TSG RAN Meeting #18 **RP-020758**
New Orleans, Louisiana, USA, 3 - 6 December, 2002

Title **CRs (Rel-4 and Rel-5 Category A) to TS 25.423 and 25.433 on Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD**
Source **TSG RAN WG3**
Agenda Item **7.3.4**

RAN3 Tdoc	Spec	curr. Vers.	new Vers.	REL	CR	Rev	Cat	Title	Work item
R3-022304	25.423	4.6.0	4.7.0	REL-4	723	-	F	Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD	LCRTDD-lublur
R3-022305	25.423	5.3.0	5.4.0	REL-5	724	-	A	Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD	LCRTDD-lublur
R3-022302	25.433	4.6.0	4.7.0	REL-4	748	-	F	Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD	LCRTDD-lublur
R3-022303	25.433	5.2.0	5.3.0	REL-5	749	-	A	Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD	LCRTDD-lublur

3GPP TSG-RAN WG3 Meeting #33 ***R3-022304***
Sophia, Antipolis, France, 11th—15th November 2002

CR-Form-v7

CHANGE REQUEST

⌘ **25.423** **CR** **723** ⌘ **rev** **-** ⌘ Current version: **4.6.0** ⌘

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

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

Title:	⌘	Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD
Source:	⌘	RAN WG3
Work item code:	⌘	LCRTDD-Iublur
Date:	⌘	24/10/2002
Category:	⌘	**F**
Release:	⌘	Rel-4

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

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

Reason for change:	⌘	In 1.28 Mcps TDD, uplink power control for DPCH and PUSCH is performed by closed loop Power Control according TS 25.221, section 6.2.2.2 - similar as in the FDD mode. The Node B needs to receive the UL SIR Target values from the SRNC; and therefore the *UL SIR Target* IE should be added to respective NBAP and RNSAP messages. In TS25.423 section 9.1.11.2, IE "UL SIR Target" has already been added in Synchronized RL Reconfiguration procedure for 1.28Mcps TDD. It should also be possible to be reconfigured in Unsynchronized RL Reconfiguration procedure.
Summary of change:	⌘	The IE "UL SIR Target" is added as an optional elements to the UL CCTrCH to Modify IEs in the RADIO LINK RECONFIGURATION REQUEST (TDD) message. Procedure text is added to describe the application of the UL SIR Target IE in the 1.28Mcps TDD mode. Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects only the Unsynchronized RL Reconfiguration procedure for 1.28Mcps TDD.
Consequences if not approved:	⌘	If this document is not approved,the Uplink close loop power control specification for 1.28Mcps will be inconsistent.

Clauses affected:	⌘	8.3.7.2, 9.1.16.2, 9.3.3			
Other specs	⌘	Y: ☒ N: ☐	Other core specifications	⌘	25.433 R4 CR 748

affected:			25.433 R5 CR 749 25.423 R5 CR 724
		X	Test specifications
		X	O&M Specifications
Other comments:	⌘		

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

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

8.3.7 Unsynchronised Radio Link Reconfiguration

/* partly omitted */

8.3.7.2 Successful Operation

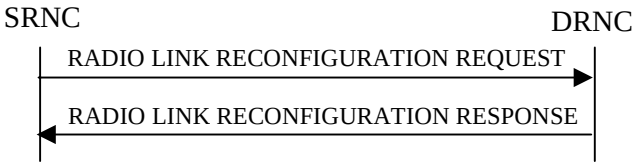

Figure 14: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

/* partly omitted */

[TDD - UL/DL CCTrCH Modification]

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

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH Information to modify* IEs or *DL CCTrCH Information to modify* IEs which contain a *TFCS* IE, the DRNS shall apply the included *TFCS* IE as the new value(s) to the referenced CCTrCH. Otherwise the DRNS shall continue to apply the previous value(s) specified for this CCTrCH.]

[1.28Mcps TDD - If the *UL CCTrCH To Modify* IE includes *UL SIR Target* IE, the DRNS shall apply this value as the new configuration and use it for the UL inner loop power control according [12] and [22].]

[TDD – UL/DL CCTrCH Deletion]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH Information To Delete* IEs or *DL CCTrCH Information To Delete* IEs, the DRNS shall not include the referenced CCTrCHs 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.]

/* partly omitted */

9.1.16 RADIO LINK RECONFIGURATION REQUEST

/* partly omitted */

9.1.16.2 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		–	
Allowed Queuing Time	O		9.2.1.2		YES	reject
UL CCTrCH Information To Modify		*0..<maxnoof CCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.2		–	
>TFCS	O		9.2.1.63		–	
> UL SIR Target	O		Uplink SIR 9.2.1.69	Applicable to 1.28Mcps TDD only	YES	reject
UL CCTrCH Information To Delete		*0..<maxnoof CCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.2		–	
DL CCTrCH Information To Modify		*0..<maxnoof CCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.2		–	
>TFCS	O		9.2.1.63		–	
DL CCTrCH Information To Delete		*0..<maxnoof CCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.2		–	
DCHs To Modify	O		TDD DCHs To Modify 9.2.3.8B		YES	reject
DCHs To Add	O		DCH TDD Information 9.2.3.2A		YES	reject
DCHs To Delete		*0..<maxnoof DCHs>*			GLOBAL	reject
>DCH ID	M		9.2.1.16		–	
UL Synchronisation Parameters LCR		*0..1*		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>Uplink Synchronisation Step Size	M		9.2.3.13J		-	
>Uplink Synchronisation Frequency	M		9.2.3.13I		-	

Range Bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
maxnoofDCHs	Maximum number of DCHs for one UE.

9.3.3 PDU Definitions

/* partly omitted */

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

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

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

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD        ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD-IEs} }

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD    CRITICALITY notify  TYPE UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD  PRESENCE
mandatory   }
}

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

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

```
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD        ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD-IEs} }

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD    CRITICALITY notify  TYPE UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD  PRESENCE
mandatory   }
}

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

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

/* partly omitted */

3GPP TSG-RAN WG3 Meeting #33 ***R3-022305***
Sophia Antipolis, France, 11th—15th November 2002

CR-Form-v7

CHANGE REQUEST

⌘ **25.423** **CR** **724** ⌘ **rev** **-** ⌘ Current version: **5.3.0** ⌘

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

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

Title:	⌘	Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD
Source:	⌘	RAN WG3
Work item code:	⌘	LCRTDD-Iublur
Date:	⌘	24/10/2002
Category:	⌘	**A**
Release:	⌘	Rel-5

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

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

Reason for change:	⌘	In 1.28 Mcps TDD, uplink power control for DPCH and PUSCH is performed by closed loop Power Control according TS 25.221, section 6.2.2.2 - similar as in the FDD mode. The Node B needs to receive the UL SIR Target values from the SRNC; and therefore the *UL SIR Target* IE should be added to respective NBAP and RNSAP messages. In TS25.423 section 9.1.11.2, IE "UL SIR Target" has already been added in Synchronized RL Reconfiguration procedure for 1.28Mcps TDD. It should also be possible to be reconfigured in Unsynchronized RL Reconfiguration procedure.
Summary of change:	⌘	The IE "UL SIR Target" is added as an optional elements to the UL CCTrCH to Modify IEs in the RADIO LINK RECONFIGURATION REQUEST (TDD) message. Procedure text is added to describe the application of the UL SIR Target IE in the 1.28Mcps TDD mode. Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects only the Unsynchronized RL Reconfiguration procedure for 1.28Mcps TDD.
Consequences if not approved:	⌘	If this document is not approved, the Uplink close loop power control specification for 1.28Mcps will be inconsistent.

Clauses affected:	⌘	8.3.7.2, 9.1.16.2, 9.3.3			
Other specs	⌘	Y: ☒ N: ☐	Other core specifications	⌘	25.433 R4 CR 748

affected:			25.433 R5 CR 749 25.423 R4 CR 723
		X	Test specifications
		X	O&M Specifications
Other comments:	⌘		

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1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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8.3.7 Unsynchronised Radio Link Reconfiguration

/* partly omitted */

8.3.7.2 Successful Operation

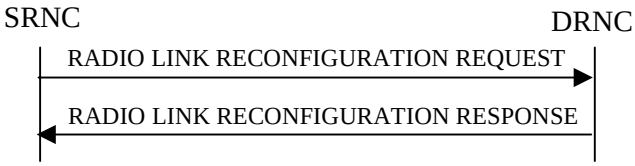

Figure 14: Unsynchronised Radio Link Reconfiguration procedure, Successful Operation

/* partly omitted */

[TDD - UL/DL CCTrCH Modification]

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

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH Information To Modify* IEs or */DL CCTrCH Information To Modify* Ies which contain a *TFCS* IE, the DRNS shall apply the included *TFCS* IE as the new value(s) to the referenced CCTrCH. Otherwise the DRNS shall continue to apply the previous value(s) specified for this CCTrCH.]

[1.28Mcps TDD - If the *UL CCTrCH To Modify* IE includes *UL SIR Target* IE, the DRNS shall apply this value as the new configuration and use it for the UL inner loop power control according [12] and [22].]

[TDD – UL/DL CCTrCH Deletion]

[TDD - If the RADIO LINK RECONFIGURATION REQUEST message includes any *UL CCTrCH Information To Delete* IEs or *DL CCTrCH Information To Delete* IEs, the DRNS shall not include the referenced CCTrCH in the new configuration.]

DL Power Control:

[FDD – If the RADIO LINK RECONFIGURATION REQUEST message includes the *DL Reference Power Information* IE and the power balancing is active, the 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 REQUEST message is supported, using the *DL Reference Power Information* IE in the RADIO LINK RECONFIGURATION REQUEST message. The updated reference power shall be used from the next adjustment period.]

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

[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.]

/* partly omitted */

9.1.16 RADIO LINK RECONFIGURATION REQUEST

/* partly omitted */

9.1.16.2 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		–	
Allowed Queuing Time	O		9.2.1.2		YES	reject
UL CCTrCH Information To Modify		*0..<maxnoof CCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.2		–	
>TFCS	O		9.2.1.63		–	
>UL SIR Target	O		Uplink SIR 9.2.1.69	Applicable to 1.28Mcps TDD only	YES	reject
UL CCTrCH Information to Delete		*0..<maxnoof CCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.2		–	
DL CCTrCH Information To Modify		*0..<maxnoof CCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.2		–	
>TFCS	O		9.2.1.63		–	
DL CCTrCH Information to Delete		*0..<maxnoof CCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.2		–	
DCHs To Modify	O		TDD DCHs To Modify 9.2.3.8B		YES	reject
DCHs To Add	O		DCH TDD Information 9.2.3.2A		YES	reject
DCHs to Delete		*0..<maxnoof DCHs>*			GLOBAL	reject
>DCH ID	M		9.2.1.16		–	
RL Information		*0..1*			YES	ignore
>RL ID	M		9.2.1.49		–	
>RL Specific DCH Information	O		9.2.1.49A		–	
UL Synchronisation Parameters LCR		*0..1*		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>Uplink Synchronisation Step Size	M		9.2.3.13J		-	
>Uplink Synchronisation Frequency	M		9.2.3.13I		-	

Range Bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE.
maxnoofDCHs	Maximum number of DCHs for one UE.

9.3.3 PDU Definitions

/* partly omitted */

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

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

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

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD        ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationModifyList-RL-ReconfRqstTDD-IEs} }

UL-CCTrCH-InformationModifyList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD    CRITICALITY notify  TYPE UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD  PRESENCE
mandatory   }
}

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

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

```
}

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD        ::= SEQUENCE (SIZE (0..maxNrOfCCTrCHs)) OF ProtocolIE-Single-Container { {UL-CCTrCH-
InformationDeleteList-RL-ReconfRqstTDD-IEs} }

UL-CCTrCH-InformationDeleteList-RL-ReconfRqstTDD-IEs RNSAP-PROTOCOL-IES ::= {
    { ID id-UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD    CRITICALITY notify  TYPE UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD  PRESENCE
mandatory   }
}

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

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

/* partly omitted */

3GPP TSG-RAN WG3 Meeting #33 ***R3-022302***
Sophia Antipolis, France, 11th—15th November 2002

CR-Form-v7

CHANGE REQUEST

⌘ **25.433** **CR** **748** ⌘ **rev** **-** ⌘ Current version: **4.6.0** ⌘

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

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

Title:	⌘	Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD
Source:	⌘	RAN WG3
Work item code:	⌘	LCRTDD-Iublur
Date:	⌘	24/10/2002
Category:	⌘	**F**
Release:	⌘	Rel-4

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

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

Reason for change:	⌘	In 1.28 Mcps TDD, uplink power control for DPCH and PUSCH is performed by closed loop Power Control according TS 25.221, section 6.2.2.2 - similar as in the FDD mode. The Node B needs to receive the UL SIR Target values from the SRNC; and therefore the *UL SIR Target* IE should be added to respective NBAP and RNSAP messages. In TS25.433 section 9.1.42.2, IE "UL SIR Target" has already been added in Synchronized RL Reconfiguration procedure for 1.28Mcps TDD. It should also be possible to be reconfigured in Unsynchronized RL Reconfiguration procedure.
Summary of change:	⌘	The IE "UL SIR Target" is added as an optional elements to the UL CCTrCH to Modify IEs in the RADIO LINK RECONFIGURATION REQUEST (TDD) message. Procedure text is added to describe the application of the UL SIR Target IE in the 1.28Mcps TDD mode. Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects only the Unsynchronized RL Reconfiguration procedure for 1.28Mcps TDD.
Consequences if not approved:	⌘	If this document is not approved, the Uplink close loop power control specification for 1.28Mcps will be inconsistent.

Clauses affected:	⌘	8.3.5.2, 9.1.47.2, 9.3.3			
Other specs	⌘	Y: ☒ N: ☐	Other core specifications	⌘	25.433 R5 CR 749

affected:			25.423 R4 CR 723 25.423 R5 CR 724
		X	Test specifications
		X	O&M Specifications
Other comments:	⌘		

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

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

8.3.5 Unsynchronised Radio Link Reconfiguration

/* partly omitted */

8.3.5.2 Successful Operation

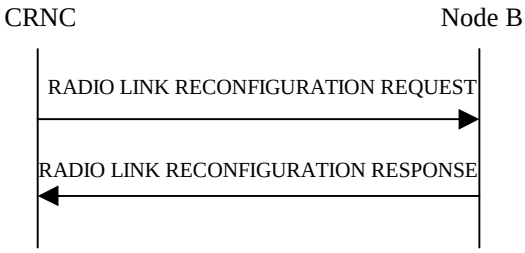

Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation

/* partly omitted */

[TDD – UL/DL CCTrCH Modification]

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

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

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

[TDD – UL/DL CCTrCH Deletion]

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

RL Information:

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

- If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and not transmit with a higher power on any Downlink DPCH of the Radio Link once the new configuration is being used. [FDD - 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.]

- If the *RL Information* IE includes the *Minimum DL Power* IE, the Node B shall apply this value to the new configuration and never transmit with a lower power on any Downlink Channelisation Code of the Radio Link once the new configuration is being used.

- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]

- [1.28Mcps TDD - If the RADIO LINK 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.]

/* partly omitted */

9.1.47 RADIO LINK RECONFIGURATION REQUEST

/* partly omitted */

9.1.47.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantic 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 Modify		*0..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>Puncture Limit	O		9.2.1.50		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	reject
UL CCTrCH To Delete		*0..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
DL CCTrCH To Modify		*0..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>Puncture Limit	O		9.2.1.50		–	
DL CCTrCH To Delete		*0..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
DCHs To Modify	O		DCHs TDD To Modify 9.2.3.4D		YES	reject
DCHs To Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs To Delete		*0..<maxnoofDSCHs>*			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
RL Information		*0..1*			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	–	
>UL Synchronisation Parameters LCR		*0..1*		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>Uplink Synchronisation Step Size	M		9.2.3.26H		–	
>>Uplink Synchronisation Frequency	M		9.2.3.26G		–	

Range Bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE

9.3.3 PDU Definitions

/* partly omitted */

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

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

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

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

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

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

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
    cCTrCH-ID                                       CCTrCH-ID,
```

```
    tFCS                                        TFCS            OPTIONAL,
    punctureLimit                               PunctureLimit   OPTIONAL,
    iE-Extensions                               ProtocolExtensionContainer { { UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD-ExtIEs} }
    OPTIONAL,
    ...
}

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

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

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

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

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

/* partly omitted */

3GPP TSG-RAN WG3 Meeting #33 ***R3-022303***
Sophia Antipolis, France, 11-15 November 2002

CR-Form-v7

CHANGE REQUEST

⌘ **25.433** **CR** **749** ⌘ **rev** **-** ⌘ Current version: **5.2.0** ⌘

*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:	⌘	Add UL SIR_target for Unsynchronized RL Reconfiguration in 1.28Mcps TDD
Source:	⌘	RAN WG3
Work item code:	⌘	LCRTDD-Iublur
Date:	⌘	24/10/2002
Category:	⌘	**A**
Release:	⌘	Rel-5

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

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

Reason for change:	⌘	In 1.28 Mcps TDD, uplink power control for DPCH and PUSCH is performed by closed loop Power Control according TS 25.221, section 6.2.2.2 - similar as in the FDD mode. The Node B needs to receive the UL SIR Target values from the SRNC; and therefore the *UL SIR Target* IE should be added to respective NBAP and RNSAP messages. In TS25.433 section 9.1.42.2, IE "UL SIR Target" has already been added in Synchronized RL Reconfiguration procedure for 1.28Mcps TDD. It should also be possible to be reconfigured in Unsynchronized RL Reconfiguration procedure.
Summary of change:	⌘	The IE "UL SIR Target" is added as an optional elements to the UL CCTrCH to Modify IEs in the RADIO LINK RECONFIGURATION REQUEST (TDD) message. Procedure text is added to describe the application of the UL SIR Target IE in the 1.28Mcps TDD mode. Impact Analysis: Impact assessment towards the previous version of the specification (same release): The impact can be considered isolated because the change affects only the Unsynchronized RL Reconfiguration procedure for 1.28Mcps TDD.
Consequences if not approved:	⌘	If this document is not approved, the Uplink close loop power control specification for 1.28Mcps will be inconsistent.

Clauses affected:	⌘	8.3.5.2, 9.1.47.2, 9.3.3			
Other specs	⌘	Y: X / N: ☐	Other core specifications	⌘	25.433 R4 CR 748

affected:			25.423 R4 CR 723 25.423 R5 CR 724
		X	Test specifications
		X	O&M Specifications
Other comments:	⌘		

How to create CRs using this form:

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

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

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.

8.3.5 Unsynchronised Radio Link Reconfiguration

/* partly omitted */

8.3.5.2 Successful Operation

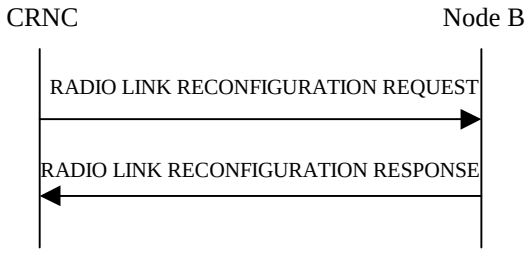

Figure 34: Unsynchronised Radio Link Reconfiguration Procedure, Successful Operation

/* partly omitted */

[TDD – UL/DL CCTrCH Modification]

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

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

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

[TDD – UL/DL CCTrCH Deletion]

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

DL Power Control:

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

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

RL Information:

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

- If the *RL Information* IE includes the *Maximum DL Power* IE, the Node B shall apply this value to the new configuration and not transmit with a higher power on any Downlink DPCH of the Radio Link once the new configuration is being used. [FDD - 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.]

- If the *RL Information* IE includes the *Minimum DL Power* IE, the Node B shall apply this value to the new configuration and never transmit with a lower power on any Downlink Channelisation Code of the Radio Link once the new configuration is being used.

- [FDD – If the *RL Information* IE contains the *Transmission Gap Pattern Sequence Code Information* IE in the *DL Code Information* IE for any of the allocated DL Channelisation Codes, the Node B shall apply the alternate scrambling code as indicated whenever the downlink compressed mode method SF/2 is active in the new configuration.]

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

Signalling Bearer Re-arrangement:

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

/* partly omitted */

9.1.47 RADIO LINK RECONFIGURATION REQUEST

/* partly omitted */

9.1.47.2 TDD Message

IE/Group Name	Presence	Range	IE Type and Reference	Semantics Description	Criticality	Assigned Criticality
Message Discriminator	M		9.2.1.45		–	
Message Type	M		9.2.1.46		YES	reject
Transaction ID	M		9.2.1.62		–	
Node B Communication Context ID	M		9.2.1.48	The reserved value "All NBCC" shall not be used.	YES	reject
UL CCTrCH To Modify		*0..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>Puncture Limit	O		9.2.1.50		–	
>UL SIR Target	O		UL SIR 9.2.1.67A	Applicable to 1.28Mcps TDD only	YES	reject
UL CCTrCH To Delete		*0..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
DL CCTrCH To Modify		*0..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
>TFCS	O		9.2.1.58		–	
>Puncture Limit	O		9.2.1.50		–	
DL CCTrCH To Delete		*0..<maxnoofCCTrCHs>*			EACH	notify
>CCTrCH ID	M		9.2.3.3		–	
DCHs To Modify	O		DCHs TDD To Modify 9.2.3.4D		YES	reject
DCHs To Add	O		DCH TDD Information 9.2.3.4C		YES	reject
DCHs To Delete		*0..<maxnoofDSCHs>*			GLOBAL	reject
>DCH ID	M		9.2.1.20		–	
RL Information		*0..1*			YES	reject
>RL ID	M		9.2.1.53		–	
>Maximum Downlink Power	O		DL Power 9.2.1.21	Maximum allowed power on DPCH	–	
>Minimum Downlink Power	O		DL Power 9.2.1.21	Minimum allowed power on DPCH	–	
>RL Specific DCH Information	O		9.2.1.53G		YES	ignore
>UL Synchronisation Parameters LCR		*0..1*		Mandatory for 1.28Mcps TDD. Not Applicable to 3.84Mcps TDD.	YES	ignore
>>Uplink Synchronisation Step Size	M		9.2.3.26H		–	
>>Uplink Synchronisation Frequency	M		9.2.3.26G		–	

Signalling Bearer Request Indicator	O		9.2.1.55A		YES	reject

Range Bound	Explanation
maxnoofCCTrCHs	Maximum number of CCTrCHs for a UE

9.3.3 PDU Definitions

```
/* partly omitted */

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

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

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

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

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

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

UL-CCTrCH-InformationModifyItem-RL-ReconfRqstTDD ::= SEQUENCE {
```

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

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

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

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

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

UL-CCTrCH-InformationDeleteItem-RL-ReconfRqstTDD-ExtIEs  NBAP-PROTOCOL-EXTENSION ::= {
    ...
}
/* partly omitted */
```