# TSG-RAN Meeting #28 Quebec, Canada, 01-03 June 2005

RP-050302 agenda item 7.3.5

Source: TSG-RAN WG2

Title: CRs (Rel-5 & Rel-6) on TEI5

The following CRs are in RP-050302:

Spec	CR	Rev	Phase	Subject	Cat	<b>Version-Current</b>	Version-New	Doc-2nd-Level	Workitem
25.322	0275	-	Rel-5	Erroneous Sequence Number definition	F	5.10.0	5.11.0	R2-051539	TEI5
25.322	0276	-	Rel-6	Erroneous Sequence Number definition	Α	6.3.0	6.4.0	R2-051540	TEI5
25.331	2544	-	Rel-5	Timing Reinitialized Handover & Radio Link Timing Adjustment	F	5.12.1	5.13.0	R2-051150	TEI5
25.331	2545	-	Rel-6	Timing Reinitialized Handover & Radio Link Timing Adjustment	Α	6.5.0	6.6.0	R2-051151	TEI5
25.331	2546	-		Addition of omitted IE "report criteria" in MEASUREMENT CONTROL message "modify" command	F	5.12.1	5.13.0	R2-051156	TEI5
25.331	2547	-	Rel-6	Addition of omitted IE "report criteria" in MEASUREMENT CONTROL message "modify" command	А	6.5.0	6.6.0	R2-051157	TEI5
25.331	2571	-	Rel-5	CTFC calculation for DCH	F	5.12.1	5.13.0	R2-051542	TEI5
25.331	2572	-	Rel-6	CTFC calculation for DCH	Α	6.5.0	6.6.0	R2-051543	TEI5
25.331	2573	-	Rel-5	Default RB identity in IE 'Signalling RB information to setup'	F	5.12.1	5.13.0	R2-051544	TEI5
25.331	2574	-	Rel-6	Default RB identity in IE 'Signalling RB information to setup'	Α	6.5.0	6.6.0	R2-051545	TEI5
25.331	2575	-	Rel-5	Default configuration 13	F	5.12.1	5.13.0	R2-051546	TEI5
25.331	2576	-	Rel-6	Default configuration 13	Α	6.5.0	6.6.0	R2-051547	TEI5
25.331	2606	1	Rel-5	UE behaviour for DCH SIR target setting for Downlink power control	F	5.12.1	5.13.0	R2-051690	TEI5
25.331	2607	1	Rel-6	UE behaviour for DCH SIR target setting for Downlink power control	Α	6.5.0	6.6.0	R2-051691	TEI5

		CHANGI	E REQ	UES1	CR-Form-v7.1
ж	25.322	CR <mark>0275</mark>	<b>≋rev</b>	<b>-</b> #	Current version: 5.10.0 **

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \mathbb{H} symbols.

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

Title: Source: 第 RAN WG2 Date: # 03/05/2005 Category: ₩ F Release: # Rel-5 Use one of the following categories: Use one of the following releases: (GSM Phase 2) F (correction) Ph2 **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) (Release 1999) **D** (editorial modification) R99 Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

## Reason for change: #

In current subclause 10.1, an erroneous SN is detected if a NACKed SN is outside the interval  $VT(A) \le SN \le VT(S) - 1$ . In subclause 9.4, it is specifed that when performing arithmetic comparisons of state variables or sequence number values, a modulus base shall be used. At the Sender, VT(A) shall be assumed to be the modulus base in AM.

In the case of VT(S) = VT(A) and with the convention of modulus base for arithmetic comparisons, the above checking inequality will always be true. In other words, erroneous SN, if existing in status report with NACKs, will not be detected. For example, suppose VT(S) = VT(A) = 200. If SN = 300 is negatively acknowledged, it should be recognized as an errorneous SN. However, by the current specification, the inequality will be interpreted as: (200 - VT(A)) mod 4096 <= 300 <= (200 - 1 - VT(A)) mod 4096, i.e. 0 <= 300 <= 4095, which is true. Therefore, SN = 300 is not recognized as an erroneous SN by the current specification.

#### Summary of change: ₩

The inequality is corrected to be:  $VT(A) \le SN < VT(S)$ 

#### **Isolated Impact Change Analysis.**

This change only impacts the behaviour of detecting erroneous SN from NACKs. No backward compatibility issues are foreseen.

Implementation of this CR by a R99/Rel-4 UE will not cause backwards compatibility issues.

If UTRAN implements the change while UE does not: UTRAN will work normally. UE may not be able to detect erroneous SNs.

		IF UE implements the change while UTRAN does not: UE will work normally while UTRAN may not be able to detect erroneous SNs.
Consequences if not approved:	¥	RLC entity may not be able to detect erroneous SN. Protocol error can not be recovered.

Clauses affected:	第 10.1	
Other specs affected:	Y N      X Other core specifications	
Other comments:	lpha	

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

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

# 10.1 Erroneous Sequence Number

A STATUS PDU or Piggybacked STATUS PDU including "erroneous Sequence Number" is a STATUS PDU or Piggybacked STATUS PDU that contains:

- a LIST, BITMAP or RLIST SUFI in which the "Sequence Number" of at least one AMD PDU that is negatively acknowledged is outside the interval VT(A)≤"Sequence Number" < VT(S)≤ VT(S) 1; or
- an ACK SUFI in which "LSN" is outside the interval VT(A)≤"LSN"≤ VT(S).

If an AM RLC entity receives a STATUS PDU or a Piggybacked STATUS PDU including "erroneous Sequence Number", it shall:

- discard the STATUS PDU or the Piggybacked STATUS PDU;
- initiate the RLC reset procedure (see subclause 11.4).

## 3GPP TSG-RAN2 Meeting #47 Athens, Greece, 9-13 May 2005

		OHAROL	REQ	UE	5 I			
署 2	5.322	CR <mark>0276</mark>	жrev	-	$\mathbb{H}$	Current version:	6.3.0	æ

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \mathbb{H} symbols.

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

Title: Source: 第 RAN WG2 Date: # 03/05/2005 Category: ₩ A Release: # Rel-6 Use one of the following categories: Use one of the following releases: (GSM Phase 2) F (correction) Ph2 **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) (Release 1999) **D** (editorial modification) R99 Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

## Reason for change: ₩

In current subclause 10.1, an erroneous SN is detected if a NACKed SN is outside the interval  $VT(A) \le SN \le VT(S) - 1$ . In subclause 9.4, it is specifed that when performing arithmetic comparisons of state variables or sequence number values, a modulus base shall be used. At the Sender, VT(A) shall be assumed to be the modulus base in AM.

In the case of VT(S) = VT(A) and with the convention of modulus base for arithmetic comparisons, the above checking inequality will always be true. In other words, erroneous SN, if existing in status report with NACKs, will not be detected. For example, suppose VT(S) = VT(A) = 200. If SN = 300 is negatively acknowledged, it should be recognized as an errorneous SN. However, by the current specification, the inequality will be interpreted as: (200 - VT(A)) mod 4096 <= 300 <= (200 - 1 - VT(A)) mod 4096, i.e. 0 <= 300 <= 4095, which is true. Therefore, SN = 300 is not recognized as an erroneous SN by the current specification.

#### Summary of change: ₩

The inequality is corrected to be:  $VT(A) \le SN < VT(S)$ 

#### **Isolated Impact Change Analysis.**

This change only impacts the behaviour of detecting erroneous SN from NACKs. No backward compatibility issues are foreseen.

Implementation of this CR by a R99/Rel-4 UE will not cause backwards compatibility issues.

<u>If UTRAN implements the change while UE does not</u>: UTRAN will work normally. UE may not be able to detect erroneous SNs.

		IF UE implements the change while UTRAN does not: UE will work normally while UTRAN may not be able to detect erroneous SNs.
Consequences if not approved:	¥	RLC entity may not be able to detect erroneous SN. Protocol error can not be recovered.

Clauses affected:	第 10.1	
Other specs affected:	Y N      X Other core specifications	
Other comments:	lpha	

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

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

# 10.1 Erroneous Sequence Number

A STATUS PDU or Piggybacked STATUS PDU including "erroneous Sequence Number" is a STATUS PDU or Piggybacked STATUS PDU that contains:

- a LIST, BITMAP or RLIST SUFI in which the "Sequence Number" of at least one AMD PDU that is negatively acknowledged is outside the interval VT(A)≤"Sequence Number" < VT(S)≤ VT(S) 1; or
- an ACK SUFI in which "LSN" is outside the interval VT(A)≤"LSN"≤ VT(S).

If an AM RLC entity receives a STATUS PDU or a Piggybacked STATUS PDU including "erroneous Sequence Number", it shall:

- discard the STATUS PDU or the Piggybacked STATUS PDU;
- initiate the RLC reset procedure (see subclause 11.4).

# **CHANGE REQUEST**

 $\mathfrak{R}$ 

25.331 CR 2544

**≋rev** 

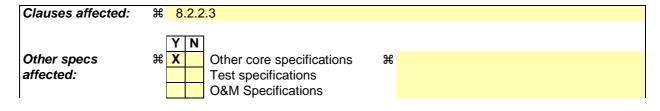
Current version:

5.12.1

For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the **\mathbb{H}** symbols.

Proposed chang	ge a	affects:	UICC apps	€	ME X Radio Ad	cess Netwo	rk Core	Network
							<del></del>	
Title:	¥	Timing	Reinitialized I	Handover &	Radio Link Timin	g Adjustmen	t	
Source:	¥	RAN W	/G2					
Work item code	<b>:</b> #	TEI5				Date: ∺	7/4/2005	
Category:	**	F (c) A (c) B (a) C (f) D (e) Detailed (	of the following correction) corresponds to a addition of feature innctional modifications of in 3GPP TR 21	a correction in tre), ication of feat ation) the above ca	,	2	REL-5 the following (GSM Phase (Release 199 (Release 199 (Release 199 (Release 4) (Release 5)	2) 96) 97) 98)
		be lound	III SUPP <u>IR 21</u>	<u>.900</u> .		Rel-5 Rel-6	(Release 5)	

Reason for change: ₩	For the timing reinitialized case the procedural text implies that both the Default DPCH Offset Value and the DPCH Frame Offset are signaled. Additionally signaling of the DPCH Frame Offset may be forced since it has mandatory presence in DL DPCH Info for Each RL in section 10.3.6.21.
	If the DPCH Frame Offset is signaled in a reconfiguration procedure we have specified for RL timing adjustment in section 8.2.2.3, if the DPCH Frame Offset corresponds to an adjustment of more then 256 chips the procedure in invalid.
	It is our understanding that if timing reinitialized handover is performed we do not want to restrict the change chip offset to 256 chips. Therefore the text on RL timing adjustment should not be applied in the case of timing reinitialized handover.
Summary of change: ₩	The radio link timing adjustment 256 chip limitation is removed from the case of timing reinitialized hard handover.
Consequences if # mot approved:	Timing reinitialized handover will be limited to 256 chip adjustments.



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

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

# 8.2.2.3 Reception of RADIO BEARER SETUP or RADIO BEARER RECONFIGURATION or RADIO BEARER RELEASE or TRANSPORT CHANNEL RECONFIGURATION or PHYSICAL CHANNEL RECONFIGURATION message by the UE

The UE shall:

- 1> be able to receive any of the following messages:
  - 2> RADIO BEARER SETUP message; or
  - 2> RADIO BEARER RECONFIGURATION message; or
  - 2> RADIO BEARER RELEASE message; or
  - 2> TRANSPORT CHANNEL RECONFIGURATION message; or
  - 2> PHYSICAL CHANNEL RECONFIGURATION message;
- 1> be able to perform a hard handover and apply physical layer synchronisation procedure A as specified in [29], even if no prior UE measurements have been performed on the target cell and/or frequency.

In case the reconfiguration procedure is used to remove all existing RL(s) in the active set while new RL(s) are established the UE shall:

- 1> if the UE has a pending "TGPS reconfiguration CFN" at the activation time received in the reconfiguration message and the reconfiguration requests a timing re-initialised hard handover (see subclause 8.3.5.1), the UE may:
  - 2> abort the pending CM activation;
  - 2> set the CM PATTERN ACTIVATION ABORTED to TRUE.
- 1> otherwise:
  - 2> set the CM PATTERN ACTIVATION ABORTED to FALSE.

#### If the UE receives:

- a RADIO BEARER SETUP message; or
- a RADIO BEARER RECONFIGURATION message; or
- a RADIO BEARER RELEASE message; or
- a TRANSPORT CHANNEL RECONFIGURATION message; or
- a PHYSICAL CHANNEL RECONFIGURATION message:

#### it shall:

- 1> set the variable ORDERED\_RECONFIGURATION to TRUE;
- 1> if the UE will enter the CELL\_DCH state from any state other than CELL\_DCH state at the conclusion of this procedure:
  - 2> perform the physical layer synchronisation procedure A as specified in [29] (FDD only).
- 1> act upon all received information elements as specified in subclause 8.6, unless specified in the following and perform the actions below.

#### The UE may:

1> maintain a list of the set of cells to which the UE has Radio Links if the IE "Cell ID" is present.

The UE may first release the physical channel configuration used at reception of the reconfiguration message. The UE shall then:

- 1> in FDD, if the IE "PDSCH code mapping" is included but the IE "PDSCH with SHO DCH Info" is not included and if the DCH has only one link in its active set:
  - 2> act upon the IE "PDSCH code mapping" as specified in subclause 8.6; and
  - 2> infer that the PDSCH will be transmitted from the cell from which the downlink DPCH is transmitted.
- 1> enter a state according to subclause 8.6.3.3.

In case the UE receives a RADIO BEARER RECONFIGURATION message including the IE "RB information to reconfigure" that only includes the IE "RB identity", the UE shall:

1> handle the message as if IE "RB information to reconfigure" was absent.

NOTE: The RADIO BEARER RECONFIGURATION message always includes the IE "RB information to reconfigure". UTRAN has to include it even if it does not require the reconfiguration of any RB.

In case the UE receives a RADIO BEARER RECONFIGURATION message with the IE "Specification mode" set to "Preconfiguration" while the message is not sent through GERAN *Iu mode*, the UE behaviour is unspecified.

If after state transition the UE enters CELL\_DCH state, the UE shall, after the state transition:

- 1> in FDD; or
- 1> in TDD when "Primary CCPCH Info" is included indicating a new target cell and "New C-RNTI" is not specified:

- 2> remove any C-RNTI from MAC;
- 2> clear the variable C\_RNTI.

If after state transition the UE leaves CELL\_DCH state, the UE shall, after the state transition:

- 1> clear any stored IE "Downlink HS-PDSCH information";
- 1> determine the value for the HS\_DSCH\_RECEPTION variable and take the corresponding actions as described in subclause 8.5.25.

In FDD, if after state transition the UE leaves CELL\_DCH state, the UE shall, after the state transition:

- 1> remove any DSCH-RNTI from MAC;
- 1> clear the variable DSCH\_RNTI.

If the UE was in CELL\_DCH state upon reception of the reconfiguration message and remains in CELL\_DCH state, the UE shall:

- 1> if the IE "Uplink DPCH Info" is absent, not change its current UL Physical channel configuration;
- 1> in TDD:
  - 2> if "Primary CCPCH Info" is included indicating a new target cell and "New C-RNTI" is not specified:
    - 3> remove any C-RNTI from MAC;
    - 3> clear the variable C\_RNTI.
  - 2> if "Primary CCPCH Info" is included indicating a new target cell and "New H-RNTI" is not specified:
    - 3> remove any H-RNTI from MAC;
    - 3> clear the variable H\_RNTI;
    - 3> determine the value for the HS\_DSCH\_RECEPTION variable and take the corresponding actions as described in subclause 8.5.25.
- 1> if "DPCH frame offset" is included for one or more RLs in the active set, and the reconfiguration procedure does not request a timing reinitialized hard handover (see subclause 8.3.5.1):
  - 2> use its value to determine the beginning of the DPCH frame in accordance with the following:
    - 3> if the received IE "DPCH frame offset" is across the value range border compared to the DPCH frame offset currently used by the UE:
      - 4> consider it to be a request to adjust the timing with 256 chips across the frame border (e.g. if the UE receives value 0 while the value currently used is 38144 consider this as a request to adjust the timing with +256 chips).
    - 3> if after taking into account value range borders, the received IE "DPCH frame offset" corresponds to a request to adjust the timing with a step exceeding 256 chips:
      - 4> set the variable INVALID\_CONFIGURATION to TRUE.
    - 3> and the procedure ends.
  - 2> adjust the radio link timing accordingly.

 $\mathfrak{R}$ 

25.331 CR 2545

**#rev** 

Current version:

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **\mathbb{H}** symbols.

Proposed chan	ge a	affects:	UICC apps#	M	EX Radio Ac	cess Netwo	rk 📉 C	Core Network
Title:	$\mathfrak{H}$	Liming	Reinitialized Hando	over & Ra	adio Link Timing	g Adjustmer	nt	
		5 4 4 4 4 4						
Source:	$\mathfrak{H}$	RAN W	'G2					
Work item code	<b>∷</b> ₩	TEI5				Date: #	7/4/200	)5
Category:	$\mathbb{H}$				Į.	Release: ೫		
			of the following categ	ories:		Use <u>one</u> of		ving releases:
		,	correction)			2	(GSM P	,
			corresponds to a corr	ection in a	n earlier release)		(Release	
		,	addition of feature),			R97	(Release	,
		,	unctional modification	n of featur	e)	R98	(Release	,
		١,	editorial modification)			R99	(Release	,
			explanations of the al	oove cate	gories can	Rel-4	(Release	,
		be found	in 3GPP <u>TR 21.900</u> .			Rel-5	(Release	,
						Rel-6	(Release	e 6)

Reason for change: # For the timing reinitialized case the procedural text implies that both the Default DPCH Offset Value and the DPCH Frame Offset are signaled. Additionally signaling of the DPCH Frame Offset may be forced since it has mandatory presence in DL DPCH Info for Each RL in section 10.3.6.21. If the DPCH Frame Offset is signaled in a reconfiguration procedure we have specified for RL timing adjustment in section 8.2.2.3, if the DPCH Frame Offset corresponds to an adjustment of more then 256 chips the procedure in invalid. It is our understanding that if timing reinitialized handover is performed we do not want to restrict the change chip offset to 256 chips. Therefore the text on RL timing adjustment should not be applied in the case of timing reinitialized handover. Summary of change: ₩ The radio link timing adjustment 256 chip limitation is removed from the case of timing reinitialized hard handover. Consequences if 置 Timing reinitialized handover will be limited to 256 chip adjustments. not approved:

Clauses affected:	$\mathfrak{H}$	8.2	2.3		
	Г	V	N I		
Other specs	$\mathbb{H}$	Х	Other core specifications	${\mathbb H}$	
affected:			Test specifications		
			O&M Specifications		

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

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

# 8.2.2.3 Reception of RADIO BEARER SETUP or RADIO BEARER RECONFIGURATION or RADIO BEARER RELEASE or TRANSPORT CHANNEL RECONFIGURATION or PHYSICAL CHANNEL RECONFIGURATION message by the UE

The UE shall:

- 1> be able to receive any of the following messages:
  - 2> RADIO BEARER SETUP message; or
  - 2> RADIO BEARER RECONFIGURATION message; or
  - 2> RADIO BEARER RELEASE message; or
  - 2> TRANSPORT CHANNEL RECONFIGURATION message; or
  - 2> PHYSICAL CHANNEL RECONFIGURATION message;
- 1> be able to perform a hard handover and apply physical layer synchronisation procedure A as specified in [29], even if no prior UE measurements have been performed on the target cell and/or frequency.

In case the reconfiguration procedure is used to remove all existing RL(s) in the active set while new RL(s) are established the UE shall:

- 1> if the UE has a pending "TGPS reconfiguration CFN" at the activation time received in the reconfiguration message and the reconfiguration requests a timing re-initialised hard handover (see subclause 8.3.5.1), the UE may:
  - 2> abort the pending CM activation;
  - 2> set the CM PATTERN ACTIVATION ABORTED to TRUE.
- 1> otherwise:
  - 2> set the CM PATTERN ACTIVATION ABORTED to FALSE.

#### If the UE receives:

- a RADIO BEARER SETUP message; or
- a RADIO BEARER RECONFIGURATION message; or
- a RADIO BEARER RELEASE message; or
- a TRANSPORT CHANNEL RECONFIGURATION message; or
- a PHYSICAL CHANNEL RECONFIGURATION message:

#### it shall:

- 1> set the variable ORDERED\_RECONFIGURATION to TRUE;
- 1> if the UE will enter the CELL\_DCH state from any state other than CELL\_DCH state at the conclusion of this procedure:
  - 2> perform the physical layer synchronisation procedure A as specified in [29] (FDD only).
- 1> act upon all received information elements as specified in subclause 8.6, unless specified in the following and perform the actions below.

#### The UE may:

1> maintain a list of the set of cells to which the UE has Radio Links if the IE "Cell ID" is present.

The UE may first release the physical channel configuration used at reception of the reconfiguration message. The UE shall then:

- 1> in FDD, if the IE "PDSCH code mapping" is included but the IE "PDSCH with SHO DCH Info" is not included and if the DCH has only one link in its active set:
  - 2> act upon the IE "PDSCH code mapping" as specified in subclause 8.6; and
  - 2> infer that the PDSCH will be transmitted from the cell from which the downlink DPCH is transmitted.
- 1> enter a state according to subclause 8.6.3.3.

In case the UE receives a RADIO BEARER RECONFIGURATION message including the IE "RB information to reconfigure" that only includes the IE "RB identity", the UE shall:

1> handle the message as if IE "RB information to reconfigure" was absent.

NOTE: The RADIO BEARER RECONFIGURATION message always includes the IE "RB information to reconfigure". UTRAN has to include it even if it does not require the reconfiguration of any RB.

In case the UE receives a RADIO BEARER RECONFIGURATION message with the IE "Specification mode" set to "Preconfiguration" while the message is not sent through GERAN *Iu mode*, the UE behaviour is unspecified.

If after state transition the UE enters CELL\_DCH state, the UE shall, after the state transition:

- 1> in FDD; or
- 1> in TDD when "Primary CCPCH Info" is included indicating a new target cell and "New C-RNTI" is not specified:

- 2> remove any C-RNTI from MAC;
- 2> clear the variable C\_RNTI.

If after state transition the UE leaves CELL\_DCH state, the UE shall, after the state transition:

- 1> clear any stored IE "Downlink HS-PDSCH information";
- 1> determine the value for the HS\_DSCH\_RECEPTION variable and take the corresponding actions as described in subclause 8.5.25.

In FDD, if after state transition the UE leaves CELL\_DCH state, the UE shall, after the state transition:

- 1> remove any DSCH-RNTI from MAC;
- 1> clear the variable DSCH\_RNTI.

If the UE was in CELL\_DCH state upon reception of the reconfiguration message and remains in CELL\_DCH state, the UE shall:

- 1> if the IE "Uplink DPCH Info" is absent, not change its current UL Physical channel configuration;
- 1> in TDD:
  - 2> if "Primary CCPCH Info" is included indicating a new target cell and "New C-RNTI" is not specified:
    - 3> remove any C-RNTI from MAC;
    - 3> clear the variable C\_RNTI.
  - 2> if "Primary CCPCH Info" is included indicating a new target cell and "New H-RNTI" is not specified:
    - 3> remove any H-RNTI from MAC;
    - 3> clear the variable H\_RNTI;
    - 3> determine the value for the HS\_DSCH\_RECEPTION variable and take the corresponding actions as described in subclause 8.5.25.
- 1> if "DPCH frame offset" is included for one or more RLs in the active set, and the reconfiguration procedure does not request a timing reinitialized hard handover (see subclause 8.3.5.1):
  - 2> use its value to determine the beginning of the DPCH frame in accordance with the following:
    - 3> if the received IE "DPCH frame offset" is across the value range border compared to the DPCH frame offset currently used by the UE:
      - 4> consider it to be a request to adjust the timing with 256 chips across the frame border (e.g. if the UE receives value 0 while the value currently used is 38144 consider this as a request to adjust the timing with +256 chips).
    - 3> if after taking into account value range borders, the received IE "DPCH frame offset" corresponds to a request to adjust the timing with a step exceeding 256 chips:
      - 4> set the variable INVALID\_CONFIGURATION to TRUE.
    - 3> and the procedure ends.
  - 2> adjust the radio link timing accordingly.

## 3GPP TSG-RAN2 #46bis Beijing, China, 4-8 April 2005

		_											
CR-Form-v7 CHANGE REQUEST													
×	25	.331	CR	2546		жrev	-	¥	Curre	ent vers	sion:	5.12	.1 <sup>ж</sup>
For <u>HELP</u> on	using	this fo	rm, see	e bottom	of this	page o	r look	at th	e pop-	up tex	t over	the %	symbols.
Proposed change	affec	ts:	UICC a	apps# <mark>_</mark>		ME	<b>€</b> Ra∉	dio A	ccess	Netwo	ork	Core	Network
Title:			of omit comma	ted IE "re and	eport c	riteria" i	n ME	ASUF	REMEI	NT CO	NTRO	OL mes	sage
Source: 3	RA	N WG	2										
Work item code: 3	E TE	15							D	Date: #	Арі	ril 7, 20	05
Category: ៖	Deta	F (con A (con B (add C (fur D (edd	rrection) rrespon dition of actional itorial m planatio	owing cate ) ds to a co f feature), modification ons of the TR 21.900	orrection ion of fe n) above	n in an ea			Use e) I I I I	<b>ase:</b> ₩ <u>one</u> or 2 R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	f the for (GSN (Rele (Rele (Rele (Rele (Rele	-	96) 97) 98)
Reason for chang		chang meas 2) Be meas instru	TROL in get the sureme havious ureme acted to	message reporting nts). r of a UE nts to a r	e applie criteri that is mode i R repo	es a "mo a (exce s instruc ncompa orting to	odify" ( ot in the cted to tible v FALS	comme can cha with E SE, is	mand cases of inge re BLER r	does not inter- porting eporting ear.	ot incli or intr g mode ng, bu	ude a n a-frequ e for qu	neans to lency lality
Summary of chan	ge:₩			eport crite viour in c									
Consequences if not approved:	*			not inclu viour will				ging	the re	port cr	iteria i	n these	e cases.
Clauses affected:	H	8.4.	1.3										
Other specs affected:	ж	Y N X X	Test	r core sp specifica Specific	tions		¥						
Other comments:	$\mathfrak{H}$												

How to create CRs using this form:

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

- 1) Fill out the above form. The symbols above marked \( \mathcal{H} \) 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 <a href="ftp://ftp.3gpp.org/specs/">ftp://ftp.3gpp.org/specs/</a> 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.

### 8.4.1.3 Reception of MEASUREMENT CONTROL by the UE

Upon reception of a MEASUREMENT CONTROL message the UE shall perform actions specified in subclause 8.6 unless otherwise specified below.

#### The UE shall:

- 1> read the IE "Measurement command";
- 1> if the IE "Measurement command" has the value "setup":
  - 2> store this measurement in the variable MEASUREMENT\_IDENTITY according to the IE "measurement identity", first releasing any previously stored measurement with that identity if that exists;
  - 2> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
    - 3> if the UE is in CELL\_FACH state:
      - 4> the UE behaviour is not specified.
  - 2> for measurement types "inter-RAT measurement" or "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency:
    - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and after reception of this message a compressed mode pattern sequence with an appropriate measurement purpose is active according to the IE "Current TGPS Status Flag" in UE variable TGPS\_IDENTITY; or
    - 3> if, according to its measurement capabilities, the UE does not require compressed mode to perform the measurements on at least one supported band of that measurement type:
      - 4> if the measurement is valid in the current RRC state of the UE:
        - 5> begin measurements according to the stored control information for this measurement identity.
- NOTE: The UE is not required to perform measurements on cells for which it needs compressed mode but a suitable compressed mode pattern is not activated.
  - 2> for measurement type "inter-frequency measurement" that requires measurements only on the same frequency as the actually used frequency:
    - 3> if the measurement is valid in the current RRC state of the UE:
      - 4> begin measurements according to the stored control information for this measurement identity.
  - 2> for measurement type "UE positioning measurement":
    - 3> if the UE is in CELL\_FACH state:
      - 4> if IE "Positioning Method" is set to "OTDOA":
        - 5> if IE "Method Type" is set to "UE assisted":
          - 6> if IE "UE positioning OTDOA assistance data for UE assisted" is not included:
            - 7> if System Information Block type 15.4 is broadcast:
              - 8> read System Information Block type 15.4.
            - 7> act as specified in subclause 8.6.7.19.2.
        - 5> if IE "Method Type" is set to "UE based":
          - 6> if IE "UE positioning OTDOA assistance data for UE based" is not included:
            - 7> if System Information Block type 15.5 is broadcast:
              - 8> read System Information Block type 15.5.
            - 7> act as specified in subclause 8.6.7.19.2a.
  - 2> for any other measurement type:
    - 3> if the measurement is valid in the current RRC state of the UE:

- 4> begin measurements according to the stored control information for this measurement identity.
- 1> if the IE "Measurement command" has the value "modify":
  - 2> for all IEs present in the MEASUREMENT CONTROL message:
    - 3> if a measurement was stored in the variable MEASUREMENT\_IDENTITY associated to the identity by the IE "measurement identity":
      - 4> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
        - 5> if the UE is in CELL\_FACH state:
          - 6> the UE behaviour is not specified.
      - 4> if measurement type is set to "intra-frequency measurement", for any of the optional IEs "Intra-frequency measurement objects list", "Intra-frequency measurement quantity", "Intra-frequency reporting quantity", "Measurement Validity", "report criteria" and "parameters required for each event" (given "report criteria" is set to "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "inter-frequency measurement", for any of the optional IEs "Inter-frequency measurement quantity", "Inter-frequency reporting quantity", "Measurement Validity", "Inter-frequency set update" and "parameters required for each event" (given "report criteria" is set to either "inter-frequency measurement reporting criteria" or "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "inter-RAT measurement", for any of the optional IEs "Inter-RAT measurement objects list", "Inter-RAT measurement quantity", and "Inter-RAT reporting quantity"—and "parameters required for each event" (given "report criteria" is set to "inter-RAT measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning OTDOA assistance data" is present, for any of the optional IEs "UE positioning OTDOA neighbour cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-based", "UE positioning OTDOA neighbour cell info for UE-based" and "UE positioning" that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning GPS assistance data" is present, for any of the optional IEs "UE positioning GPS reference time", "UE positioning GPS reference UE position", "UE positioning GPS DGPS corrections", "UE positioning GPS ionospheric model", "UE positioning GPS UTC model", "UE positioning GPS acquisition assistance", "UE positioning GPS real-time integrity" that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "traffic volume measurement", for any of the optional IEs "Traffic volume measurement Object", "Traffic volume measurement quantity", "Traffic volume reporting quantity", and "Measurement Validity" and "parameters required for each event" (given "report criteria" is set to "traffic volume measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "quality measurement", for any of the optional IE "Quality reporting quantity" that if it is present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "UE internal measurement", for any of the optional IEs "UE internal measurement quantity", and "UE internal reporting quantity" and "parameters required for each event" (given "report criteria" is set to "UE internal measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
        - 5> replace all instances of the IEs listed above (and all their children) stored in variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IEs received in the MEASUREMENT CONTROL message;
        - 5> leave all other stored information elements unchanged in the variable MEASUREMENT IDENTITY.
    - 3> otherwise:
      - 4> set the variable CONFIGURATION\_INCOMPLETE to TRUE.
  - 2> if measurement type is set to "inter-frequency measurement":
    - 3> if "report criteria" is set to "intra-frequency measurement reporting criteria" and "reporting criteria" in "inter-frequency measurement quantity" is set to "intra-frequency reporting criteria":

- 4> leave the currently stored "inter-frequency measurement reporting criteria" within "report criteria" and "inter-frequency reporting criteria" within "inter-frequency measurement quantity" unchanged, and continue to act on the information stored in these variables.
- NOTE: If the UTRAN wants to modify the inter-frequency cell info list for an inter-frequency measurement configured with event based reporting without repeating any IEs related to the configured events, one possibility is to set the IE "report criteria" to "intra-frequency measurement reporting criteria", not include the IE "parameters required for each event", and set the IE "reporting criteria" in the IE "inter-frequency measurement quantity" to "intra-frequency reporting criteria".
  - 2> for measurement types "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency, or that require measurements on another RAT:
    - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and after reception of this message a compressed mode pattern sequence with an appropriate measurement purpose is active according to the IE "Current TGPS Status Flag" in UE variable TGPS\_IDENTITY; or
    - 3> if, according to its measurement capabilities, the UE does not require compressed mode, on at least one supported band of that measurement type, to perform the measurements:
      - 4> resume the measurements according to the new stored measurement control information.
  - 2> for measurement type "inter-frequency measurement" that requires measurements only on the same frequency as the actually used frequency:
    - 3> if the measurement is valid in the current RRC state of the UE:
      - 4> resume measurements according to the new stored control information for this measurement identity.
  - 2> for any other measurement type:
    - 3> resume the measurements according to the new stored measurement control information.
  - 2> for measurement type "inter-RAT measurement":
    - 3> if "report criteria" is set to "inter-RAT measurement reporting criteria":
      - 4> if the value of "report criteria" stored in the variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" is not "inter-RAT measurement reporting criteria", or
      - 4> if the value of "report criteria" stored in the variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" is "inter-RAT measurement reporting criteria" and if the IE "Parameters required for each event" is present:
        - 5> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
    - 3> if "report criteria" is not set to "inter-RAT measurement reporting criteria":
      - 4> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
  - 2> for measurement type "UE positioning measurement":
    - 3> if "reporting criteria" is set to "UE positioning reporting criteria":
      - 4> if the value of "reporting criteria" stored in the variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" is not "UE positioning reporting criteria", or
      - 4> if the value of "reporting criteria" stored in the variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" is "UE positioning reporting criteria" and if the IE "Parameters required for each event" is present:
        - 5> replace the IE "reporting criteria" (and all its children) stored in variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
    - 3> if "reporting criteria" is not set to "UE positioning reporting criteria":

- 4> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
- 2> for measurement type "traffic volume measurement":
  - 3> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
- 2> for measurement type "quality measurement":
  - 3> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message;
  - 3> if "report criteria" is set to "quality measurement reporting criteria":
    - 4> if the value of "BLER reporting" in any instance of the IE "Quality reporting quantity" stored in the variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message is set to TRUE:
      - 5> the UE behaviour is unspecified.
- 2> for measurement type "UE internal measurement":
  - 3> if "report criteria" is set to "UE internal measurement reporting criteria":
    - 4> if the value of "report criteria" stored in the variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" is not "UE internal measurement reporting criteria", or
    - 4> if the value of "report criteria" stored in the variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" is "UE internal measurement reporting criteria" and if the IE "Parameters sent for each UE internal measurement event" is present:
      - 5> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
  - 3> if "report criteria" is not set to "UE internal measurement reporting criteria":
    - 4> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
- 1> if the IE "measurement command" has the value "release":
  - 2> terminate the measurement associated with the identity given in the IE "measurement identity";
  - 2> clear all stored measurement control information related associated to this measurement identity in variable MEASUREMENT\_IDENTITY.
- 1> if the IE "DPCH Compressed Mode Status Info" is present:
  - 2> if, as the result of this message, UE will have more than one transmission gap pattern sequence with the same measurement purpose active (according to IEs "TGMP" and "Current TGPS Status Flag" in variable TGPS IDENTITY):
    - 3> set the variable CONFIGURATION\_INCOMPLETE to TRUE.
  - 2> if there is any pending "TGPS reconfiguration CFN" or any pending "TGCFN":
    - 3> the UE behaviour is unspecified.
  - 2> if there is a pending "activation time" for a reconfiguration procedure that included the IE "DPCH Compressed mode info":
    - 3> the UE behaviour is unspecified.
  - 2> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS IDENTITY):
    - 3> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:

- 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message;
- 4> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS\_IDENTITY to "inactive" at the frame indicated by IE "TGPS reconfiguration CFN" received in the message.
- 3> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
  - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message.
- NOTE1: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- NOTE2: The deactivation of pattern sequences only occurs as a result of RRC messages received by the UE, i.e. the UE does not set the "Current TGPS Status Flag" to "inactive" after the final gap of a finite length pattern sequence.
  - 2> after the time indicated by IE "TGPS reconfiguration CFN" has elapsed:
    - 3> activate the pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" in this message is set to "activate" at the time indicated by IE "TGCFN"; and
    - 3> set the corresponding "Current TGPS status flag" for this pattern sequence in the variable TGPS\_IDENTITY to "active"; and
    - 3> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
    - 3> if the values of IE "TGPS reconfiguration CFN" and IE "TGCFN" are equal:
      - 4> start the concerned pattern sequence immediately at that CFN.
  - 2> not alter pattern sequences stored in variable TGPS\_IDENTITY, if the pattern sequence is not identitifed in IE "TGPSI" in the received message.
- 1> if the UE in CELL\_FACH state receives a MEASUREMENT CONTROL message, which indicates the same measurement identity as that stored in the variable MEASUREMENT\_IDENTITY:
  - 2> update the stored information with the traffic volume measurement control information in variable MEASUREMENT\_IDENTITY; and
  - 2> refrain from updating the traffic volume measurement control information associated with this measurement identity in the variable MEASUREMENT\_IDENTITY with the information received in System Information Block type 12 (or System Information Block type 11, according to subclause 8.1.1.6.11) until this measurement is explicitly released with another MEASUREMENT CONTROL message.
- 1> if the IE "Read SFN indicator" included in the IE "Cell info" of an inter-frequency cell is set to TRUE and the variable UE\_CAPABILITY\_TRANSFERRED has the DL "Measurement capability" for "FDD measurements" set to TRUE (the UE requires DL compressed mode in order to perform measurements on FDD):
  - 2> set the variable CONFIGURATION INCOMPLETE to TRUE.
- 1> clear the entry for the MEASUREMENT CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS.

#### The UE may:

- 1> if the IE "Measurement command" has the value "setup":
  - 2> for measurement type "UE positioning measurement":
    - 3> if the UE is CELL\_FACH state:
      - 4> if IE "Positioning Method" is set to "GPS":
        - 5> if IE "UE positioning GPS assistance data" is not included and variable UE\_POSITIONING\_GPS\_DATA is empty:
          - 6> if System Information Block types 15, 15.1, 15.2 and 15.3 are broadcast:
            - 7> read System Information Block types 15, 15.1, 15.2 and 15.3.
          - 6> act as specified in subclause 8.6.7.19.3.



1> and the procedure ends.

## 3GPP TSG-RAN2 #46bis Beijing, China, 4-8 April 2005

													OD 5
CHANGE REQUEST													
*		25	.331	CR	2547		жrev	-	¥	Current v	ersion:	6.5.0	¥
For <u>H</u>	<mark>ELP</mark> on ι	ısing t	this for	m, see	e bottom	of this	page o	r look	at th	e pop-up t	text ove	r the ℋ sy	mbols.
	d change				apps# <mark>_</mark>		_	_		ccess Net		_	etwork
Title:	₩			of omit comma		eport o	riteria" i	n ME	ASUF	REMENT (	CONTR	OL messa	ige
Source:	$\mathfrak{H}$	RA	N WG	2									
Work ite	m code: ૠ	TE	5							Date	: Ж <mark>А</mark> р	oril 7, 2005	5
Category	<i>y:</i> ૠ		F (cor A (cor B (add C (fun	rection) respon dition of ctional	owing cat ds to a co f feature), modificatio	orrection tion of f	n in an e	arlier re	eleas	2	<u>e</u> of the f (GS (Rei (Rei (Rei	el-6 following rei M Phase 2, lease 1996, lease 1997, lease 1998, lease 1999,	) ) )
		Deta	iled exp	olanatio	ons of the TR 21.90	above	categori	es can		Rel-4 Rel-6 Rel-6	4 (Rel 5 (Rel	lease 4) lease 5) lease 6)	
Reason	for change	e: ¥	chang meas 2) Bel meas	TROL in the sureme that the surement tha	message reporting nts). r of a UE nts to a	e applie g criter E that i mode	es a "mo ia (exce s instrud incompa	odify" of pt in the cted to tible v	comn ne ca cha vith E	where a M mand does ases of inte nge report BLER report a not clear.	s not ind er- or inf ting mod orting, b	lude a me tra-frequer de for qual	ity
Summar	y of chang	ge: ૠ	· _		•					of affected			
Consequ not appr	ences if oved:	ж	, .		not inclu viour will				ging	the report	criteria	in these o	ases.
Clauses	affected:	ж	8.4.1	1.3									
Other sp affected:		¥	Y N X X	Test	r core sp specifica Specific	ations		¥					
Other co	mments:	$\mathfrak{H}$											

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

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

- 1) Fill out the above form. The symbols above marked \( \mathcal{H} \) 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 <a href="ftp://ftp.3gpp.org/specs/">ftp://ftp.3gpp.org/specs/</a> 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.

### 8.4.1.3 Reception of MEASUREMENT CONTROL by the UE

Upon reception of a MEASUREMENT CONTROL message the UE shall perform actions specified in subclause 8.6 unless otherwise specified below.

#### The UE shall:

- 1> read the IE "Measurement command";
- 1> if the IE "Measurement command" has the value "setup":
  - 2> store this measurement in the variable MEASUREMENT\_IDENTITY according to the IE "measurement identity", first releasing any previously stored measurement with that identity if that exists;
  - 2> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
    - 3> if the UE is in CELL\_FACH state:
      - 4> the UE behaviour is not specified.
  - 2> for measurement types "inter-RAT measurement" or "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency:
    - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and after reception of this message a compressed mode pattern sequence with an appropriate measurement purpose is active according to the IE "Current TGPS Status Flag" in UE variable TGPS\_IDENTITY; or
    - 3> if, according to its measurement capabilities, the UE does not require compressed mode to perform the measurements on at least one supported band of that measurement type:
      - 4> if the measurement is valid in the current RRC state of the UE:
        - 5> begin measurements according to the stored control information for this measurement identity.
- NOTE: The UE is not required to perform measurements on cells for which it needs compressed mode but a suitable compressed mode pattern is not activated.
  - 2> for measurement type "inter-frequency measurement" that requires measurements only on the same frequency as the actually used frequency:
    - 3> if the measurement is valid in the current RRC state of the UE:
      - 4> begin measurements according to the stored control information for this measurement identity.
  - 2> for measurement type "UE positioning measurement":
    - 3> if the UE is in CELL\_FACH state:
      - 4> if IE "Positioning Method" is set to "OTDOA":
        - 5> if IE "Method Type" is set to "UE assisted":
          - 6> if IE "UE positioning OTDOA assistance data for UE assisted" is not included:
            - 7> if System Information Block type 15.4 is broadcast:
              - 8> read System Information Block type 15.4.
            - 7> act as specified in subclause 8.6.7.19.2.
        - 5> if IE "Method Type" is set to "UE based":
          - 6> if IE "UE positioning OTDOA assistance data for UE based" is not included:
            - 7> if System Information Block type 15.5 is broadcast:
              - 8> read System Information Block type 15.5.
            - 7> act as specified in subclause 8.6.7.19.2a.
  - 2> for any other measurement type:
    - 3> if the measurement is valid in the current RRC state of the UE:

- 4> begin measurements according to the stored control information for this measurement identity.
- 1> if the IE "Measurement command" has the value "modify":
  - 2> for all IEs present in the MEASUREMENT CONTROL message:
    - 3> if a measurement was stored in the variable MEASUREMENT\_IDENTITY associated to the identity by the IE "measurement identity":
      - 4> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
        - 5> if the UE is in CELL\_FACH state:
          - 6> the UE behaviour is not specified.
      - 4> if measurement type is set to "intra-frequency measurement", for any of the optional IEs "Intra-frequency measurement objects list", "Intra-frequency measurement quantity", "Intra-frequency reporting quantity", "Measurement Validity", "report criteria" and "parameters required for each event" (given "report criteria" is set to "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "inter-frequency measurement", for any of the optional IEs "Inter-frequency measurement quantity", "Inter-frequency reporting quantity", "Measurement Validity", "Inter-frequency set update" and "parameters required for each event" (given "report criteria" is set to either "inter-frequency measurement reporting criteria" or "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "inter-RAT measurement", for any of the optional IEs "Inter-RAT measurement objects list", "Inter-RAT measurement quantity", and "Inter-RAT reporting quantity"—and "parameters required for each event" (given "report criteria" is set to "inter-RAT measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning OTDOA assistance data" is present, for any of the optional IEs "UE positioning OTDOA neighbour cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-assisted", "UE positioning OTDOA reference cell info for UE-based", "UE positioning OTDOA neighbour cell info for UE-based" and "UE positioning" that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "UE positioning measurement" and the IE "UE positioning GPS assistance data" is present, for any of the optional IEs "UE positioning GPS reference time", "UE positioning GPS reference UE position", "UE positioning GPS DGPS corrections", "UE positioning GPS ionospheric model", "UE positioning GPS UTC model", "UE positioning GPS acquisition assistance", "UE positioning GPS real-time integrity" that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "traffic volume measurement", for any of the optional IEs "Traffic volume measurement Object", "Traffic volume measurement quantity", "Traffic volume reporting quantity", and "Measurement Validity" and "parameters required for each event" (given "report criteria" is set to "traffic volume measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "quality measurement", for any of the optional IE "Quality reporting quantity" that if it is present in the MEASUREMENT CONTROL message:
      - 4> if measurement type is set to "UE internal measurement", for any of the optional IEs "UE internal measurement quantity", and "UE internal reporting quantity" and "parameters required for each event" (given "report criteria" is set to "UE internal measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:
        - 5> replace all instances of the IEs listed above (and all their children) stored in variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IEs received in the MEASUREMENT CONTROL message;
        - 5> leave all other stored information elements unchanged in the variable MEASUREMENT IDENTITY.
    - 3> otherwise:
      - 4> set the variable CONFIGURATION\_INCOMPLETE to TRUE.
  - 2> if measurement type is set to "inter-frequency measurement":
    - 3> if "report criteria" is set to "intra-frequency measurement reporting criteria" and "reporting criteria" in "inter-frequency measurement quantity" is set to "intra-frequency reporting criteria":

- 4> leave the currently stored "inter-frequency measurement reporting criteria" within "report criteria" and "inter-frequency reporting criteria" within "inter-frequency measurement quantity" unchanged, and continue to act on the information stored in these variables.
- NOTE: If the UTRAN wants to modify the inter-frequency cell info list for an inter-frequency measurement configured with event based reporting without repeating any IEs related to the configured events, one possibility is to set the IE "report criteria" to "intra-frequency measurement reporting criteria", not include the IE "parameters required for each event", and set the IE "reporting criteria" in the IE "inter-frequency measurement quantity" to "intra-frequency reporting criteria".
  - 2> for measurement types "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency, or that require measurements on another RAT:
    - 3> if, according to its measurement capabilities, the UE requires compressed mode to perform that measurement type and after reception of this message a compressed mode pattern sequence with an appropriate measurement purpose is active according to the IE "Current TGPS Status Flag" in UE variable TGPS\_IDENTITY; or
    - 3> if, according to its measurement capabilities, the UE does not require compressed mode, on at least one supported band of that measurement type, to perform the measurements:
      - 4> resume the measurements according to the new stored measurement control information.
  - 2> for measurement type "inter-frequency measurement" that requires measurements only on the same frequency as the actually used frequency:
    - 3> if the measurement is valid in the current RRC state of the UE:
      - 4> resume measurements according to the new stored control information for this measurement identity.
  - 2> for any other measurement type:
    - 3> resume the measurements according to the new stored measurement control information.
  - 2> for measurement type "inter-RAT measurement":
    - 3> if "report criteria" is set to "inter-RAT measurement reporting criteria":
      - 4> if the value of "report criteria" stored in the variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" is not "inter-RAT measurement reporting criteria", or
      - 4> if the value of "report criteria" stored in the variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" is "inter-RAT measurement reporting criteria" and if the IE "Parameters required for each event" is present:
        - 5> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
    - 3> if "report criteria" is not set to "inter-RAT measurement reporting criteria":
      - 4> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
  - 2> for measurement type "UE positioning measurement":
    - 3> if "reporting criteria" is set to "UE positioning reporting criteria":
      - 4> if the value of "reporting criteria" stored in the variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" is not "UE positioning reporting criteria", or
      - 4> if the value of "reporting criteria" stored in the variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" is "UE positioning reporting criteria" and if the IE "Parameters required for each event" is present:
        - 5> replace the IE "reporting criteria" (and all its children) stored in variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
    - 3> if "reporting criteria" is not set to "UE positioning reporting criteria":

- 4> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
- 2> for measurement type "traffic volume measurement":
  - 3> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
- 2> for measurement type "quality measurement":
  - 3> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message;
  - 3> if "report criteria" is set to "quality measurement reporting criteria":
    - 4> if the value of "BLER reporting" in any instance of the IE "Quality reporting quantity" stored in the variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message is set to TRUE:
      - 5> the UE behaviour is unspecified.
- 2> for measurement type "UE internal measurement":
  - 3> if "report criteria" is set to "UE internal measurement reporting criteria":
    - 4> if the value of "report criteria" stored in the variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" is not "UE internal measurement reporting criteria", or
    - 4> if the value of "report criteria" stored in the variable MEASUREMENT\_IDENTITY associated to the identity indicated by the IE "measurement identity" is "UE internal measurement reporting criteria" and if the IE "Parameters sent for each UE internal measurement event" is present:
      - 5> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
  - 3> if "report criteria" is not set to "UE internal measurement reporting criteria":
    - 4> replace the IE "report criteria" (and all its children) stored in variable MEASUREMENT IDENTITY associated to the identity indicated by the IE "measurement identity" with the IE "report criteria" received in the MEASUREMENT CONTROL message.
- 1> if the IE "measurement command" has the value "release":
  - 2> terminate the measurement associated with the identity given in the IE "measurement identity";
  - 2> clear all stored measurement control information related associated to this measurement identity in variable MEASUREMENT IDENTITY.
- 1> if the IE "DPCH Compressed Mode Status Info" is present:
  - 2> if, as the result of this message, UE will have more than one transmission gap pattern sequence with the same measurement purpose active (according to IEs "TGMP" and "Current TGPS Status Flag" in variable TGPS IDENTITY):
    - 3> set the variable CONFIGURATION\_INCOMPLETE to TRUE.
  - 2> if there is any pending "TGPS reconfiguration CFN" or any pending "TGCFN":
    - 3> the UE behaviour is unspecified.
  - 2> if there is a pending "activation time" for a reconfiguration procedure that included the IE "DPCH Compressed mode info":
    - 3> the UE behaviour is unspecified.
  - 2> if pattern sequence corresponding to IE "TGPSI" is already active (according to "Current TGPS Status Flag") in the variable TGPS IDENTITY):
    - 3> if the "TGPS Status Flag" in this message is set to "deactivate" for the corresponding pattern sequence:

- 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message;
- 4> set the "Current TGPS Status Flag" for this pattern sequence in the variable TGPS\_IDENTITY to "inactive" at the frame indicated by IE "TGPS reconfiguration CFN" received in the message.
- 3> if the "TGPS Status Flag" in this message is set to "activate" for the corresponding pattern sequence:
  - 4> deactivate this pattern sequence at the beginning of the frame indicated by IE "TGPS reconfiguration CFN" received in the message.
- NOTE1: The temporary deactivation of pattern sequences for which the status flag is set to "activate" can be used by the network to align the timing of already active patterns with newly activated patterns.
- NOTE2: The deactivation of pattern sequences only occurs as a result of RRC messages received by the UE, i.e. the UE does not set the "Current TGPS Status Flag" to "inactive" after the final gap of a finite length pattern sequence.
  - 2> after the time indicated by IE "TGPS reconfiguration CFN" has elapsed:
    - 3> activate the pattern sequence corresponding to each IE "TGPSI" for which the "TGPS status flag" in this message is set to "activate" at the time indicated by IE "TGCFN"; and
    - 3> set the corresponding "Current TGPS status flag" for this pattern sequence in the variable TGPS\_IDENTITY to "active"; and
    - 3> begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
    - 3> if the values of IE "TGPS reconfiguration CFN" and IE "TGCFN" are equal:
      - 4> start the concerned pattern sequence immediately at that CFN.
  - 2> not alter pattern sequences stored in variable TGPS\_IDENTITY, if the pattern sequence is not identitifed in IE "TGPSI" in the received message.
- 1> if the UE in CELL\_FACH state receives a MEASUREMENT CONTROL message, which indicates the same measurement identity as that stored in the variable MEASUREMENT\_IDENTITY:
  - 2> update the stored information with the traffic volume measurement control information in variable MEASUREMENT\_IDENTITY; and
  - 2> refrain from updating the traffic volume measurement control information associated with this measurement identity in the variable MEASUREMENT\_IDENTITY with the information received in System Information Block type 12 (or System Information Block type 11, according to subclause 8.1.1.6.11) until this measurement is explicitly released with another MEASUREMENT CONTROL message.
- 1> if the IE "Read SFN indicator" included in the IE "Cell info" of an inter-frequency cell is set to TRUE and the variable UE\_CAPABILITY\_TRANSFERRED has the DL "Measurement capability" for "FDD measurements" set to TRUE (the UE requires DL compressed mode in order to perform measurements on FDD):
  - 2> set the variable CONFIGURATION INCOMPLETE to TRUE.
- 1> clear the entry for the MEASUREMENT CONTROL message in the table "Accepted transactions" in the variable TRANSACTIONS.

#### The UE may:

- 1> if the IE "Measurement command" has the value "setup":
  - 2> for measurement type "UE positioning measurement":
    - 3> if the UE is CELL\_FACH state:
      - 4> if IE "Positioning Method" is set to "GPS":
        - 5> if IE "UE positioning GPS assistance data" is not included and variable UE\_POSITIONING\_GPS\_DATA is empty:
          - 6> if System Information Block types 15, 15.1, 15.2 and 15.3 are broadcast:
            - 7> read System Information Block types 15, 15.1, 15.2 and 15.3.
          - 6> act as specified in subclause 8.6.7.19.3.



1> and the procedure ends.

## 3GPP TSG RAN2#47 Athens, Greece, 9-13 May, 2005

		CHAN	GE REQ	UES1	-	CR-	Form-v7.1
×	25.331 CR	2571	жrev	<b>-</b> %	Current version:	<b>5.12.1</b> <sup>8</sup>	К
or <u>HELP</u>	on using this form, se	e bottom of	this page or	look at th	ne pop-up text ove	er the % symb	ools.

ME X Radio Access Network X Core Network Proposed change affects:

Title:	$\mathfrak{H}$	CTFC calculation for DCH		
Source:	$\mathfrak{R}$	RAN WG2		
Work item code	:₩	TEI5	Date: ₩	May 2005
Category:	$\mathfrak{H}$	F	Release: ₩	Rel-5
		Use <u>one</u> of the following categories:	Use <u>one</u> of	the following releases:
		<b>F</b> (correction)	Ph2	(GSM Phase 2)
		A (corresponds to a correction in an earlier relea-	se) R96	(Release 1996)
		<b>B</b> (addition of feature),	R97	(Release 1997)
		<b>C</b> (functional modification of feature)	R98	(Release 1998)
		<b>D</b> (editorial modification)	R99	(Release 1999)
		Detailed explanations of the above categories can	Rel-4	(Release 4)
		be found in 3GPP <u>TR 21.900</u> .	Rel-5	(Release 5)
			Rel-6	(Release 6)
			Rel-7	(Release 7)

Reason for change: # In case UE is configured with one or more RBs that have more than one RB multiplexing option, it is currently not clear if all configured TrCHs, or only TrCHs used by the selected RB multiplexing option, shall belong to the Transport Format Combination, and therefore considered when calculating the CTFC (Calculated Transport Format Combination).

> As an example, we consider a RB that has two multiplexing options: "HS-DSCH" and "DCH". Currently, it is not clear in section 14.10 that also in case the "HS-DSCH" multiplexing option is used, the DCH (although not actually "used") shall belong to the transport format combination of the CCTrCH, and thus considered when calculating the CTFC.

Summary of change: # It is clarified that all configured DCH transport channels are included in the transport format combination.

**Isolated Impact Analysis** 

Functionality corrected: RB configuration

Isolated impact statement: Correction to a function where specifications are incomplete. Different implementations in UE and UTRAN leads to mismatch in TFCI mapping.

Implementation of this CR by a R99/Rel-4 UE, will not cause backwards compatibility issues.

Consequences if not approved:

# Risk for different implementations in UE and UTRAN, leading to mismatch in TFCI mapping.

Clauses affected:	<b>₩</b> 14.10
Other specs affected:	# X Other core specifications # Test specifications O&M Specifications
Other comments:	$m{lpha}$

## How to create CRs using this form:

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

- 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 <a href="ftp://ftp.3gpp.org/specs/">ftp://ftp.3gpp.org/specs/</a> 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.

# 14.10 Calculated Transport Format Combination

The Calculated Transport Format Combination (CTFC) is a tool for efficient signalling of transport format combinations.

Let I be the number of transport channels that are included in the transport format combination. For DCHs, all configured DCHs are included in the transport format combination. Each transport channel TrCH<sub>i</sub>, i = 1, 2, ..., I, has L<sub>i</sub> transport formats, i.e. the transport format indicator TFI<sub>i</sub> can take L<sub>i</sub> values,  $TFI_i \in \{0,1,2,...,L_i-1\}$ .

Define 
$$P_i = \prod_{i=0}^{i-1} L_j$$
, where  $i = 1, 2, ..., I$ , and  $L_0 = 1$ .

Let  $TFC(TFI_1, TFI_2, ..., TFI_l)$  be the transport format combination for which  $TrCH_1$  has transport format  $TFI_1$ ,  $TrCH_2$  has transport format  $TFI_2$ , etc. The corresponding  $CTFC(TFI_1, TFI_2, ..., TFI_l)$  is then computed as:

$$CTFC(TFI_1, TFI_2, K, TFI_I) = \sum_{i=1}^{I} TFI_i \cdot P_i.$$

For FACH and PCH transport channels, " $TrCH_1$ " corresponds to the transport channel listed at the first position in IE "FACH/PCH information" in IE "Secondary CCPCH System Information", " $TrCH_2$ " corresponds to the transport channel listed at the second position in IE "FACH/PCH information" and so on.

For all other transport channels in FDD and for all configured transport channels of the same transport channel type (i.e. DCH, DSCH, USCH) in TDD, "TrCH<sub>1</sub>" corresponds to the transport channel having the lowest transport channel identity in the transport format combination mapped to the TFCI field. "TrCH<sub>2</sub>" corresponds to the transport channel having the next lowest transport channel identity, and so on.

ME X Radio Access Network X Core Network

## 3GPP TSG RAN2#47 Athens, Greece, 9-13 May, 2005

Proposed change affects:

# 25.331 CR 2572

Title:	$\mathfrak{H}$	CTFC calculation for DCH
Source:	$\mathfrak{H}$	RAN WG2
Work item code:	:Ж	TEI5 Date: 第 May 2005
Category:	$\mathfrak{H}$	Release: # Rel-6
		Use <u>one</u> of the following categories:  Use <u>one</u> of the following releases:
		<b>F</b> (correction) Ph2 (GSM Phase 2)
		A (corresponds to a correction in an earlier release) R96 (Release 1996)
		<b>B</b> (addition of feature), R97 (Release 1997)
		C (functional modification of feature) R98 (Release 1998)
		<b>D</b> (editorial modification) R99 (Release 1999)
		Detailed explanations of the above categories can Rel-4 (Release 4)
		be found in 3GPP TR 21.900. Rel-5 (Release 5)
		Rel-6 (Release 6)
		Rel-7 (Release 7)

Reason for change: 
In case UE is configured with one or more RBs that have more than one RB multiplexing option, it is currently not clear if all configured TrCHs, or only TrCHs used by the selected RB multiplexing option, shall belong to the Transport Format Combination, and therefore considered when calculating the CTFC (Calculated Transport Format Combination).

As an example, we consider a RB that has two multiplexing options: "HS-DSCH" and "DCH". Currently, it is not clear in section 14.10 that also in case the "HS-DSCH" multiplexing option is used, the DCH (although not actually "used") shall belong to the transport format combination of the CCTrCH, and thus considered when calculating the CTFC.

Summary of change: # It is clarified that all configured DCH transport channels are included in the transport format combination.

#### **Isolated Impact Analysis**

UICC apps₩

Functionality corrected: RB configuration

Isolated impact statement: Correction to a function where specifications are incomplete. Different implementations in UE and UTRAN leads to mismatch in TFCI mapping.

Implementation of this CR by a R99/Rel-4 UE, will not cause backwards compatibility issues.

Consequences if not approved:

**X** Risk for different implementations in UE and UTRAN, leading to mismatch in TFCI mapping.

Clauses affected:	<b>₩</b> 14.10
Other specs affected:	# X Other core specifications # Test specifications O&M Specifications
Other comments:	$m{lpha}$

## How to create CRs using this form:

- 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 <a href="ftp://ftp.3gpp.org/specs/">ftp://ftp.3gpp.org/specs/</a> 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.

# 14.10 Calculated Transport Format Combination

The Calculated Transport Format Combination (CTFC) is a tool for efficient signalling of transport format combinations.

Let I be the number of transport channels that are included in the transport format combination. For DCHs, all configured DCHs are included in the transport format combination. Each transport channel TrCH<sub>i</sub>, i = 1, 2, ..., I, has L<sub>i</sub> transport formats, i.e. the transport format indicator TFI<sub>i</sub> can take L<sub>i</sub> values,  $TFI_i \in \{0,1,2,...,L_i-1\}$ .

Define 
$$P_i = \prod_{i=0}^{i-1} L_j$$
, where  $i = 1, 2, ..., I$ , and  $L_0 = 1$ .

Let  $TFC(TFI_1, TFI_2, ..., TFI_l)$  be the transport format combination for which  $TrCH_1$  has transport format  $TFI_1, TrCH_2$  has transport format  $TFI_2$ , etc. The corresponding  $CTFC(TFI_1, TFI_2, ..., TFI_l)$  is then computed as:

$$CTFC(TFI_1, TFI_2, K, TFI_I) = \sum_{i=1}^{I} TFI_i \cdot P_i.$$

For FACH and PCH transport channels, " $TrCH_1$ " corresponds to the transport channel listed at the first position in IE "FACH/PCH information" in IE "Secondary CCPCH System Information", " $TrCH_2$ " corresponds to the transport channel listed at the second position in IE "FACH/PCH information" and so on.

For all other transport channels in FDD and for all configured transport channels of the same transport channel type (i.e. DCH, DSCH, USCH) in TDD, "TrCH<sub>1</sub>" corresponds to the transport channel having the lowest transport channel identity in the transport format combination mapped to the TFCI field. "TrCH<sub>2</sub>" corresponds to the transport channel having the next lowest transport channel identity, and so on.

# 3GPP TSG-RAN WG2 Meeting #47 Athens, Greece, 9th-13th May 2005

		CHANG	E REQ	UES	T	CR-Form-v7.1
<b></b>	25.331	CR 2573	<b>≋rev</b>	<b>-</b> 3	Current version	5.12.1 <sup>#</sup>

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the \mathbb{H} symbols.

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

itte:	ж	Default RB identity in IE Signalling RB information	on to setup	)		
Source:	$\mathbb{H}$	RAN WG2				
Work item code:	: X	TEI5	Date	<i>:</i> Ж	11/04/2005	
Category:	$\mathfrak{H}$	F	Release	<i>:</i> Ж	Rel-5	
		Use one of the following categories:	Use <u>one</u>	e of t	the following releases	s:
		<b>F</b> (correction)	Ph2		(GSM Phase 2)	
		A (corresponds to a correction in an earlier releas	se) R96		(Release 1996)	
		<b>B</b> (addition of feature),	R97		(Release 1997)	
		<b>C</b> (functional modification of feature)	R98		(Release 1998)	
		<b>D</b> (editorial modification)	R99		(Release 1999)	
		Detailed explanations of the above categories can	Rel-4	4	(Release 4)	
		be found in 3GPP TR 21.900.	Rel-	5	(Release 5)	
			Rel-6	6	(Release 6)	
			Rel-	7	(Release 7)	

#### Reason for change: # The IE

The IE 'Signalling RB information to setup' contains an MD IE 'RB identity' with the default value describe in section 8.6.4.1 as:

- 1> apply a default value of the IE "RB identity" equal to 1 for the first IE "Signalling RB information to setup"; and
- 1> increase the default value by 1 for each occurrence.

Within the ASN.1 the IE is optional and the ASN.1 contains a comment which states, 'The default value for rb-Identity is the smallest value not used yet.' In some situations these different requirements conflict with each other.

When the IE is used within a RRC Connection Setup message or a Handover to UTRAN Command and the IE 'RB identity' is omitted then both requirements will result in the same outcome.

However, if the IE is used in a RB Setup Message or Cell Update Confirm message to add SRB4 (if not previously setup) or TM-SRB and the RB identity is not included then the two requirements would result in different behaviour. According to the text in section 8.6.4.1 the new SRB would be setup with RB identity 1 which obviously result in unpredictable UE behaviour. According to the text in section 11.3 the new SRB would be setup with RB identity 4 or 5. For this reason the interpretation according to 11.3 seems to be the most sensible.

The conflicting requirements can easily be avoided by the network by including the IE 'RB identity' in all cases except RRC Connection Setup or Handover to UTRAN Command.

#### Summary of change: ₩

It is proposed to add a note to the specification to state that the UTRAN should only use the default value for the RB Identity in the case of RRC Connection Setup or Handover from UTRAN command otherwise the UE behaviour is not specified.

#### **Isolated Impact Analysis**

Functionality corrected: Signalling radio bearer setup

Isolated impact statement: Correction to a function where specification was containing some contradiction. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.

A Release 99/4 UE can expect the behaviour described by this CR from the UTRAN.

# Consequences if not approved:

If the CR is not approved then some UTRAN implementation may rely on the default value of the RB Identity when setting up SRB4 or TM-SRB during an RRC connection. If uses the default value handing according to section 11 and the UE uses the default value handling according to section 8 then the UE behaviour is not predictable. Potentially the call may be dropped.

Clauses affected:	第 8.6.4.1
Other specs affected:	Y N  N Other core specifications N O&M Specifications
Other comments:	lpha

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

- 1) Fill out the above form. The symbols above marked \( \mathcal{X} \) 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 <a href="ftp://ftp.3gpp.org/specs/">ftp://ftp.3gpp.org/specs/</a> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

## 8.6.4.1 Signalling RB information to setup list

If the IE "Signalling RB information to setup list" is included the UE shall:

- 1> use the same START value to initialise the COUNT-C and COUNT-I variables for all the signalling radio bearers in the list;
- 1> if the IE "Signalling RB information to setup list" was included in the RADIO BEARER SETUP message:
  - 2> if the variable LATEST\_CONFIGURED\_CN\_DOMAIN has been initialised:
    - 3> calculate the START value only once during this procedure according to subclause 8.5.9 for the CN domain indicated in the variable LATEST\_CONFIGURED\_CN\_DOMAIN;
    - 3> store the calculated START value in the variable START\_VALUE\_TO\_TRANSMIT.
- 1> for each occurrence of the IE "Signalling RB information to setup":
  - 2> use the value of the IE "RB identity" as the identity of the signalling radio bearer to setup;
  - 2> if the signalling radio bearer identified with the IE "RB identity" does not exist in the variable ESTABLISHED\_RABS:
    - 3> create a new entry for the signalling radio bearer in the variable ESTABLISHED RABS.
  - 2> if the IE "Signalling RB information to setup list" was received in a message other than HANDOVER TO UTRAN COMMAND; and
  - 2> if the variable LATEST\_CONFIGURED\_CN\_DOMAIN has been initialised and the value "STATUS" of the variable CIPHERING\_STATUS of the CN domain stored in this variable is "Started":
    - 3> if the IE "Uplink RLC mode" or the IE "Downlink RLC mode" either in the IE "RLC info" or referenced by the RB identity in the IE "Same as RB" is set to "AM RLC" or "UM RLC":
      - 4> initialise the 20 MSB of the hyper frame number component of COUNT-C for this signalling radio bearer with the START value in the variable START\_VALUE\_TO\_TRANSMIT;
      - 4> set the remaining LSB of the hyper frame number component of COUNT-C for this signalling radio bearer to zero;
      - 4> start to perform ciphering on this signalling radio bearer, using the value of the IE "RB identity" minus one as the value of BEARER in the ciphering algorithm.
  - 2> if the IE "Signalling RB information to setup list" was received in a message other than HANDOVER TO UTRAN COMMAND; and
  - 2> if the variable LATEST\_CONFIGURED\_CN\_DOMAIN has been initialised and the value "Status" of the variable "INTEGRITY\_PROTECTION\_INFO" of the CN domain stored in this variable is "Started":
    - 3> initialise the 20 MSB of the hyper frame number component of COUNT-I for this signalling radio bearer with the START value in the variable START\_VALUE\_TO\_TRANSMIT;
    - 3> set the remaining LSB of the hyper frame number component of COUNT-I for this signalling radio bearer to zero;
    - 3> for this signalling radio bearer, set the IE "Uplink RRC Message sequence number" in the variable INTEGRITY\_PROTECTION\_INFO to zero;
    - 3> start performing integrity protection according to subclauses 8.5.10.1 and 8.5.10.2.
  - 2> perform the actions for the IE "RLC info" as specified in subclause 8.6.4.9, applied for that signalling radio bearer;
  - 2> perform the actions for the IE "RB mapping info" as specified in subclause 8.6.4.8, applied for that signalling radio bearer.

1> apply a default value of the IE "RB identity" equal to 1 for the first IE "Signalling RB information to setup"; and

1> increase the default value by 1 for each occurrence.

NOTE: The UTRAN should only use the default value of the IE "RB identity" within the RRC Connection Setup and Handover to UTRAN Command messages. If the default value of the IE "RB identity" is used in any other message then the UE behaviour is not specified.

# 10.3.4.24 Signalling RB information to setup

Information Element/Group name	Need	Multi	Type and reference	Semantics description
RB identity	MD		RB identity	Default value is specified in
			10.3.4.16	subclause 8.6.4.1
CHOICE RLC info type	MP			
>RLC info			RLC info	
			10.3.4.23	
>Same as RB			RB identity	Identity of RB with exactly the
			10.3.4.16	same RLC info IE values
RB mapping info	MP		RB mapping	
			info	
			10.3.4.21	

NOTE: This information element is included within IE "Predefined RB configuration".

# 11.3 Information element definitions

```
SRB-InformationSetup ::=
                                   SEQUENCE {
    -- The default value for rb-Identity is the smallest value not used yet.
rb-Identity RB-Identity OPTIONAL,
   rb-Identity
                                       RLC-InfoChoice,
   rlc-InfoChoice
   rb-MappingInfo
                                       RB-MappingInfo
}
SRB-InformationSetup-r5 ::= SEQUENCE {
    -- The default value for rb-Identity is the smallest value not used yet.
                     RB-Identity
RLC-InfoChoice-r5,
   rb-Identity
                                                                           OPTIONAL,
   rlc-InfoChoice
   rb-MappingInfo
                                      RB-MappingInfo-r5
```

# 3GPP TSG-RAN WG2 Meeting #47 Athens, Greece, 9th-13th May 2005

		CHANGI	E REQ	UE	ST	-	С	R-Form-v7.1
*	25.331 CR	2574	жrev	-	Ж	Current version:	6.5.0	ж
- 450								

For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the \mathbb{H} symbols.

Proposed chan	ge a	<b>Iffects:</b> UICC apps器 ME X Radio	Access Netwo	ork X Core Network
Title:	ж	Default RB identity in IE 'Signalling RB information	ion to setup'	
			•	
Source:	$\mathbb{H}$	RAN WG2		
Work item code	<b>∷</b> ૠ	TEI5	Date: ℍ	11/04/2005
Category:	$\mathbb{H}$	A	Release: ଖ	Rel-5
		Use <u>one</u> of the following categories:		f the following releases:
		<b>F</b> (correction)	Ph2	(GSM Phase 2)
		A (corresponds to a correction in an earlier relea	ise) R96	(Release 1996)
		<b>B</b> (addition of feature),	R97	(Release 1997)
		<b>C</b> (functional modification of feature)	R98	(Release 1998)
		<b>D</b> (editorial modification)	R99	(Release 1999)
		Detailed explanations of the above categories can	Rel-4	(Release 4)
		he found in 3GPP TR 21 900	Rel-5	(Release 5)

#### Reason for change: ₩

The IE 'Signalling RB information to setup' contains an MD IE 'RB identity' with the default value describe in section 8.6.4.1 as:

1> apply a default value of the IE "RB identity" equal to 1 for the first IE "Signalling RB information to setup"; and

Rel-6

Rel-7

(Release 6)

(Release 7)

1> increase the default value by 1 for each occurrence.

Within the ASN.1 the IE is optional and the ASN.1 contains a comment which states, 'The default value for rb-Identity is the smallest value not used yet.' In some situations these different requirements conflict with each other.

When the IE is used within a RRC Connection Setup message or a Handover to UTRAN Command and the IE 'RB identity' is omitted then both requirements will result in the same outcome.

However, if the IE is used in a RB Setup Message or Cell Update Confirm message to add SRB4 (if not previously setup) or TM-SRB and the RB identity is not included then the two requirements would result in different behaviour. According to the text in section 8.6.4.1 the new SRB would be setup with RB identity 1 which obviously result in unpredictable UE behaviour. According to the text in section 11.3 the new SRB would be setup with RB identity 4 or 5. For this reason the interpretation according to 11.3 seems to be the most sensible.

The conflicting requirements can easily be avoided by the network by including the IE 'RB identity' in all cases except RRC Connection Setup or Handover to UTRAN Command.

#### Summary of change: ₩

It is proposed to add a note to the specification to state that the UTRAN should only use the default value for the RB Identity in the case of RRC Connection Setup or Handover from UTRAN command otherwise the UE behaviour is not specified.

#### **Isolated Impact Analysis**

Functionality corrected: Signalling radio bearer setup

Isolated impact statement: Correction to a function where specification was containing some contradiction. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.

A Release 99/4 UE can expect the behaviour described by this CR from the UTRAN.

# Consequences if not approved:

If the CR is not approved then some UTRAN implementation may rely on the default value of the RB Identity when setting up SRB4 or TM-SRB during an RRC connection. If uses the default value handing according to section 11 and the UE uses the default value handling according to section 8 then the UE behaviour is not predictable. Potentially the call may be dropped.

Clauses affected:	第 8.6.4.1
Other specs affected:	Y N  N Other core specifications N O&M Specifications
Other comments:	lpha

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

- 1) Fill out the above form. The symbols above marked \( \mathcal{X} \) 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 <a href="ftp://ftp.3gpp.org/specs/">ftp://ftp.3gpp.org/specs/</a> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

## 8.6.4.1 Signalling RB information to setup list

If the IE "Signalling RB information to setup list" is included the UE shall:

- 1> use the same START value to initialise the COUNT-C and COUNT-I variables for all the signalling radio bearers in the list;
- 1> if the IE "Signalling RB information to setup list" was included in the RADIO BEARER SETUP message:
  - 2> if the variable LATEST\_CONFIGURED\_CN\_DOMAIN has been initialised:
    - 3> calculate the START value only once during this procedure according to subclause 8.5.9 for the CN domain indicated in the variable LATEST\_CONFIGURED\_CN\_DOMAIN;
    - 3> store the calculated START value in the variable START\_VALUE\_TO\_TRANSMIT.
- 1> for each occurrence of the IE "Signalling RB information to setup":
  - 2> use the value of the IE "RB identity" as the identity of the signalling radio bearer to setup;
  - 2> if the signalling radio bearer identified with the IE "RB identity" does not exist in the variable ESTABLISHED\_RABS:
    - 3> create a new entry for the signalling radio bearer in the variable ESTABLISHED RABS.
  - 2> if the IE "Signalling RB information to setup list" was received in a message other than HANDOVER TO UTRAN COMMAND; and
  - 2> if the variable LATEST\_CONFIGURED\_CN\_DOMAIN has been initialised and the value "STATUS" of the variable CIPHERING\_STATUS of the CN domain stored in this variable is "Started":
    - 3> if the IE "Uplink RLC mode" or the IE "Downlink RLC mode" either in the IE "RLC info" or referenced by the RB identity in the IE "Same as RB" is set to "AM RLC" or "UM RLC":
      - 4> initialise the 20 MSB of the hyper frame number component of COUNT-C for this signalling radio bearer with the START value in the variable START\_VALUE\_TO\_TRANSMIT;
      - 4> set the remaining LSB of the hyper frame number component of COUNT-C for this signalling radio bearer to zero;
      - 4> start to perform ciphering on this signalling radio bearer, using the value of the IE "RB identity" minus one as the value of BEARER in the ciphering algorithm.
  - 2> if the IE "Signalling RB information to setup list" was received in a message other than HANDOVER TO UTRAN COMMAND; and
  - 2> if the variable LATEST\_CONFIGURED\_CN\_DOMAIN has been initialised and the value "Status" of the variable "INTEGRITY\_PROTECTION\_INFO" of the CN domain stored in this variable is "Started":
    - 3> initialise the 20 MSB of the hyper frame number component of COUNT-I for this signalling radio bearer with the START value in the variable START\_VALUE\_TO\_TRANSMIT;
    - 3> set the remaining LSB of the hyper frame number component of COUNT-I for this signalling radio bearer to zero;
    - 3> for this signalling radio bearer, set the IE "Uplink RRC Message sequence number" in the variable INTEGRITY\_PROTECTION\_INFO to zero;
    - 3> start performing integrity protection according to subclauses 8.5.10.1 and 8.5.10.2.
  - 2> perform the actions for the IE "RLC info" as specified in subclause 8.6.4.9, applied for that signalling radio bearer;
  - 2> perform the actions for the IE "RB mapping info" as specified in subclause 8.6.4.8, applied for that signalling radio bearer.

1> apply a default value of the IE "RB identity" equal to 1 for the first IE "Signalling RB information to setup"; and

1> increase the default value by 1 for each occurrence.

NOTE: The UTRAN should only use the default value of the IE "RB identity" within the RRC Connection Setup and Handover to UTRAN Command messages. If the default value of the IE "RB identity" is used in any other message then the UE behaviour is not specified.

# 10.3.4.24 Signalling RB information to setup

Information Element/Group name	Need	Multi	Type and reference	Semantics description
RB identity	MD		RB identity	Default value is specified in
			10.3.4.16	subclause 8.6.4.1
CHOICE RLC info type	MP			
>RLC info			RLC info	
			10.3.4.23	
>Same as RB			RB identity	Identity of RB with exactly the
			10.3.4.16	same RLC info IE values
RB mapping info	MP		RB mapping	
			info	
			10.3.4.21	

NOTE: This information element is included within IE "Predefined RB configuration".

# 11.3 Information element definitions

```
SRB-InformationSetup ::=
                                   SEQUENCE {
    -- The default value for rb-Identity is the smallest value not used yet.
rb-Identity RB-Identity OPTIONAL,
   rb-Identity
                                       RLC-InfoChoice,
   rlc-InfoChoice
   rb-MappingInfo
                                       RB-MappingInfo
}
SRB-InformationSetup-r5 ::= SEQUENCE {
    -- The default value for rb-Identity is the smallest value not used yet.
                     RB-Identity
RLC-InfoChoice-r5,
   rb-Identity
                                                                           OPTIONAL,
   rlc-InfoChoice
   rb-MappingInfo
                                      RB-MappingInfo-r5
```

Athens, Greece,	, 9-13	} Ma	y 200	5								
			(	CHAN	GE R	REQ	UE	ST				CR-Form-v7.1
*	25.	331	CR	2575	*	rev	-	$\mathbb{H}$	Current ver	sion:	5.12.	<b>1</b> <sup>#</sup>
For <u>HELP</u> on u	ising ti	his foi	rm, see	bottom of	f this pa	age or l	ook a	at the	pop-up tex	t over	the ૠ sy	/mbols.
Proposed change a	affect	's: (	UICC a	npps#	1	ME <mark>X</mark>	Rad	io Ac	ccess Netwo	ork X	Core N	letwork
Title: 第	Defa	ault co	onfigur	ation 13								
Source: #	RAN	N WG	2									
Work item code: ∺	TEI	5							Date: 3	09/0	05/2005	
Category: 米	l l l Detai	F (cor A (cor B (add C (fun D (edi led ex	rection) respondition of actional itorial m planatio	owing categ ds to a corre feature), modification odification) ons of the ak TR 21.900.	ection in n of featu	ure)		lease	Release: # Use <u>one</u> o Ph2 P) R96 R97 R98 R99 Rel-4 Rel-5 Rel-6 Rel-7	f the fol (GSM (Rele (Rele (Rele (Rele (Rele (Rele		?) ?) ?) !)
Reason for change	e: X	size	type. T		a rang	e of (0.			nfiguration of cannot have			
Summary of chang	g <b>e</b> : ૠ	Impa A UE	nged to configu act Ana E that h	use RLC ration 62 s alysis: nas not imphat has no	size typ specified	be 2 (pad in 34)	art1= .108.	6, pa	art2= 8) in o this CR will ng to this CR	rder to	be cohe e modific	erent with
Consequences if not approved:	¥	cann The Hand	not be u behavi dover t default	used acros our of UE o UTRAN,	ss the ai when d , will be	ir interf lefault o unspe	ace ( config cified	(defa gurat I.	r TFI0,3 of E ult configura ion 13 is use	ation 1 ed upo	3 cannot on Inter-F	t be used) RAT
Clauses affected:	ж	13.7										
Other specs affected:	¥	Y N X X	Other Test	r core spec specification Specificat	ons	ns	¥					

Other comments:

# How to create CRs using this form:

 $\mathfrak{R}$ 

- 1) Fill out the above form. The symbols above marked \( \mathbb{X} \) 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 <a href="ftp://ftp.3gpp.org/specs/">ftp://ftp.3gpp.org/specs/</a> 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.

# 13.7 Parameter values for default radio configurations

The UE shall support the use of the default radio configurations that are specified in the following.

NOTE 1: These configurations are based on [41] and cover a number of RAB and signalling connection configurations.

In the table that is used to specify the parameter values for these default configurations, the following principles are used:

- Optional IEs that are not used are omitted;
- In case no parameter value is specified in a column, this means the value given the previous (left side) column applies.
- NOTE 2: If needed, signalling radio bearer RB4 is established after the completion of handover.
- NOTE 3: For each default configuration, the value of FDD, 3.84 Mcps TDD and 1.28 Mcps TDD parameters are specified. All parameters apply to FDD, 3.84 Mcps TDD and 1.28 Mcps TDD modes, unless explicitly stated otherwise. It should be noted that in this respect default configurations differ from pre-defined configurations, which only include parameter values for one mode.
- NOTE 4: The transport format sizes, indicated in the following table, concern the RLC PDU size, since all configurations concern dedicated channels. The transport block sizes indicated in TS 34.108 are different since these include the size of the MAC header.
- NOTE 5: The tabular values included in this subclause, represent the actual IE values as in clause 10, and not the ASN.1 representation of these values.

### section omitted

Configuration	12.65/8.85/6.6 kbps
garanon	speech +
	3.4 kbps signalling
B (2) (2)	
Ref 34.108	62
Default configuration	13
RB INFORMATION	
rb-Identity	RB1: 1, RB2: 2,
15-Identity	RB3: 3, RB5: 5,
	RB6: 6, RB8: 8
rlc-InfoChoice	RIc-info
>ul-RLC-Mode	RB1: UM
	RB2- RB3: AM
	RB5-RB6: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3:
Discardiviode	NoDiscard
	RB5- RB6: N/A
>>>maxDat	RB1: N/A
	RB2- RB3: 15
	RB5- RB6: N/A
>>transmissionWindowSiz	RB1: N/A
е	RB2- RB3: 128 for
	UEs with more than 10 kbyte "total RLC
	AM buffer size" and
	32 otherwise
	RB5- RB6: N/A
>>timerRST	RB1: N/A
	RB2- RB3: 300
	RB5- RB6: N/A
>>max-RST	RB1: N/A RB2- RB3: 1
	RB5- RB6: N/A
>>pollingInfo	RB1: N/A
, , pege	RB2- RB3: as below
	RB5- RB6: N/A
>>>lastTransmissionPDU-	RB2- RB3: FALSE
Poll	DDO DDO EN OF
>>>lastRetransmissionPD	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A
	RB5- RB6: FALSE
>dl-RLC-Mode	RB1: UM
	RB2- RB3: AM
	RB5- RB6: TM
>>inSequenceDelivery	RB8: TM RB1: N/A
>>inSequenceDelivery	RB2- RB3: TRUE
	RB5- RB6: N/A
	RB8: N/A
>>receivingWindowSize	RB1: N/A
	RB2- RB3: 128 for
	UEs with more than
	10 kbyte "total RLC AM buffer size" and
	32 otherwise
	RB5- RB6: N/A
	RB8: N/A
>>dl-RLC-StatusInfo	RB1: N/A
	RB2- RB3: as below
	RB5- RB6: N/A
s stimor Otatua Destrict	RB8: N/A
>>>timerStatusProhibit >>>missingPDU-Indicator	RB2- RB3: 100 RB2- RB3: FALSE
//>////	NDZ- NDS. FALSE

>>>timerStatusPeriodic	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A
	RB5- RB6: FALSE
	RB8: FALSE
rb-MappingInfo	
>UL-	OneLogicalChannel
1	Offecogleaterialifier
LogicalChannelMappings	5.
>>ul-	Dch
TransportChannelType	
>>>transportChannelIdentit	RB1- RB3: 4
У	RB5: 1, RB6: 2.
>>logicalChannelIdentity	RB1: 1, RB2: 2,
	RB3: 3
	RB5- RB6: N/A
>>rlc-SizeList	RB1- RB3:
	configured
	RB5- RB6: N/A
>>mac-	RB1: 1, RB2: 2,
LogicalChannelPriority	RB3: 3
13 12 12 12 13 13 13 13	RB5- RB6: 5
>DL-	
logicalChannelMappingList	
>>Mapping option 1	One manning entice
	One mapping option
>>>dl-	Dch
TransportChannelType	DD4 DD2 4
>>>>transportChannellden	RB1- RB3: 4
tity	RB5: 1, RB6: 2,
	RB8: 5
>>>logicalChannelIdentity	RB1: 1, RB2: 2,
	RB3: 3
	RB5- RB6: N/A
	RB8: N/A
TrCH INFORMATION PER	
TrCH	
UL-	
AddReconfTransChInfoList	
>Uplink transport channel	dch
type	4011
>transportChannelIdentity	TrCH1: 1, TrCH2: 2,
	TrCH1: 1, 110H2: 2,
>transportEarmatCat	DedicatedTransChT
>transportFormatSet	
A	FS
>>dynamicTF-information	T 0114 (2 =5)
>>>tf0/ tf0,1	TrCH1: (0x72)
	TrCH2: (0x 181)
	TrCH4: (0x144,
	1x144)
>>>rlcSize	BitMode
>>>>sizeType	TrCH1: type 1: 72
[	TrCH2: type 42:
	<del>181</del> part1= 6, part2=
	5
Ϊ	TrCH4: 2: type 2,
	part1= 2, part2= 0
	(144)
>>>numberOfTbSizeList	TrCH1-2: Zero
IIGITIDOTOTTDOIZGEIST	TrCH4: Zero, one
>>> ogicalChannell_ist	All
>>>>logicalChannelList	
>>>tf 1	TrCH1: (1x40)
	TrCH2: (1x 78)
	TrCH4: N/A
>>>numberOfTransportBI	TrCH4: N/A TrCH1: One
ocks	TrCH4: N/A TrCH1: One TrCH2: One
	TrCH4: N/A TrCH1: One
ocks	TrCH4: N/A TrCH1: One TrCH2: One
ocks >>>rlc-Size	TrCH4: N/A TrCH1: One TrCH2: One TrCH1-2: BitMode

>>>>numberOfTbSizeList	TrCH1-2: One
>>>>logicalChannelList	TrCH1: all
>>>tf 2	TrCH1: (1x54)
	TrCH2: (1x113)
	TrCH4: N/A
>>>numberOfTransportBl	TrCH1: One
ocks	TrCh2: One
>>>rlc-Size	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 54
	TrCH2: type 1: 113
>>>>numberOfTbSizeList	TrCH1: One
	TrCH2: One
>>>logicalChannelList	TrCH1: all
	TrCH2: all
>>>tf 3	TrCH1: (1x64)
>>u 3	TrCH2: (1x181)
1 007	TrCH4: N/A
>>>numberOfTransportBl	TrCH1: One
ocks	TrCh2: One
>>>rlc-Size	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 64
	TrCH2: type 42:
	181 part1 = 6, part2 =
	5
>>>numberOfTbSizeList	TrCH1: One
	TrCH2: One
had a logical Channell ist	TrCH1: all
>>>logicalChannelList	
	TrCH2: all
>>>tf 4	TrCH1: (1x72)
	TrCH2: N/A
	TrCH4: N/A
>>>>numberOfTransportBl	TrCH1: One
ocks	
	TrCH1: BitMode
>>>rlc-Size	TrCH1: BitMode TrCH1: type 1: 72
>>>rlc-Size >>>>sizeType	TrCH1: type 1: 72
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList	TrCH1: type 1: 72 TrCH1: One
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList	TrCH1: type 1: 72
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information	TrCH1: type 1: 72 TrCH1: One TrCH1: all
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList	TrCH1: type 1: 72 TrCH1: One TrCH1: all TrCH1- TrCH2: 20
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti	TrCH1: type 1: 72 TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH4: 40
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: type 1: 72 TrCH1: One TrCH1: all TrCH1- TrCH2: 20
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti	TrCH1: type 1: 72 TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH4: 40
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2:
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH1: 200
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH1: 200 TrCH2: 190
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH4: 170
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL-	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL- AddReconfTransChInfoList	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL- AddReconfTransChInfoList >Downlink transport	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  >>>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL- AddReconfTransChInfoList >Downlink transport	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL- AddReconfTransChInfoList >Downlink transport channel type >dl-	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  >>>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL- AddReconfTransChInfoList >Downlink transport channel type >dl-	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  >>>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only on="" td="" tf0="" trch1<=""></only>
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  >>>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" on="" on<="" td="" tf0="" tf1="" trch1=""></only>
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  >>>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" different<="" on="" td="" tf0="" tf1="" trch1="" trch5=""></only>
>>>rlc-Size >>>>sizeType >>>logicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" on="" on<="" td="" tf0="" tf1="" trch1=""></only>
>>>rlc-Size >>>>sizeType >>>sologicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>rateMatchingAttribute  >>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode  >>transportFormatSet	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" different<="" on="" td="" tf0="" tf1="" trch1="" trch5=""></only>
>>>rlc-Size >>>>sizeType >>>logicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>rateMatchingAttribute  >>crc-Size  DL-AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode  >>transportFormatSet >>>dynamicTF-information	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" below="" different="" on="" shown="" tf0="" tf1="" trch1="" trch5=""></only>
>>>rlc-Size >>>>sizeType >>>sologicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>rateMatchingAttribute  >>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode  >>transportFormatSet	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" below="" different="" on="" shown="" tf0="" tf1="" trch1="" trch5="">  TrCH1: (1x0)</only>
>>>rlc-Size >>>>sizeType >>>logicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>rateMatchingAttribute  >>crc-Size  DL-AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode  >>transportFormatSet >>>dynamicTF-information	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" below="" different="" on="" shown="" tf0="" tf1="" trch1="" trch5=""></only>
>>>rlc-Size >>>>sizeType >>>logicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>rateMatchingAttribute  >>crc-Size  DL-AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode  >>transportFormatSet >>>dynamicTF-information	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" below="" different="" on="" shown="" tf0="" tf1="" trch1="" trch5="">  TrCH1: (1x0)</only>

>>>>sizeType	TrCH1: type 1: 0
	TrCH5: type 1: 3
>>>>numberOfTbSizeList	TrCH1: One
	TrCH5: Zero, one
>>>>logicalChannelList	All
>>>semistaticTF-	same as UL except
Information	for TrCH5
>>>>tti	TrCH5: 20
>>>>channelCodingType	Convolutional
>>>>codingRate	TrCH5: Third
>>>rateMatchingAttribute	TrCH5: 205
>>>crc-Size	TrCH5: 8
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2,
77021101110	TrCH4: 4,
>dch-QualityTarget	
>>bler-QualityValue	TrCH1: 7x10 <sup>-3</sup>
22 biol Quality value	TrCH2: Absent
	TrCH4- TrCH5:
	Absent
TrCH INFORMATION,	Absent
COMMON	
ul-CommonTransChInfo	
	1
>tfcs-ID (TDD only) >sharedChannelIndicator	FALSE
	FALSE
(TDD only) > tfc-Subset	Aboost not required
	Absent, not required
>ul-TFCS	Normal TFCI
" " " " " " " " " " " " " " " " " " " "	signalling
>>explicitTFCS-	Complete
ConfigurationMode	
>>>ctfcSize	Ctfc6Bit
>>>TFCS representation	Addition
>>>>TFC list	
>>>>TFC 1	(TF0, TF0, TF0)
<i>&gt;&gt;&gt;&gt;&gt;</i>	(110, 110, 110)
>>>>>ctfc	0
>>>>>ctfc >>>>>gainFactorInform ation	0
>>>>>ctfc >>>>>gainFactorInform ation	0
>>>>>ctfc >>>>>gainFactorInform	0 Computed
>>>>>ctfc >>>>>gainFactorInform ation >>>>>referenceTFCId	0
>>>>>ctfc >>>>>gainFactorInform ation >>>>>TFC 2 >>>>>ctfc	O Computed  O (TF1, TF0, TF0)  1
>>>>>ctfc >>>>>gainFactorInform ation >>>>>TFC 2	O Computed O (TF1, TF0, TF0)
>>>>>ctfc >>>>>gainFactorInform ation >>>>>referenceTFCId >>>>>tfC 2 >>>>>ctfc >>>>>>ctfc >>>>>painFactorInform	O Computed  O (TF1, TF0, TF0)  1
>>>>>ctfc >>>>>gainFactorInform ation >>>>>referenceTFCId >>>>>TFC 2 >>>>>ctfc >>>>>>gainFactorInform ation >>>>>>cffc >>>>>>>bcffc >>>>>>sgainFactorInform ation >>>>>>>	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A
>>>>>ctfc >>>>>gainFactorInform ation >>>>>TFC 2 >>>>>ctfc >>>>>ctfc >>>>>cfc >>>>>breferenceTFCId >>>>>ctfc >>>>>breferenceTFCId >>>>>breferenceTFCId >>>>>ctfc >>>>>breferenceTFCId >>>>>breferenceTFCId >>>>>breferenceTFCId >>>>>breferenceTFCId >>>>>breferenceTFCId >>>>>breferenceTFCId >>>>>breferenceTFCId >>>>>breferenceTFCId >>>>>breferenceTFCId	0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A
$\begin{array}{l} >>>>>>ctfc\\ >>>>>gainFactorInform\\ ation\\ >>>>>referenceTFCId\\ >>>>>tfC 2\\ >>>>>ctfc\\ >>>>>sgainFactorInform\\ ation\\ >>>>>\beta c (FDD only)\\ >>>>>>\beta d\\ >>>>>referenceTFCId\\ >>>>>>>>ctfc\\ >>>>>>ctfc\\ >>>>>>ctfc\\ >>>>>ctfc\\ >>>>>ctfc\\ >>>>>ctfc\\ >>>>>ctfc\\ >>>>>ctfc\\ >>>>>ctfc\\ >>>>>ctfc\\ >>>>>ctfc\\ >>>>>>ctfc\\ >>>>>ctfc\\ >>>>>ctfc\\ >>>>>>ctfc\\ >>>>>ctfc\\ >>>>>>ctfc\\ >>>>>>ctfc\\ >>>>>ctfc\\ >>>>>ctfc\\ >>>>>>ctfc\\ >>>>>>ctfc\\ >>>>>ctfc\\ >>>>>>ctfc\\ >>>>>ctfc\\ >>>>>>ctfc\\ >>>>>>ctfc\\ >>>>>>ctfc\\ >>>>>>ctfc\\ >>>>>>ctfc\\ >>>>>>ctfc\\ >>>>>>ctfc\\ >>>>>>>ctfc\\ >>>>>>>>>ctfc\\ >>>>>>>>>ctfc\\ >>>>>>>>>>>>ctfc\\ >>>>>>>>>>ctfc\\ >>>>>>>>>>>>>>>>ctfc\\ >>>>>>>>>>>>>>ctfc\\ >>>>>>>>>>>>>>>>>>>ctfc\\ >>>>>>>>>>>>>>>>>ctfc\\ >>>>>>>>>>>>>>>>>>>>ctfc\\ >>>>>>>>>>>>>>>>>>>>>>>>>>>ctfc\\ >>>>>>>>>>>>>>>>>>>>>>>>>>>>>ctfc\\ >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>$	0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0
$\begin{array}{l} >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> TFC 2 \\ >>>>> ctfc \\ >>>>> ctfc \\ >>>>> fc (FDD only) \\ >>>>> \beta d \\ >>>>> TFC 3 \\ >>>> TFC 3 \\ >>>>> TFC 3 \\ >>>> TFC 3 \\ >>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>>> TFC 3 \\ >>> TFC 3 \\ >>>> TFC 3 \\ >> TFC 3$	0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A
$\begin{array}{l} >>>>>ctfc \\ >>>>>gainFactorInform \\ ation \\ >>>>>TFC 2 \\ >>>>ctfc \\ >>>>>ctfc \\ >>>>>gainFactorInform \\ ation \\ >>>>>b (FDD only) \\ >>>>>b (FDD only) \\ >>>>>>referenceTFCId \\ >>>>>>tfC 3 \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>tfC 3 \\ >>>>>tfC 3 \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>tfC 7 \\ >>>>>tfC 3 \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>tfC 3 \\ >>>>>tfC 3 \\ >>>>>>tfC 3 \\ >>>>>>>tfC 7 \\ >>>>>>tfC 3 \\ >>>>>>tfC 7 \\ >>>>>>tfC 3 \\ >>>>>>>tfC 7 \\ >>>>>>tfC 3 \\ >>>>>>tfC 7 \\ >>>>>>>>tfC 7 \\ >>>>>>tfC 7 \\ >>>>>>>tfC 7 \\ >>>>>>tfC 7 \\ >>>>>>>tfC 7 \\ >>>>>>tfC 7 \\ >>>>>>tfC 7 \\ >>>>>>tfC 7 \\ >>>>>>tfC 7 \\ >>>>>>>tfC 7 \\ >>>>>>tfC 7 \\ >>>>>tfC 7 \\ >>>>>>tfC 7 \\ >>>>>tfC 7 \\ >>>>>>tfC 7 \\ >>>>>tfC 7 \\ >>tfC 7 \\ > tfC 7 \\ >>tfC 7 \\ > tfC 7 \\$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7
$\begin{array}{l} >>>>>>ctfc \\ >>>>>gainFactorInform \\ ation \\ >>>>>TFC 2 \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>bgainFactorInform \\ ation \\ >>>>>bgainFactorInform \\ ation \\ >>>>>bfc (FDD only) \\ >>>>>FeferenceTFCId \\ >>>>>TFC 3 \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>>ctfc \\ >>>>>>ctfc \\ >>>>>ctfc \\ >>>>>>ctfc \\ >>>>>>ctfc \\ >>>>>>ctfc \\ >>>>>>ctfc \\ >>>>>>>>>>ctfc \\ >>>>>>>>>>>>ctfc \\ >>>>>>>>>>>>>>>>>>ctfc \\ >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>$	0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0
$\begin{array}{l} >>>>>>ctfc \\ >>>>>gainFactorInform \\ ation \\ >>>>>TFC 2 \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>sgainFactorInform \\ ation \\ >>>>>b (FDD only) \\ >>>>>b (FDD only) \\ >>>>>TFC 3 \\ >>>>>ctfc \\ >>>>ctfc \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>ctfc \\ >>>>ctfc \\ >>>>ctfc \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>ctfc \\ >>>>ctfc \\ >>>>ctfc \\ >>>>ctfc \\ >>ctfc $	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed
$\begin{array}{l} >>>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> referenceTFCId \\ >>>> TFC 2 \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> \betac (FDD only) \\ >>>>> FerenceTFCId \\ >>>>> tfc 3 \\ >>>>> ctfc \\ >>>>> ctfc \\ >>>>> referenceTFCId \\ >>>>> tfc 3 \\ >>>>> ctfc \\ >>>>> ctfc \\ >>>>> referenceTFCId \\ >>>> referenceTFCId \\ >>>> referenceTFCId \\ >>>> referenceTFCId \\ >>>>> referenceTFCId \\ >>>> referenceTFCId \\ >>> referenceTFCId \\ >> referenceTFCId \\ >>> referenceTFCId \\ >> referenceTFC$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{referenceTFCId} \\ >>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \beta c \text{ (FDD only)} \\ >>>>> \beta d \\ >>>>> \text{TFC 3} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>> \text{ctfc} \\ >> \text{ctfc} \\ >>> \text{ctfc} \\ >> \text{ctfc} \\ >>> \text{ctfc} \\ >> \text{ctfc}$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \beta c \text{ (FDD only)} \\ >>>>> \beta d \\ >>>>> \text{TFC 3} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>> \text{ctfc} \\ >>> \text{ctfc} \\ >>> \text{ctfc} \\ >>> \text{ctfc} \\ >> \text$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \beta c \text{ (FDD only)} \\ >>>>> \beta d \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{ctfc} \\ >>>>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>> \text{ctfc} \\ >>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>> \text{ctfc} \\ >> ctfc$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \beta c \text{ (FDD only)} \\ >>>>> \beta d \\ >>>>> \text{TFC 3} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>> \text{ctfc} \\ >>> \text{ctfc} \\ >>> \text{ctfc} \\ >>> \text{ctfc} \\ >> \text$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \beta c \text{ (FDD only)} \\ >>>>> \beta d \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{ferenceTFCId} \\ >>>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>> \text{ctfc} \\ >> \text{ctfc} \\ >>>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>>> \text{ctfc} \\ >>> \text{ctfc} \\ >> ct$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \beta c \text{ (FDD only)} \\ >>>>> \beta d \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> for a constant of the consta$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13
$\begin{array}{l} >>>>>>ctfc \\ >>>>>>gainFactorInform \\ ation \\ >>>>>TFC 2 \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>fc (FDD only) \\ >>>>>fc (FDD only) \\ >>>>>ctfc \\ >>>>>ctfc \\ >>>>>pd \\ >>>>>ctfc \\ >>>>>pd \\ >>>>ctfc \\ >>>>>pd \\ >>>>>tfc (FDD only) \\ >>>>>fc (FDD only) \\ >>>>>tfc (FDD only) \\ >>>>>pd (FDD only) \\ >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13 Computed
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \beta c \text{ (FDD only)} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ ation$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13 Computed
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \beta c \text{ (FDD only)} \\ >>>>> \beta d \\ >>>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> for a particle of the property of the $	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13 Computed  O (TF4, TF3, TF0)
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{referenceTFCId} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \beta c \text{ (FDD only)} \\ >>>>> \beta d \\ >>>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ \text{ation} \\ \text{ation} \\ \text{ation} \\ \text{ation} \\ \text{ation}$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13 Computed  O (TF4, TF3, TF0)  19
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ >>>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>>> \text{gainFactorInform} \\ >>>>> \text{gainFactorInform} \\ >>>>>> \text{gainFactorInform} \\ >>>>> g$	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13 Computed  O (TF4, TF3, TF0)
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{gainFactorInform} \\ \text{ation} \\ >>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{gainFactorInform} \\ \text{ation} \\ >>> \text{gainFactorInform} \\ \text{ation} \\ >> \text{gainFactorInform} \\ >> $	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13 Computed  O (TF4, TF3, TF0)  19 Computed
$\begin{array}{lll} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{gainFactorInform} \\ \text{ation} $	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13 Computed  O (TF4, TF3, TF0)  19 Computed  O
$\begin{array}{l} >>>>>> \text{ctfc} \\ >>>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{TFC 2} \\ >>>>> \text{ctfc} \\ >>>>> \text{ctfc} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{gainFactorInform} \\ \text{ation} \\ >>> \text{gainFactorInform} \\ \text{ation} \\ >>>> \text{gainFactorInform} \\ \text{ation} \\ >>> \text{gainFactorInform} \\ \text{ation} \\ >> \text{gainFactorInform} \\ >> $	O Computed  O (TF1, TF0, TF0)  1 Computed  N/A  N/A  O (TF2, TF1, TF0)  7 Computed  O (TF3, TF2, TF0)  13 Computed  O (TF4, TF3, TF0)  19 Computed

>>>>>gainFactorInform	Computed
ation	
>>>>>βc (FDD only)	
>>>>>βd	
>>>>>>referenceTFCld	0
>>>>TFC 7	(TF1, TF0, TF1)
>>>>>ctfc	21
>>>>>gainFactorInform	Computed
ation	Compated
>>>>>>referenceTFCId	0
>>>>TFC 8	(TF2, TF1, TF1)
>>>>>ctfc	27
>>>>>gainFactorInform	computed
ation	,
>>>>>>βc (FDD only)	
>>>>>βd	
>>>>>>referenceTFCld	0
>>>>TFC 9	(TF3, TF2, TF1)
>>>>>ctfc	33
>>>>>gainFactorInform	computed
ation	
>>>>>>referenceTFCId	0
>>>>TFC 10	(TF4, TF3, TF1)
>>>>>ctfc	39
>>>>>gainFactorInform	signalled
	signalied
ation	
>>>>>βc (FDD only)	11
>>>>>βd	15
>>>>>referenceTFCld	0
> TFC subset list	
>>TFC subset 1	(speech rate 6.6)
>>> Allowed transport	(TFC1, TFC2,
format combination list	TFC3, TFC6, TFC7,
Torrial combination list	TFC8)
>>TFC subset 2	(speech rate 8.85)
>>> Allowed transport	(TFC1, TFC2,
format combination list	TFC3, TFC4, TFC6,
	TFC7, TFC8, TFC9)
>>TFC subset 3	(speech rate 12.65)
>>> Allowed transport	(TFC1, TFC2,
format combination list	TEC3 TEC4 TEC5
Torrida combination not	TFC3, TFC4, TFC5, TFC6, TFC7, TFC8,
	TFC9, TFC10)
dl Commercia Tura in Cl. L. (	11 00, 15010)
dl-CommonTransChInfo	
>tfcs-SignallingMode	Independent
ul-CommonTransChInfo	
>tfcs-ID (TDD only)	1
>sharedChannelIndicator	FALSE
(TDD only)	
	Aboost not required
> tfc-Subset	Absent, not required
>dl-TFCS	Normal TFCI
	signalling
>>explicitTFCS-	Complete
ConfigurationMode	
>>ctfcSize	Ctfc8Bit
>>>TFCS representation	Addition
TECC "-+	Addition
>>>>TFCS list	/TE0 TE0 TE0
>>>>TFC 1	(TF0, TF0, TF0,
	TF0)
	0
>>>>>ctfc	U
>>>>>ctfc	-
>>>>>ctfc >>>>>TFC 2	(TF1, TF0, TF0,
	-

>>>>TFC 3	(TF2, TF1, TF0, TF0)
>>>>>ctfc	7
>>>>TFC 4	(TF3, TF2, TF0,
777771101	TF0)
>>>>>ctfc	13
>>>>TFC 5	(TF4, TF3, TF0,
	TF0)
>>>>>ctfc	19
>>>>TFC 6	(TF0, TF0, TF1,
	TF0)
>>>>>ctfc	20
>>>>TFC 7	(TF1, TF0, TF1,
	TF0)
>>>>>ctfc	21
>>>>TFC 8	(TF2, TF1, TF1,
	TF0)
>>>>>ctfc	27
>>>>TFC 9	(TF3, TF2, TF1,
	TF0)
>>>>>ctfc	33
>>>>TFC 10	(TF4, TF3, TF1,
	TF0)
>>>>>ctfc	39
>>>>TFC 11	(TF0, TF0, TF0,
	TF1)
>>>>>ctfc	40
>>>>TFC 12	(TF1, TF0, TF0,
	TF1)
>>>>>ctfc	41
>>>>TFC 13	(TF2, TF1, TF0,
	TF1)
>>>>>ctfc	47
>>>>TFC 14	(TF3, TF2, TF0,
	TF1)
>>>>>ctfc	53
>>>>TFC 15	(TF4, TF3, TF0,
	TF1)
>>>>>ctfc	59
>>>>TFC 16	(TF0, TF0, TF1,
	TF1)
>>>>>ctfc	60
>>>>TFC 17	(TF1, TF0, TF1,
	TF1)
>>>>>ctfc	61
>>>>TFC 18	(TF2, TF1, TF1,
	TF1)
>>>>>ctfc	67
>>>>TFC 19	(TF3, TF2, TF1,
	TF1)
>>>>>ctfc	73
>>>>TFC 20	(TF4, TF3, TF1,
-	TF1)
>>>>>ctfc	79
PhyCH INFORMATION	
FDD	
UL-DPCH-InfoPredef	
>ul-DPCH-	
PowerControlInfo	A1 '0 4
>>powerControlAlgorithm	Algorithm 1
>>>tpcStepSize	1 dB
>tfci-Existence	TRUE
>puncturingLimit	0.84
DL-	
CommonInformationPredef	

>dl-DPCH-InfoCommon	
>>spreadingFactor	128
>>tfci-Existence	FALSE
>>pilotBits	4
>>positionFixed	Fixed

Athens, Greece,	, 9-13	3 Ma	y 200	5										
			(	CHAN	GE	REC	UE	EST	•				С	R-Form-v7.1
*	25.	331	CR	2576		жrev	-	ж	Curr	ent ver	sion:	6.5	0.0	ж
For HELP on u	_			e bottom o	_	_				·				nbols. etwork
Title: Ж	Def	ault c	onfigur	ation 13										
Source: #	RAI	N WG	2											
Work item code: ₩	TEI	5							ı	Date: ៖	€ 09	9/05/20	05	
Category: ∺	Detai	F (cor A (cor B (add C (fun D (edi led ex	rection) rrespondition of actional itorial m planatic	owing cated ds to a confecture), modification ons of the a TR 21.900	rection on of fe ) above (	in an ea			Us e)	ease: 8 e <u>one</u> o Ph2 R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	of the f (GS (Re) (Re) (Re) (Re) (Re) (Re)	el-6 following M Phase lease 19 lease 19 lease 49 lease 49 lease 69 lease 7	se 2) 996) 997) 998) 999) )	eases:
Reason for change	e: #	size	type. 7	nd TFI3 c Type 1 has type 2 sh	s a ra	nge of (	012							
Summary of chang	ge: ૠ	char the c Impa A UE A U	nged to configu act An E that h	ort format use RLC ration 62 alysis: nas not im that has n n.	size t specif	type 2 ( fied in 3 ented a	part1 4.108	= 6, p 3. ling to	oart2=	8) in c	rder requ	to be c	oher	ent with
Consequences if not approved:	*	canr The Han	not be i behavi dover t default	nd UTRAI used acro iour of UE to UTRAN t configura	ss the wher I, will I	e air inte n defaul be unsp	rface t con ecifie	e (defa figura ed.	ault co	onfigura 3 is us	ation ed up	13 can oon Inte	not l er-R	oe used) AT
Clauses affected:	H	13.7	•											
Other specs Affected:	*	Y N X X	Othe Test	r core spe specificat Specifica	ions	tions	¥							

Other comments:

# How to create CRs using this form:

 $\mathfrak{R}$ 

- 1) Fill out the above form. The symbols above marked \( \mathbb{X} \) 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 <a href="ftp://ftp.3gpp.org/specs/">ftp://ftp.3gpp.org/specs/</a> 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.

# 13.7 Parameter values for default radio configurations

The UE shall support the use of the default radio configurations that are specified in the following.

NOTE 1: These configurations are based on [41] and cover a number of RAB and signalling connection configurations.

In the table that is used to specify the parameter values for these default configurations, the following principles are used:

- Optional IEs that are not used are omitted;
- In case no parameter value is specified in a column, this means the value given the previous (left side) column applies.
- NOTE 2: If needed, signalling radio bearer RB4 is established after the completion of handover.
- NOTE 3: For each default configuration, the value of FDD, 3.84 Mcps TDD and 1.28 Mcps TDD parameters are specified. All parameters apply to FDD, 3.84 Mcps TDD and 1.28 Mcps TDD modes, unless explicitly stated otherwise. It should be noted that in this respect default configurations differ from pre-defined configurations, which only include parameter values for one mode.
- NOTE 4: The transport format sizes, indicated in the following table, concern the RLC PDU size, since all configurations concern dedicated channels. The transport block sizes indicated in TS 34.108 are different since these include the size of the MAC header.
- NOTE 5: The tabular values included in this subclause, represent the actual IE values as in clause 10, and not the ASN.1 representation of these values.

### section omitted

Configuration	12.65/8.85/6.6 kbps
garanon	speech +
	3.4 kbps signalling
B (2) (2)	
Ref 34.108	62
Default configuration	13
RB INFORMATION	
rb-Identity	RB1: 1, RB2: 2,
15-Identity	RB3: 3, RB5: 5,
	RB6: 6, RB8: 8
rlc-InfoChoice	RIc-info
>ul-RLC-Mode	RB1: UM
	RB2- RB3: AM
	RB5-RB6: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3:
Discardiviode	NoDiscard
	RB5- RB6: N/A
>>>maxDat	RB1: N/A
	RB2- RB3: 15
	RB5- RB6: N/A
>>transmissionWindowSiz	RB1: N/A
е	RB2- RB3: 128 for
	UEs with more than 10 kbyte "total RLC
	AM buffer size" and
	32 otherwise
	RB5- RB6: N/A
>>timerRST	RB1: N/A
	RB2- RB3: 300
	RB5- RB6: N/A
>>max-RST	RB1: N/A RB2- RB3: 1
	RB5- RB6: N/A
>>pollingInfo	RB1: N/A
, , pege	RB2- RB3: as below
	RB5- RB6: N/A
>>>lastTransmissionPDU-	RB2- RB3: FALSE
Poll	DDO DDO EN OF
>>>lastRetransmissionPD	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A
	RB5- RB6: FALSE
>dl-RLC-Mode	RB1: UM
	RB2- RB3: AM
	RB5- RB6: TM
>>inSequenceDelivery	RB8: TM RB1: N/A
>>inSequenceDelivery	RB2- RB3: TRUE
	RB5- RB6: N/A
	RB8: N/A
>>receivingWindowSize	RB1: N/A
	RB2- RB3: 128 for
	UEs with more than
	10 kbyte "total RLC AM buffer size" and
	32 otherwise
	RB5- RB6: N/A
	RB8: N/A
>>dl-RLC-StatusInfo	RB1: N/A
	RB2- RB3: as below
	RB5- RB6: N/A
s stimor Otatua Destrict	RB8: N/A
>>>timerStatusProhibit >>>missingPDU-Indicator	RB2- RB3: 100 RB2- RB3: FALSE
//>////	NDZ- NDS. FALSE

>>>timerStatusPeriodic	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A
	RB5- RB6: FALSE
	RB8: FALSE
rb-MappingInfo	
>UL-	OneLogicalChannel
1	Offecogleaterialifier
LogicalChannelMappings	5.
>>ul-	Dch
TransportChannelType	
>>>transportChannelIdentit	RB1- RB3: 4
У	RB5: 1, RB6: 2.
>>logicalChannelIdentity	RB1: 1, RB2: 2,
	RB3: 3
	RB5- RB6: N/A
>>rlc-SizeList	RB1- RB3:
	configured
	RB5- RB6: N/A
>>mac-	RB1: 1, RB2: 2,
LogicalChannelPriority	RB3: 3
13 12 12 12 13 13 13 13 13	RB5- RB6: 5
>DL-	
logicalChannelMappingList	
>>Mapping option 1	One manning antica
	One mapping option
>>>dl-	Dch
TransportChannelType	DD4 DD2 4
>>>>transportChannellden	RB1- RB3: 4
tity	RB5: 1, RB6: 2,
	RB8: 5
>>>logicalChannelIdentity	RB1: 1, RB2: 2,
	RB3: 3
	RB5- RB6: N/A
	RB8: N/A
TrCH INFORMATION PER	
TrCH	
UL-	
AddReconfTransChInfoList	
>Uplink transport channel	dch
type	4011
>transportChannelIdentity	TrCH1: 1, TrCH2: 2,
	TrCH1: 1, 11CH2: 2,
>transportEarmatCat	DedicatedTransChT
>transportFormatSet	
A	FS
>>dynamicTF-information	T 0114 (2 =5)
>>>tf0/ tf0,1	TrCH1: (0x72)
	TrCH2: (0x 181)
	TrCH4: (0x144,
	1x144)
>>>rlcSize	BitMode
>>>>sizeType	TrCH1: type 1: 72
[	TrCH2: type 42:
	<del>181</del> part1= 6, part2=
	5
Ϊ	TrCH4: 2: type 2,
	part1= 2, part2= 0
	(144)
>>>numberOfTbSizeList	TrCH1-2: Zero
IIGITIDOTOTTDOIZGEIST	TrCH4: Zero, one
>>> ogicalChannell_ist	All
>>>>logicalChannelList	
>>>tf 1	TrCH1: (1x40)
	TrCH2: (1x 78)
	TrCH4: N/A
>>>numberOfTransportBI	TrCH4: N/A TrCH1: One
ocks	TrCH4: N/A TrCH1: One TrCH2: One
	TrCH4: N/A TrCH1: One
ocks	TrCH4: N/A TrCH1: One TrCH2: One
ocks >>>rlc-Size	TrCH4: N/A TrCH1: One TrCH2: One TrCH1-2: BitMode

>>>>numberOfTbSizeList	TrCH1-2: One
>>>>logicalChannelList	TrCH1: all
>>>tf 2	TrCH1: (1x54)
	TrCH2: (1x113)
	TrCH4: N/A
>>>numberOfTransportBl	TrCH1: One
ocks	TrCh2: One
>>>rlc-Size	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 54
	TrCH2: type 1: 113
>>>>numberOfTbSizeList	TrCH1: One
	TrCH2: One
>>>logicalChannelList	TrCH1: all
	TrCH2: all
>>>tf 3	TrCH1: (1x64)
>>u 3	TrCH2: (1x181)
1 007	TrCH4: N/A
>>>numberOfTransportBl	TrCH1: One
ocks	TrCh2: One
>>>rlc-Size	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 64
	TrCH2: type 42:
	181 part1 = 6, part2 =
	5
>>>numberOfTbSizeList	TrCH1: One
	TrCH2: One
had a logical Channell ist	TrCH1: all
>>>logicalChannelList	
	TrCH2: all
>>>tf 4	TrCH1: (1x72)
	TrCH2: N/A
	TrCH4: N/A
>>>>numberOfTransportBl	TrCH1: One
ocks	
	TrCH1: BitMode
>>>rlc-Size	TrCH1: BitMode TrCH1: type 1: 72
>>>rlc-Size >>>>sizeType	TrCH1: type 1: 72
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList	TrCH1: type 1: 72 TrCH1: One
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList	TrCH1: type 1: 72
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information	TrCH1: type 1: 72 TrCH1: One TrCH1: all
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList	TrCH1: type 1: 72 TrCH1: One TrCH1: all TrCH1- TrCH2: 20
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti	TrCH1: type 1: 72 TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH4: 40
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: type 1: 72 TrCH1: One TrCH1: all TrCH1- TrCH2: 20
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti	TrCH1: type 1: 72 TrCH1: One TrCH1: all TrCH1- TrCH2: 20 TrCH4: 40
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2:
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti >>>channelCodingType	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH1: 200
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH1: 200 TrCH2: 190
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH4: 170
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL-	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL- AddReconfTransChInfoList	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL- AddReconfTransChInfoList >Downlink transport	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  >>>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>numberOfTbSizeList >>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL- AddReconfTransChInfoList >Downlink transport	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL- AddReconfTransChInfoList >Downlink transport channel type >dl-	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  >>>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  DL- AddReconfTransChInfoList >Downlink transport channel type >dl-	TrCH1: type 1: 72 TrCH1: One TrCH1: all  TrCH1- TrCH2: 20 TrCH4: 40 Convolutional TrCH1- TrCH2: Third TrCH4: Third TrCH4: Third TrCH2: 190 TrCH2: 190 TrCH4: 170 TrCH1: 12 TrCH2: 0 TrCH4: 16
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  >>>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only on="" td="" tf0="" trch1<=""></only>
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  >>>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" on="" on<="" td="" tf0="" tf1="" trch1=""></only>
>>>rlc-Size >>>>sizeType >>>>logicalChannelList >>semistaticTF-Information >>>tti  >>>channelCodingType >>>codingRate  >>>rateMatchingAttribute  >>>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" different<="" on="" td="" tf0="" tf1="" trch1="" trch5=""></only>
>>>rlc-Size >>>>sizeType >>>logicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" on="" on<="" td="" tf0="" tf1="" trch1=""></only>
>>>rlc-Size >>>>sizeType >>>sologicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>rateMatchingAttribute  >>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode  >>transportFormatSet	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" different<="" on="" td="" tf0="" tf1="" trch1="" trch5=""></only>
>>>rlc-Size >>>>sizeType >>>logicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>rateMatchingAttribute  >>crc-Size  DL-AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode  >>transportFormatSet >>>dynamicTF-information	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" below="" different="" on="" shown="" tf0="" tf1="" trch1="" trch5=""></only>
>>>rlc-Size >>>>sizeType >>>sologicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>rateMatchingAttribute  >>crc-Size  DL- AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode  >>transportFormatSet	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" below="" different="" on="" shown="" tf0="" tf1="" trch1="" trch5="">  TrCH1: (1x0)</only>
>>>rlc-Size >>>>sizeType >>>logicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>rateMatchingAttribute  >>crc-Size  DL-AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode  >>transportFormatSet >>>dynamicTF-information	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" below="" different="" on="" shown="" tf0="" tf1="" trch1="" trch5=""></only>
>>>rlc-Size >>>>sizeType >>>logicalChannelList >>semistaticTF-Information >>tti  >>channelCodingType >>>codingRate  >>rateMatchingAttribute  >>crc-Size  DL-AddReconfTransChInfoList >Downlink transport channel type >dl- TransportChannelIdentity >tfs-SignallingMode  >>transportFormatSet >>>dynamicTF-information	TrCH1: type 1: 72  TrCH1: One  TrCH1: all  TrCH1- TrCH2: 20  TrCH4: 40  Convolutional  TrCH1- TrCH2: Third  TrCH4: Third  TrCH4: Third  TrCH2: 190  TrCH2: 190  TrCH4: 170  TrCH4: 16  dch  Independent <only and="" are="" below="" different="" on="" shown="" tf0="" tf1="" trch1="" trch5="">  TrCH1: (1x0)</only>

>>>>sizeType	TrCH1: type 1: 0
	TrCH5: type 1: 3
>>>>numberOfTbSizeList	TrCH1: One
	TrCH5: Zero, one
>>>>logicalChannelList	All
>>>semistaticTF-	same as UL except
Information	for TrCH5
>>>>tti	TrCH5: 20
>>>>channelCodingType	Convolutional
>>>>codingRate	TrCH5: Third
>>>rateMatchingAttribute	TrCH5: 205
>>>crc-Size	TrCH5: 8
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2,
77021101110	TrCH4: 4,
>dch-QualityTarget	
>>bler-QualityValue	TrCH1: 7x10 <sup>-3</sup>
22 biol Quality value	TrCH2: Absent
	TrCH4- TrCH5:
	Absent
TrCH INFORMATION,	Absont
COMMON	
ul-CommonTransChInfo	
>tfcs-ID (TDD only)	1
>tics-iD (TDD only) >sharedChannelIndicator	FALSE
(TDD only)	TALSE
> tfc-Subset	Absent, not required
	Normal TFCI
>ul-TFCS	
	signalling
>>explicitTFCS-	Complete
ConfigurationMode	O4-0D:
>>>ctfcSize	Ctfc6Bit
>>>>TFCS representation	Addition
>>>>TFC list	
>>>>TFC 1	(TF0, TF0, TF0)
>>>>>ctfc	0
>>>>>gainFactorInform	Computed
ation	
>>>>>>referenceTFCId	0
>>>>>TFC 2	(TF1, TF0, TF0)
>>>>>ctfc	1
>>>>>gainFactorInform	Computed
ation	
>>>>>βc (FDD only)	N/A
>>>>>βd	N/A
>>>>>referenceTFCId	0
>>>>TFC 3	(TF2, TF1, TF0)
>>>>>ctfc	7
>>>>>sgainFactorInform	Computed
ation	Joinpaleu
>>>>>>referenceTFCId	0
//////////////////////////////////////	~
>>>>TEC /	(TE3 TE3 TEA)
>>>>TFC 4	(TF3, TF2, TF0)
>>>>>ctfc	13
>>>>>ctfc >>>>>gainFactorInform	(TF3, TF2, TF0) 13 Computed
>>>>>ctfc >>>>>gainFactorInform ation	13
>>>>>ctfc >>>>>gainFactorInform ation >>>>>βc (FDD only)	13
>>>>>ctfc >>>>>gainFactorInform ation	13
>>>>>ctfc >>>>>gainFactorInform ation >>>>>βc (FDD only)	13
>>>>>ctfc >>>>>gainFactorInform ation >>>>>βc (FDD only) >>>>>βd	Computed 0
>>>>>ctfc >>>>>>gainFactorInform ation >>>>>βc (FDD only) >>>>>βd >>>>>TFC 5	Computed
>>>>>ctfc >>>>>gainFactorInform ation >>>>>βc (FDD only) >>>>>>βd >>>>>TFC 5 >>>>>ctfc	Computed  0 (TF4, TF3, TF0) 19
>>>>>ctfc >>>>>>gainFactorInform ation >>>>>βc (FDD only) >>>>>βd >>>>>TFC 5	Computed  0 (TF4, TF3, TF0)
$\begin{tabular}{lll} >>>>>>ctfc \\ >>>>>>gainFactorInform \\ ation \\ >>>>>>\beta c (FDD only) \\ >>>>>>\beta d \\ >>>>>TFC 5 \\ >>>>>ctfc \\ >>>>>gainFactorInform \\ ation \\ \end{tabular}$	Computed  0 (TF4, TF3, TF0) 19
$\begin{array}{l} >>>>> < \\ >>>>>> < \\ cmtext{c} \\ >>>>> < \\ cmtext{gainFactorInform} \\ ation \\ >>>>>  \\ \beta c \text{ (FDD only)} \\ >>>>> \\ \beta d \\ >>>>>  \\ referenceTFCId \\ >>>>> < \\ cmtext{cfc} \\ >>>>> < \\ cmtext{gainFactorInform} \\ ation \\ >>>>>  \\ referenceTFCId \\ >>>>>  \\ cmtext{gainFactorInform} \\ ation \\ >>>>>  \\ referenceTFCId \\ >>>>>  \\ referenceTFCId \\ >>>>>  \\ referenceTFCId \\ >>>>  \\ referenceTFCId \\ >>>  \\ referenceTFCId \\ >>  \\ referenceTF$	O (TF4, TF3, TF0) 19 Computed 0
$\begin{tabular}{lll} >>>>>>ctfc \\ >>>>>>gainFactorInform \\ ation \\ >>>>>>\beta c (FDD only) \\ >>>>>>\beta d \\ >>>>>TFC 5 \\ >>>>>ctfc \\ >>>>>gainFactorInform \\ ation \\ \end{tabular}$	O (TF4, TF3, TF0) 19 Computed

>>>>>gainFactorInform	Computed
ation	
>>>>>βc (FDD only)	
>>>>>βd	
>>>>>referenceTFCId	0
>>>>TFC 7	(TF1, TF0, TF1)
>>>>>ctfc	21
>>>>>gainFactorInform	Computed
ation	Compated
>>>>>>referenceTFCId	0
>>>>TFC 8	(TF2, TF1, TF1)
>>>>>ctfc	27
>>>>>gainFactorInform	computed
ation	
>>>>>βc (FDD only)	
>>>>>βd	
>>>>>>referenceTFCId	0
>>>>TFC 9	(TF3, TF2, TF1)
>>>>>>tfc	
	33
>>>>>gainFactorInform	computed
ation	
>>>>>>referenceTFCId	0
>>>>TFC 10	(TF4, TF3, TF1)
	· · · · · · · · · · · · · · · · · · ·
>>>>>ctfc	39
>>>>>gainFactorInform	signalled
ation	
>>>>>βc (FDD only)	11
	15
>>>>>βd	
>>>>>referenceTFCId	0
> TFC subset list	
>>TFC subset 1	(speech rate 6.6)
>>> Allowed transport	(TFC1, TFC2,
format combination list	1 1EC3 1EC6 1EC7
format combination list	TFC3, TFC6, TFC7,
	TFC8)
>>TFC subset 2	TFC8) (speech rate 8.85)
>>TFC subset 2 >>> Allowed transport	TFC8) (speech rate 8.85) (TFC1, TFC2,
>>TFC subset 2	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6,
>>TFC subset 2 >>> Allowed transport	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6,
>>TFC subset 2 >>> Allowed transport format combination list	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9)
>>TFC subset 2 >>> Allowed transport format combination list >>TFC subset 3	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65)
>>TFC subset 2 >>> Allowed transport format combination list >>TFC subset 3 >>> Allowed transport	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2,
>>TFC subset 2 >>> Allowed transport format combination list >>TFC subset 3	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2,
>>TFC subset 2 >>> Allowed transport format combination list >>TFC subset 3 >>> Allowed transport	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8,
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2,
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8,
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only)	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only)	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE Absent, not required
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only)	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS >>explicitTFCS-	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS  >>explicitTFCS- ConfigurationMode	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS >>explicitTFCS-ConfigurationMode >>>ctfcSize	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete  Ctfc8Bit
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS  >>explicitTFCS- ConfigurationMode >>>ctfcSize >>>>TFCS representation	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS  >>explicitTFCS- ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>TFCS list	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete  Ctfc8Bit
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS  >>explicitTFCS- ConfigurationMode >>>ctfcSize >>>>TFCS representation	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete  Ctfc8Bit Addition
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS  >>explicitTFCS- ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>TFCS list	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete  Ctfc8Bit Addition  (TF0, TF0, TF0,
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS  >>explicitTFCS- ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>TFCS list >>>>>TFCS 1	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete  Ctfc8Bit Addition  (TF0, TF0, TF0, TF0)
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS  >>explicitTFCS- ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>>TFCS list >>>>>>>TFCS 1	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete  Ctfc8Bit Addition  (TF0, TF0, TF0, TF0) 0
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS  >>explicitTFCS- ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>TFCS list >>>>>TFCS 1	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete  Ctfc8Bit Addition  (TF0, TF0, TF0, TF0) 0 (TF1, TF0, TF0,
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) >tfc-Subset >dl-TFCS  >>explicitTFCS- ConfigurationMode >>>>TFCS representation >>>>TFCS list >>>>>>TFC 1  >>>>>>TFC 2	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete  Ctfc8Bit Addition  (TF0, TF0, TF0, TF0) 0 (TF1, TF0, TF0, TF0)
>>TFC subset 2 >>> Allowed transport format combination list  >>TFC subset 3 >>> Allowed transport format combination list  dl-CommonTransChInfo >tfcs-SignallingMode ul-CommonTransChInfo >tfcs-ID (TDD only) >sharedChannelIndicator (TDD only) > tfc-Subset >dl-TFCS  >>explicitTFCS- ConfigurationMode >>>ctfcSize >>>>TFCS representation >>>>>TFCS list >>>>>>>TFCS 1	TFC8) (speech rate 8.85) (TFC1, TFC2, TFC3, TFC4, TFC6, TFC7, TFC8, TFC9) (speech rate 12.65) (TFC1, TFC2, TFC3, TFC4, TFC5, TFC6, TFC7, TFC8, TFC9, TFC10)  Independent  1 FALSE  Absent, not required Normal TFCI signalling Complete  Ctfc8Bit Addition  (TF0, TF0, TF0, TF0) 0 (TF1, TF0, TF0,

>>>>TFC 3	(TF2, TF1, TF0, TF0)
>>>>>ctfc	7
>>>>TFC 4	(TF3, TF2, TF0,
777771101	TF0)
>>>>>ctfc	13
>>>>TFC 5	(TF4, TF3, TF0,
	TF0)
>>>>>ctfc	19
>>>>TFC 6	(TF0, TF0, TF1,
	TF0)
>>>>>ctfc	20
>>>>TFC 7	(TF1, TF0, TF1,
	TF0)
>>>>>ctfc	21
>>>>TFC 8	(TF2, TF1, TF1,
	TF0)
>>>>>ctfc	27
>>>>TFC 9	(TF3, TF2, TF1,
	TF0)
>>>>>ctfc	33
>>>>TFC 10	(TF4, TF3, TF1,
	TF0)
>>>>>ctfc	39
>>>>TFC 11	(TF0, TF0, TF0,
	TF1)
>>>>>ctfc	40
>>>>TFC 12	(TF1, TF0, TF0,
	TF1)
>>>>>ctfc	41
>>>>TFC 13	(TF2, TF1, TF0,
	TF1)
>>>>>ctfc	47
>>>>TFC 14	(TF3, TF2, TF0,
	TF1)
>>>>>ctfc	53
>>>>TFC 15	(TF4, TF3, TF0,
	TF1)
>>>>>ctfc	59
>>>>TFC 16	(TF0, TF0, TF1,
	TF1)
>>>>>ctfc	60
>>>>TFC 17	(TF1, TF0, TF1,
	TF1)
>>>>>ctfc	61
>>>>TFC 18	(TF2, TF1, TF1,
	TF1)
>>>>>ctfc	67
>>>>TFC 19	(TF3, TF2, TF1,
	TF1)
>>>>>ctfc	73
>>>>TFC 20	(TF4, TF3, TF1,
-	TF1)
>>>>>ctfc	79
PhyCH INFORMATION	
FDD	
UL-DPCH-InfoPredef	
>ul-DPCH-	
PowerControlInfo	A1 '0 4
>>powerControlAlgorithm	Algorithm 1
>>>tpcStepSize	1 dB
>tfci-Existence	TRUE
>puncturingLimit	0.84
DL-	
CommonInformationPredef	

>dl-DPCH-InfoCommon			
>>spreadingFactor	128		
>>tfci-Existence	FALSE		
>>pilotBits	4		
>>positionFixed	Fixed		

## 3GPP TSG-RAN WG2 Meeting #47 Athens, Greece, 9 – 13 May 2005

## Tdoc #R2-051690

CHANGE REQUEST

# 25.331 CR 2606 # rev 1 # Current version: 5.12.1 #

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

ME X Radio Access Network X Core Network UICC apps# Proposed change affects: Title: UE behaviour for DCH SIR target setting for Downlink power control Source: **RAN WG2** Date: # 12/05/2005 F Category: Release: # Rel-5 Use one of the following releases: Use <u>one</u> of the following categories: **F** (correction) Ph2 (GSM Phase 2) **A** (corresponds to a correction in an earlier release) R96 (Release 1996) **B** (addition of feature), (Release 1997) R97 **C** (functional modification of feature) R98 (Release 1998) **D** (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4) Rel-5 be found in 3GPP TR 21.900. (Release 5) Rel-6 (Release 6)

Reason for change: ₩

The required Ec/No to achieve a target BLER for a particular transport format is different from the required Ec/No to achieve the target BLER for another transport format. As highlighted by LS:s from RAN4 [R4-050267] and RAN1 [R1-050563], current text in 25.331 regarding DCH quality target is not sufficiently clear with respect to that the SIR target should be set on a Transport Channel level, and not for each Transport Format.

Rel-7

(Release 7)

Summary of change: ₩

It is clarified that the SIR target shall be set on a Transport Channel level, and not for each Transport Format. This means that the UE is not to compensate for the fact that the required Ec/No to achieve a target BLER for a particular transport format is different from the required Ec/No to achieve the target BLER for another transport format.

Consequences if not approved:

If the CR is not approved, different UE implementations will exist, where UEs will or will not try to compensate for the difference in required Ec/No in for the network unpredictable ways. This unpredictable UE behaviour will make it either impossible or highly inefficient for the network to ensure sufficient quality of the DCH, which is especially important for the case of DCCH.

### Isolated impact analysis:

The CR has isolated impact to DL power control.

If this is not implemented in the UE would result in that either too high power need to be used on a Transport channel or that non sufficient quality would be achieved in cases when there are changes in the used transport format if these

transport formats have a difference in requirements.
Impact on test specifications: No impact is foreseen.

Clauses affected:	Ж	8.6.5	5.4		
		YN			
Other specs	# L	Х	Other core specifications	#	
affected:		X	Test specifications		
		X	O&M Specifications		
Other comments:	$\mathfrak{H}$				

## 8.6.5.4 DCH quality target

If the IE "DCH quality target" is included, the UE shall:

- 1> set, at physical channel establishment, anthe initial downlink target SIR value based on the received IE "DCH quality target" for the transport channel with respect to all transport formats;
- 1> adjust the target SIR for the downlink power control to meet the quality target received in the IE "DCH quality target" for the transport channel with respect to all transport formats.
- NOTE 1: Adjusting the target SIR is possible to do continuously by the UE if a CRC exists in all transport formats in the downlink TFS for a DCH. If a CRC does not exist in all transport formats, the UE can only adjust the target SIR when receiving transport formats containing a CRC and the UE has knowledge about the transport format according to [27].
- NOTE 2: If the UTRAN configures a UE to use blind transport format detection and configures a transport channel such that single transport format detection [27] must be used to detect the TF, then it is not possible for the UE to maintain a quality target for that transport channel.

## 3GPP TSG-RAN WG2 Meeting #47 Athens, Greece, 9 - 13 May 2005

## Tdoc #R2-051691

CR-Form-v7.1 CHANGE REQUEST  $\mathfrak{R}$ 25.331 CR 2607 Current version: # rev For **HELP** on using this form, see bottom of this page or look at the pop-up text over the **X** symbols.

ME X Radio Access Network X Core Network UICC apps# Proposed change affects: Title: UE behaviour for DCH SIR target setting for Downlink power control Source: **RAN WG2** Date: # 12/05/2005 Category: Α Release: # Rel-6 Use one of the following releases: Use <u>one</u> of the following categories: **F** (correction) Ph2 (GSM Phase 2) **A** (corresponds to a correction in an earlier release) R96 (Release 1996) **B** (addition of feature), (Release 1997) R97 **C** (functional modification of feature) R98 (Release 1998) **D** (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4) Rel-5 be found in 3GPP TR 21.900. (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

Reason for change: #

The required Ec/No to achieve a target BLER for a particular transport format is different from the required Ec/No to achieve the target BLER for another transport format. As highlighted by LS:s from RAN4 [R4-050267] and RAN1 [R1-050563], current text in 25.331 regarding DCH quality target is not sufficiently clear with respect to that the SIR target should be set on a Transport Channel level, and not for each Transport Format.

Summary of change: ₩

It is clarified that the SIR target shall be set on a Transport Channel level, and not for each Transport Format. This means that the UE is not to compensate for the fact that the required Ec/No to achieve a target BLER for a particular transport format is different from the required Ec/No to achieve the target BLER for another transport format.

Consequences if not approved:

# If the CR is not approved, different UE implementations will exist, where UEs will or will not try to compensate for the difference in required Ec/No in for the network unpredictable ways. This unpredictable UE behaviour will make it either impossible or highly inefficient for the network to ensure sufficient quality of the DCH, which is especially important for the case of DCCH.

### Isolated impact analysis:

The CR has isolated impact to DL power control.

If this is not implemented in the UE would result in that either too high power need to be used on a Transport channel or that non sufficient quality would be achieved in cases when there are changes in the used transport format if these

transport formats have a difference in requirements.
Impact on test specifications: No impact is foreseen.

Clauses affected:	Ж	8.6.5	5.4		
		YN			
Other specs	# L	Х	Other core specifications	#	
affected:		X	Test specifications		
		X	O&M Specifications		
Other comments:	$\mathfrak{H}$				

## 8.6.5.4 DCH quality target

If the IE "DCH quality target" is included, the UE shall:

- 1> set, at physical channel establishment, anthe initial downlink target SIR value based on the received IE "DCH quality target" for the transport channel with respect to all transport formats;
- 1> adjust the target SIR for the downlink power control to meet the quality target received in the IE "DCH quality target" for the transport channel with respect to all transport formats.
- NOTE 1: Adjusting the target SIR is possible to do continuously by the UE if a CRC exists in all transport formats in the downlink TFS for a DCH. If a CRC does not exist in all transport formats, the UE can only adjust the target SIR when receiving transport formats containing a CRC and the UE has knowledge about the transport format according to [27].
- NOTE 2: If the UTRAN configures a UE to use blind transport format detection and configures a transport channel such that single transport format detection [27] must be used to detect the TF, then it is not possible for the UE to maintain a quality target for that transport channel.