst Type	M		9.2.3.7		–	
>TDD Channelisation Code	M		9.2.3.19		–	
>HS-SICH Information		<i>1</i>			–	
>>HS SICH ID	M		9.2.3.5Gb		–	
>>Time Slot	M		9.2.3.23		–	
>>Midamble Shift And Burst Type	M		9.2.3.7		–	
>>TDD Channelisation Code	M		9.2.3.19		–	
HS-SCCH Specific Information Response LCR		<i>0..<max NoOfHS SCCHcodes></i>		Mandatory for 1.28 Mcps TDD, not applicable to 3.84 Mcps TDD	GLOBAL	reject
>Time Slot LCR	M		9.2.3.24A		–	
>Midamble Shift LCR	M		9.2.3.7a7A		–	
>First TDD Channelisation Code LCR	M		TDD Channelisation Code LCR 9.2.3.19a		–	
>Second TDD Channelisation Code LCR	M		TDD Channelisation Code LCR 9.2.3.19a		–	
>HS-SICH Information LCR		<i>1</i>			–	
>>HS SICH ID	M		9.2.3.5Gb		–	
>>Time Slot LCR	M		9.2.3.24A		–	
>>Midamble Shift LCR	M		9.2.3.7a7A		–	
>>TDD Channelisation Code LCR	M		9.2.3.19a		–	

Range Bound	Explanation
<i>maxnoofMACdFlows</i>	Maximum number of HS-DSCH MAC-d flows.
<i>maxnoofPrioQueues</i>	Maximum number of Priority Queues
<i>maxnoofMACdPDUindexes</i>	Maximum number of different MAC-d Size Indexes (SIDs)
<i>maxnoofHSSCCHcodes</i>	Maximum number of HS-SCCH codes

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-- *****
--
-- RADIO LINK RECONFIGURATION READY
--
-- *****

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

RadioLinkReconfigurationReady-IEs NBAP-PROTOCOL-IES ::= {
    { ID id-CRNC-CommunicationContextID          CRITICALITY ignore TYPE CRNC-CommunicationContextID
      PRESENCE mandatory } |
    { ID id-RL-InformationResponseList-RL-ReconfReady CRITICALITY ignore TYPE RL-InformationResponseList-RL-
ReconfReady PRESENCE optional } |
    { ID id-CriticalityDiagnostics              CRITICALITY ignore TYPE CriticalityDiagnostics
      PRESENCE optional },
    ...
}

RadioLinkReconfigurationReady-Extensions NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-TargetCommunicationControlPortID CRITICALITY ignore EXTENSION CommunicationControlPortID PRESENCE optional },
    ...
}

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

RL-InformationResponseItemIE-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID id-RL-InformationResponseItem-RL-ReconfReady CRITICALITY ignore TYPE RL-InformationResponseItem-
RL-ReconfReady PRESENCE mandatory}
}

RL-InformationResponseItem-RL-ReconfReady ::= SEQUENCE {
    rL-ID RL-ID,
    dCH-InformationResponseList-RL-ReconfReady DCH-InformationResponseList-RL-ReconfReady OPTIONAL,
    dSCH-InformationResponseList-RL-ReconfReady DSCH-InformationResponseList-RL-ReconfReady OPTIONAL,
    uSCH-InformationResponseList-RL-ReconfReady USCH-InformationResponseList-RL-ReconfReady OPTIONAL, -- TDD only
    tFCI2-BearerInformationResponse TFCI2-BearerInformationResponse OPTIONAL,
    -- FDD only. There shall be only one TFCI2 bearer per Node B Communication Context.
    iE-Extensions ProtocolExtensionContainer { { RL-InformationResponseItem-RL-ReconfReady-ExtIEs} } OPTIONAL,
    ...
}

RL-InformationResponseItem-RL-ReconfReady-ExtIEs NBAP-PROTOCOL-EXTENSION ::= {
    { ID id-DL-PowerBalancing-UpdatedIndicator CRITICALITY ignore EXTENSION DL-PowerBalancing-UpdatedIndicator PRESENCE optional}|
    { ID id-HSDSCH-FDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-FDD-Information-Response PRESENCE optional }|
    -- FDD only
    { ID id-HSDSCH-TDD-Information-Response CRITICALITY ignore EXTENSION HSDSCH-TDD-Information-Response PRESENCE optional },
    -- TDD only
}

```

```
    ...
}

DCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ DCH-InformationResponseListIEs-RL-ReconfReady }}

DCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID id-DCH-InformationResponse    CRITICALITY ignore    TYPE DCH-InformationResponse    PRESENCE mandatory }
}

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

DSCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID id-DSCH-InformationResponse    CRITICALITY ignore    TYPE DSCH-InformationResponse    PRESENCE mandatory }
}

USCH-InformationResponseList-RL-ReconfReady ::= ProtocolIE-Single-Container {{ USCH-InformationResponseListIEs-RL-ReconfReady }}

USCH-InformationResponseListIEs-RL-ReconfReady NBAP-PROTOCOL-IES ::= {
    { ID id-USCH-InformationResponse    CRITICALITY ignore    TYPE USCH-InformationResponse    PRESENCE mandatory }
}
```