TSG-RAN Meeting #17 Biarritz, France, 3 - 6 September 2002

Title: Agreed CRs (Release '99 and Rel-4/Rel-5 category A) to TS 25.331

Source: TSG-RAN WG2

Agenda item: 7.2.3

Doc-1st-	Status-	Spec	CR	Rev	Phase	Subject	Cat	Versio	Versio
R2-021750	agreed	25.331	1526	1	R99	Corrections of UE internal measurement reporting events	F	3.11.0	3.12.0
R2-021751	agreed	25.331	1527	1	Rel-4	Corrections of UE internal measurement reporting events	A	4.5.0	4.6.0
R2-021752	agreed	25.331	1528	1	Rel-5	Corrections of UE internal measurement reporting events	A	5.1.0	5.2.0
R2-022226	agreed	25.331	1529	2	R99	UE behaviour upon reception of reconfiguration	F	3.11.0	3.12.0
R2-022227	agreed	25.331	1530	2	Rel-4	UE behaviour upon reception of reconfiguration	А	4.5.0	4.6.0
R2-022228	agreed	25.331	1531	2	Rel-5	UE behaviour upon reception of reconfiguration	А	5.1.0	5.2.0
R2-021719	agreed	25.331	1532		R99	Application of integrity keys in case of a pending CN	F	3.11.0	3.12.0
R2-021638	agreed	25.331	1533		Rel-4	Application of integrity keys in case of a pending CN	A	4.5.0	4.6.0
R2-021639	agreed	25.331	1534		Rel-5	Application of integrity keys in case of a pending CN	A	5.1.0	5.2.0
R2-022334	agreed	25.331	1535	1	R99	Clarifications for Quality Measurements	F	3.11.0	3.12.0
R2-022335		25.331	1536	1	Rel-4	Clarifications for Quality Measurements	А	4.5.0	4.6.0
R2-022336	agreed	25.331	1537	1	Rel-5	Clarifications for Quality Measurements	А	5.1.0	5.2.0
R2-021720	agreed	25.331	1538		R99	Correction of DPCH constant value in TDD default radio configuration	F	3.11.0	3.12.0
R2-021723	agreed	25.331	1539		Rel-4	Correction of DPCH constant value in TDD default radio configuration	A	4.5.0	4.6.0
R2-021724	agreed	25.331	1540		Rel-5	Correction of DPCH constant value in TDD default radio configuration	A	5.1.0	5.2.0
R2-021728	agreed	25.331	1541		R99	UE internal measurement information in broadcast	F	3.11.0	3.12.0
R2-021729	agreed	25.331	1542		Rel-4	UE internal measurement information in broadcast	A	4.5.0	4.6.0
R2-021730	agreed	25.331	1543		Rel-5	UE internal measurement information in broadcast	A	5.1.0	5.2.0

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Title:	жС	orrecti	ons o	f UE interna	al meas	urem	ent	reporting e	vents	
Source:	ж <mark>т</mark>	SG-RAN	<mark>I WG2</mark>							
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Reason for change: ೫	The current description of UE internal measurement reporting events (6a to 6g) does not completely describe the edge triggered behaviour and of 6x events and the reporting functionality:
	It is not clearly described the behaviour in presence of a time to trigger, which demands that the trigger condition should be kept for some time.
	It is not completely defined when the UE should start to evaluate the event again, once a report was sent.
Summary of change: ೫	The current description of UE internal measurement reporting events (6a to 6g) is interpreted to have an edge triggered behaviour.
	For each event, a variable (TRIGGERED_6x_EVENT:boolean) is introduced to store the trigger state of this event.
	The proposed change introduces a trigger condition and a leaving trigger condition for each event which corresponds to the following interpretation of the current description:
	The expression "becomes larger/less than a threshold" is changed to:
	if the corresponding variable is set to FALSE and if the value is greater/less than this threshold during "time_to_trigger"
	with the leaving condition:
	if the corresponding variable is set to TRUE and if the value is less/greater or equal this threshold.

	The expression "reaches a limit" is changed to:						
	if the corresponding variable is set to FALSE and if the value is equal this limit during "time_to_trigger"						
	with the leaving condition:						
	if the corresponding variable is set to TRUE and if the value is less/greater this limit.						
	The proposed event evaluation procedures are based on this trigger conditions and leaving trigger conditions:						
	After the trigger condition is fulfilled, a report is sent and the corresponding variable is set to TRUE. As long as this variable stays set to TRUE, no more reports are sent. After the leaving trigger condition is fulfilled the variable is set to FALSE again.						
	For events 6f and 6g this is done per RL.						
	Isolated impact analysis:						
	Affected Functionality: UE internal measurements reporting events						
	Correction to a function where specification was ambiguous/not sufficiently explicit/missing procedural text or rules/containing some contradiction. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.						
	If the UE does not implement this CR:						
	The edge triggered behaviour might not be implemented correctly and there may be more or less reports than expected by UTRAN.						
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	34.108:						
	The current specification contains no references to the concerned functions.						
	34.123						
	The current state of the specification reflects the behaviour according to the proposed description.						
Consequences if % not approved:	The evaluation of 6x events and reporting is not completely described.						
Clauses affected: #	13.4.27.fx, 14.6						
	YN						
Other specs % affected:	N Other core specifications # N Test specifications # N O&M Specifications #						

How to create CRs using this form:

Other comments:

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

- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.
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13.4.27fx TRIGGERED_6A_EVENT

This variable contains information about a 6a event that has been configured in the UE. There is one such variable per 6a event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered	OP		Boolean	

13.4.27fx TRIGGERED_6B_EVENT

This variable contains information about a 6b event that has been configured in the UE. There is one such variable per 6b event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	Type and reference	Semantics description
Event triggered	<u>OP</u>		Boolean	

13.4.27fx TRIGGERED_6C_EVENT

This variable contains information about a 6c event that has been configured in the UE. There is one such variable per 6c event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered	<u>OP</u>		<u>Boolean</u>	

13.4.27fx TRIGGERED_6D_EVENT

This variable contains information about a 6d event that has been configured in the UE. There is one such variable per 6d event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered	<u>OP</u>		<u>Boolean</u>	

13.4.27fx TRIGGERED 6E EVENT

This variable contains information about a 6e event that has been configured in the UE. There is one such variable per 6e event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> <u>reference</u>	Semantics description
Event triggered	OP		Boolean	

13.4.27fx TRIGGERED_6F_EVENT

This variable contains information about a 6f event that has been configured in the UE. There is one such variable per 6f event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered_RL	OP	<maxrl></maxrl>	Boolean	

13.4.27fx TRIGGERED_6G_EVENT

This variable contains information about a 6g event that has been configured in the UE. There is one such variable per 6g event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> <u>reference</u>	Semantics description
Event triggered_RL	<u>OP</u>	<maxrl></maxrl>	<u>Boolean</u>	

[....]

14.6 UE internal measurements

14.6.1 UE internal measurement quantities

For UE internal measurements the following measurement quantities exist:

- 1. UE transmission (Tx) power, for TDD measured on a timeslot basis.
- 2. UE received signal strength power (RSSI).
- 3. UE Rx-Tx time difference.

14.6.2 UE internal measurement reporting events

In the Measurement reporting criteria field in the Measurement Control messages, the UTRAN notifies the UE of which events should trigger a measurement report. UE internal measurement reporting events that can trigger a report are given below. The reporting events are marked with vertical arrows in the figures below. All events can be combined with time-to-trigger. In that case, the measurement report is only sent if the condition for the event has been fulfilled for the time given by the time to trigger parameter.

NOTE: The reporting events are numbered 6A, 6B, 6C,.. where 6 denotes that the event belongs to the type UE internal measurements.

14.6.2.1 Reporting event 6A: The UE Tx power becomes larger than an absolute threshold

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE transmission power (for TDD within a single TS) becomes larger than a predefined threshold. The corresponding report identifies the threshold that was exceeded.

When an UE internal measurement configuring event 6a is set up, the UE shall:

1> create a variable TRIGGERED_6A_EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

- 1> if the UE Tx power (for TDD within a single TS) is greater than the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time to trigger":
 - 2> if the variable TRIGGERED_6A_EVENT is set to FALSE:

3> set the variable TRIGGERED_6A_EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6a";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED 6A EVENT is set to TRUE and if the UE Tx power (for TDD within a single TS) is less or equal the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable <u>MEASUREMENT_IDENTITY:</u>

2> set the variable TRIGGERED 6A EVENT to FALSE

14.6.2.2 Reporting event 6B: The UE Tx power becomes less than an absolute threshold

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE transmission power (for TDD within a single TS) becomes less than a predefined threshold. The corresponding report identifies the threshold that the UE Tx power went below.

When an UE internal measurement configuring event 6b is set up, the UE shall:

1> create a variable TRIGGERED 6B EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power (for TDD within a single TS) is less than the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED 6B EVENT is set to FALSE:

3> set the variable TRIGGERED 6B EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6b";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6B_EVENT is set to TRUE and if the UE Tx power (for TDD within a single TS) is greater or equal the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY:

2> set the variable TRIGGERED_6B_EVENT to FALSE

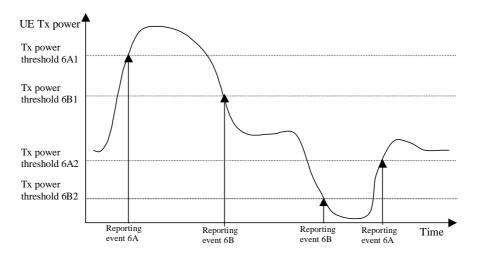


Figure 14.6.2.2-1: Event-triggered measurement reports when the UE Tx power becomes larger or less than absolute thresholds

14.6.2.3 Reporting event 6C: The UE Tx power reaches its minimum value

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE Tx power reaches its minimum value, for TDD its minimum value on a single timeslot.

When an UE internal measurement configuring event 6c is set up, the UE shall:

1> create a variable TRIGGERED 6C EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power is equal its minimum value (for TDD its minimum value on a single TS) for a time period indicated by the IE "time to trigger":

2> if the variable TRIGGERED_6C_EVENT is set to FALSE:

3> set the variable TRIGGERED 6C EVENT to TRUE;

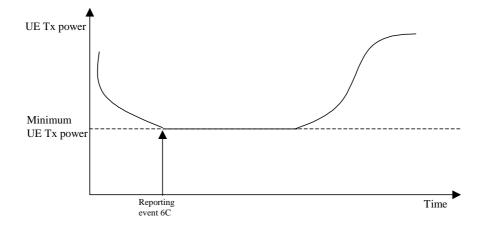
3> send a measurement report with IEs set as below:

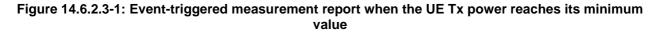
4> set in "UE internal measurement event results": "UE internal event identity" to "6c";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED 6C EVENT is set to TRUE and if the UE Tx power is greater than its minimum value:

2> set the variable TRIGGERED_6C_EVENT to FALSE





14.6.2.4 Reporting event 6D: The UE Tx power reaches its maximum value

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE Tx power reaches its maximum value, for TDD its maximum value on a single timeslot.

When an UE internal measurement configuring event 6d is set up, the UE shall:

1> create a variable TRIGGERED 6D EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

<u>1> if the UE Tx power equals the maximum allowed UE TX power</u> (for TDD its maximum value on a single TS) for a time period indicated by the IE "time to trigger":

2> if the variable TRIGGERED_6D_EVENT is set to FALSE:

<u>3> set the variable TRIGGERED_6D_EVENT to TRUE;</u>

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6d";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED 6D EVENT is set to TRUE and if the UE Tx power is less than the maximum allowed UE TX powerist maximum value:

2> set the variable TRIGGERED_6D_EVENT to FALSE

Note: The maximum allowed UE TX power is defined in 8.6.6.8

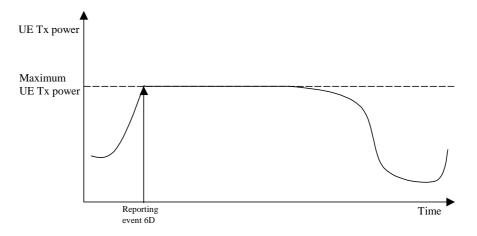


Figure 14.6.2.4-1: Event-triggered report when the UE Tx power reaches its maximum value

14.6.2.5 Reporting event 6E: The UE RSSI reaches the UE's dynamic receiver range

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE RSSI reaches the UE's dynamic receiver range.

When an UE internal measurement configuring event 6e is set up, the UE shall:

1> create a variable TRIGGERED 6E EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE RSSI is greater or equal the UE's dynamic receiver range for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6E_EVENT is set to FALSE:

3> set the variable TRIGGERED 6E EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6e";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6E_EVENT is set to TRUE and if the UE RSSI is less than the UE's dynamic receiver range:

2> set the variable TRIGGERED_6E_EVENT to FALSE

14.6.2.6 Reporting event 6F: The UE Rx-Tx time difference for a RL included in the active set becomes larger than an absolute threshold

When this event is ordered by UTRAN in a MEASUREMENT CONTROL message, the UE shall send a MEASUREMENT REPORT message whenever the UE Rx Tx time difference becomes larger than the threshold defined by the IE "UE Rx Tx time difference threshold".

When an UE internal measurement configuring event 6f is set up, the UE shall:

1> create a variable TRIGGERED_6F_EVENT related to that measurement, which shall initially be set to FALSE for each RL;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Rx-Tx time difference for a RL included in the active set is greater than the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT IDENTITY for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6F_EVENT is set to FALSE for this RL:

3> set the variable TRIGGERED 6F EVENT to TRUE for this RL;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6f";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6F_EVENT is set to TRUE for a RL and if the UE RX-Tx time difference for athis RL included in the active set is less or equal the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT IDENTITY:

2> set the variable TRIGGERED 6F EVENT to FALSE for this RL

14.6.2.7 Reporting event 6G: The UE Rx-Tx time difference for a RL included in the active set becomes less than an absolute threshold

When this event is ordered by UTRAN in a MEASUREMENT CONTROL message, the UE shall send a MEASUREMENT REPORT whenever the UE Rx Tx time difference becomes less than the threshold defined by the IE "UE Rx Tx time difference threshold".

When an UE internal measurement configuring event 6g is set up, the UE shall:

1> create a variable TRIGGERED 6G EVENT related to that measurement, which shall initially be set to FALSE for each RL;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Rx-Tx time difference for a RL included in the active set is less than the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time to trigger":

2> if the variable TRIGGERED_6G_EVENT is set to FALSE for this RL:

3> set the variable TRIGGERED_6G_EVENT to TRUE for this RL;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6g";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6G_EVENT is set to TRUE for a RL and if the UE RX-Tx time difference for athis RL included in the active set is greater or equal the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT IDENTITY:

2> set the variable TRIGGERED_6G_EVENT to FALSE for this RL

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Proposed chang	ie af	fects: (JICC a	pps#	MEX	Rad	dio A	ccess Networ	k X	Core Ne	twork
Title:	ж	Correcti	<mark>ons o</mark>	f UE interna	<mark>I measu</mark>	Irem	ent	reporting e	vents	S	
Source:	ж	TSG-RAN	<mark>I WG2</mark>								
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	If the UE does not implement this CR:
	The edge triggered behaviour might not be implemented correctly and there may be more or less reports than expected by UTRAN.
	If the UTRAN does not implement this CR:
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Clauses affected: #	13.4.27.fx, 14.6
Other specs % affected:	Y N N Other core specifications N Test specifications N O&M Specifications

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Other comments:

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Event triggered	OP		Boolean	

13.4.27fx TRIGGERED_6B_EVENT

This variable contains information about a 6b event that has been configured in the UE. There is one such variable per 6b event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	Type and reference	Semantics description
Event triggered	<u>OP</u>		Boolean	

13.4.27fx TRIGGERED_6C_EVENT

This variable contains information about a 6c event that has been configured in the UE. There is one such variable per 6c event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered	<u>OP</u>		<u>Boolean</u>	

13.4.27fx TRIGGERED_6D_EVENT

This variable contains information about a 6d event that has been configured in the UE. There is one such variable per 6d event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered	<u>OP</u>		<u>Boolean</u>	

13.4.27fx TRIGGERED 6E EVENT

This variable contains information about a 6e event that has been configured in the UE. There is one such variable per 6e event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> <u>reference</u>	Semantics description
Event triggered	OP		Boolean	

13.4.27fx TRIGGERED_6F_EVENT

This variable contains information about a 6f event that has been configured in the UE. There is one such variable per 6f event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered_RL	OP	<maxrl></maxrl>	Boolean	

13.4.27fx TRIGGERED_6G_EVENT

This variable contains information about a 6g event that has been configured in the UE. There is one such variable per 6g event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> <u>reference</u>	Semantics description
Event triggered_RL	<u>OP</u>	<maxrl></maxrl>	<u>Boolean</u>	

[....]

14.6 UE internal measurements

14.6.1 UE internal measurement quantities

For UE internal measurements the following measurement quantities exist:

- 1. UE transmission (Tx) power, for TDD measured on a timeslot basis.
- 2. UE received signal strength power (RSSI).
- 3. UE Rx-Tx time difference.

14.6.2 UE internal measurement reporting events

In the Measurement reporting criteria field in the Measurement Control messages, the UTRAN notifies the UE of which events should trigger a measurement report. UE internal measurement reporting events that can trigger a report are given below. The reporting events are marked with vertical arrows in the figures below. All events can be combined with time-to-trigger. In that case, the measurement report is only sent if the condition for the event has been fulfilled for the time given by the time to trigger parameter.

NOTE: The reporting events are numbered 6A, 6B, 6C,.. where 6 denotes that the event belongs to the type UE internal measurements.

14.6.2.1 Reporting event 6A: The UE Tx power becomes larger than an absolute threshold

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE transmission power (for TDD within a single TS) becomes larger than a predefined threshold. The corresponding report identifies the threshold that was exceeded.

When an UE internal measurement configuring event 6a is set up, the UE shall:

1> create a variable TRIGGERED_6A_EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

- 1> if the UE Tx power (for TDD within a single TS) is greater than the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time to trigger":
 - 2> if the variable TRIGGERED_6A_EVENT is set to FALSE:

3> set the variable TRIGGERED_6A_EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6a";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED 6A EVENT is set to TRUE and if the UE Tx power (for TDD within a single TS) is less or equal the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable <u>MEASUREMENT_IDENTITY:</u>

2> set the variable TRIGGERED 6A EVENT to FALSE

14.6.2.2 Reporting event 6B: The UE Tx power becomes less than an absolute threshold

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE transmission power (for TDD within a single TS) becomes less than a predefined threshold. The corresponding report identifies the threshold that the UE Tx power went below.

When an UE internal measurement configuring event 6b is set up, the UE shall:

1> create a variable TRIGGERED 6B EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power (for TDD within a single TS) is less than the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED 6B EVENT is set to FALSE:

3> set the variable TRIGGERED 6B EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6b";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6B_EVENT is set to TRUE and if the UE Tx power (for TDD within a single TS) is greater or equal the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY:

2> set the variable TRIGGERED_6B_EVENT to FALSE

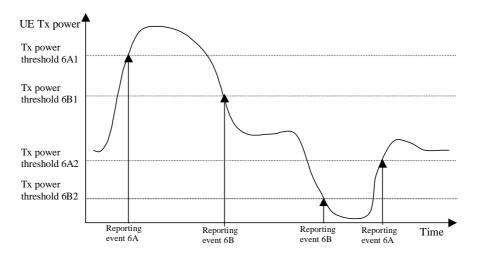


Figure 14.6.2.2-1: Event-triggered measurement reports when the UE Tx power becomes larger or less than absolute thresholds

14.6.2.3 Reporting event 6C: The UE Tx power reaches its minimum value

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE Tx power reaches its minimum value, for TDD its minimum value on a single timeslot.

When an UE internal measurement configuring event 6c is set up, the UE shall:

1> create a variable TRIGGERED 6C EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power is equal its minimum value (for TDD its minimum value on a single TS) for a time period indicated by the IE "time to trigger":

2> if the variable TRIGGERED_6C_EVENT is set to FALSE:

3> set the variable TRIGGERED 6C EVENT to TRUE;

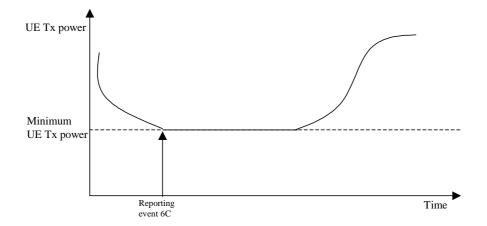
3> send a measurement report with IEs set as below:

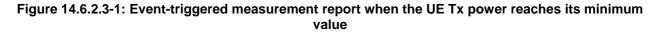
4> set in "UE internal measurement event results": "UE internal event identity" to "6c";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED 6C EVENT is set to TRUE and if the UE Tx power is greater than its minimum value:

2> set the variable TRIGGERED_6C_EVENT to FALSE





14.6.2.4 Reporting event 6D: The UE Tx power reaches its maximum value

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE Tx power reaches its maximum value, for TDD its maximum value on a single timeslot.

When an UE internal measurement configuring event 6d is set up, the UE shall:

1> create a variable TRIGGERED 6D EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power equals the maximum allowed UE TX powerits maximum value (for TDD its maximum value on a single TS) for a time period indicated by the IE "time to trigger":

2> if the variable TRIGGERED_6D_EVENT is set to FALSE:

<u>3> set the variable TRIGGERED_6D_EVENT to TRUE;</u>

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6d";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED 6D EVENT is set to TRUE and if the UE Tx power is less than the maximum allowed UE TX powerits maximum value:

2> set the variable TRIGGERED_6D_EVENT to FALSE

Note: The maximum allowed UE TX power is defined in 8.6.6.8

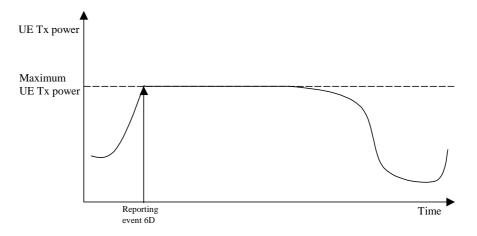


Figure 14.6.2.4-1: Event-triggered report when the UE Tx power reaches its maximum value

14.6.2.5 Reporting event 6E: The UE RSSI reaches the UE's dynamic receiver range

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE RSSI reaches the UE's dynamic receiver range.

When an UE internal measurement configuring event 6e is set up, the UE shall:

1> create a variable TRIGGERED 6E EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

- 1> if the UE RSSI is greater or equal the UE's dynamic receiver range for a time period indicated by the IE "time_to_trigger":
 - 2> if the variable TRIGGERED_6E_EVENT is set to FALSE:

3> set the variable TRIGGERED 6E EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6e";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6E_EVENT is set to TRUE and if the UE RSSI is less than the UE's dynamic receiver range:

2> set the variable TRIGGERED_6E_EVENT to FALSE

14.6.2.6 Reporting event 6F: The UE Rx-Tx time difference for a RL included in the active set becomes larger than an absolute threshold

When this event is ordered by UTRAN in a MEASUREMENT CONTROL message, the UE shall send a MEASUREMENT REPORT message whenever the UE Rx Tx time difference becomes larger than the threshold defined by the IE "UE Rx Tx time difference threshold".

When an UE internal measurement configuring event 6f is set up, the UE shall:

1> create a variable TRIGGERED_6F_EVENT related to that measurement, which shall initially be set to FALSE for each RL;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Rx-Tx time difference for a RL included in the active set is greater than the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT IDENTITY for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6F_EVENT is set to FALSE for this RL:

3> set the variable TRIGGERED 6F EVENT to TRUE for this RL;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6f";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6F_EVENT is set to TRUE for a RL and if the UE RX-Tx time difference for athis RL included in the active set is less or equal the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT IDENTITY:

2> set the variable TRIGGERED 6F EVENT to FALSE for this RL

14.6.2.7 Reporting event 6G: The UE Rx-Tx time difference for a RL included in the active set becomes less than an absolute threshold

When this event is ordered by UTRAN in a MEASUREMENT CONTROL message, the UE shall send a MEASUREMENT REPORT whenever the UE Rx Tx time difference becomes less than the threshold defined by the IE "UE Rx Tx time difference threshold".

When an UE internal measurement configuring event 6g is set up, the UE shall:

1> create a variable TRIGGERED 6G EVENT related to that measurement, which shall initially be set to FALSE for each RL;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Rx-Tx time difference for a RL included in the active set is less than the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time to trigger":

2> if the variable TRIGGERED_6G_EVENT is set to FALSE for this RL:

3> set the variable TRIGGERED_6G_EVENT to TRUE for this RL;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6g";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6G_EVENT is set to TRUE for a RL and if the UE RX-Tx time difference for athis RL included in the active set is greater or equal the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT IDENTITY:

2> set the variable TRIGGERED_6G_EVENT to FALSE for this RL

Rel-6

(Release 6)

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Reason for change: ೫	The current description of UE internal measurement reporting events (6a to 6g) does not completely describe the edge triggered behaviour and of 6x events and the reporting functionality:
	It is not clearly described the behaviour in presence of a time to trigger, which demands that the trigger condition should be kept for some time.
	It is not completely defined when the UE should start to evaluate the event again, once a report was sent.
Summary of change: #	The current description of UE internal measurement reporting events (6a to 6g) is interpreted to have an edge triggered behaviour.
	For each event, a variable (TRIGGERED_6x_EVENT:boolean) is introduced to store the trigger state of this event.
	The proposed change introduces a trigger condition and a leaving trigger condition for each event which corresponds to the following interpretation of the current description:
	The expression "becomes larger/less than a threshold" is changed to:
	if the corresponding variable is set to FALSE and if the value is greater/less than this threshold during "time_to_trigger"
	with the leaving condition:
	if the corresponding variable is set to TRUE and if the value is less/greater or equal this threshold.

	The expression "reaches a limit" is changed to:
	if the corresponding variable is set to FALSE and if the value is equal this limit during "time_to_trigger"
	with the leaving condition:
	if the corresponding variable is set to TRUE and if the value is less/greater this limit.
	The proposed event evaluation procedures are based on this trigger conditions and leaving trigger conditions:
	After the trigger condition is fulfilled, a report is sent and the corresponding variable is set to TRUE. As long as this variable stays set to TRUE, no more reports are sent. After the leaving trigger condition is fulfilled the variable is set to FALSE again.
	For events 6f and 6g this is done per RL.
	Isolated impact analysis:
	Affected Functionality: UE internal measurements reporting events
	Correction to a function where specification was ambiguous/not sufficiently explicit/missing procedural text or rules/containing some contradiction. Would not affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.
	If the UE does not implement this CR:
	The edge triggered behaviour might not be implemented correctly and there may be more or less reports than expected by UTRAN.
	If the UTRAN does not implement this CR:
	The edge triggered behaviour might not be assumed correctly and there may be more or less reports than expected.
	34.108:
	The current specification contains no references to the concerned functions.
	34.123
	The current state of the specification reflects the behaviour according to the proposed description.
Consequences if % not approved:	The evaluation of 6x events and reporting is not completely described.
Clauses affected: #	13.4.27.fx, 14.6
Other specs % affected:	Y N N Other core specifications N Test specifications N O&M Specifications

How to create CRs using this form:

Other comments:

ж

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

13.4.27fx TRIGGERED_6A_EVENT

This variable contains information about a 6a event that has been configured in the UE. There is one such variable per 6a event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered	OP		Boolean	

13.4.27fx TRIGGERED_6B_EVENT

This variable contains information about a 6b event that has been configured in the UE. There is one such variable per 6b event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	Type and reference	Semantics description
Event triggered	<u>OP</u>		Boolean	

13.4.27fx TRIGGERED_6C_EVENT

This variable contains information about a 6c event that has been configured in the UE. There is one such variable per 6c event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered	<u>OP</u>		<u>Boolean</u>	

13.4.27fx TRIGGERED_6D_EVENT

This variable contains information about a 6d event that has been configured in the UE. There is one such variable per 6d event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered	<u>OP</u>		<u>Boolean</u>	

13.4.27fx TRIGGERED 6E EVENT

This variable contains information about a 6e event that has been configured in the UE. There is one such variable per 6e event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> <u>reference</u>	Semantics description
Event triggered	OP		Boolean	

13.4.27fx TRIGGERED_6F_EVENT

This variable contains information about a 6f event that has been configured in the UE. There is one such variable per 6f event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> reference	Semantics description
Event triggered_RL	OP	<maxrl></maxrl>	Boolean	

13.4.27fx TRIGGERED_6G_EVENT

This variable contains information about a 6g event that has been configured in the UE. There is one such variable per 6g event configured in the UE.

Information Element/Group name	<u>Need</u>	<u>Multi</u>	<u>Type and</u> <u>reference</u>	Semantics description
Event triggered_RL	<u>OP</u>	<maxrl></maxrl>	<u>Boolean</u>	

[....]

14.6 UE internal measurements

14.6.1 UE internal measurement quantities

For UE internal measurements the following measurement quantities exist:

- 1. UE transmission (Tx) power, for TDD measured on a timeslot basis.
- 2. UE received signal strength power (RSSI).
- 3. UE Rx-Tx time difference.

14.6.2 UE internal measurement reporting events

In the Measurement reporting criteria field in the Measurement Control messages, the UTRAN notifies the UE of which events should trigger a measurement report. UE internal measurement reporting events that can trigger a report are given below. The reporting events are marked with vertical arrows in the figures below. All events can be combined with time-to-trigger. In that case, the measurement report is only sent if the condition for the event has been fulfilled for the time given by the time to trigger parameter.

NOTE: The reporting events are numbered 6A, 6B, 6C,.. where 6 denotes that the event belongs to the type UE internal measurements.

14.6.2.1 Reporting event 6A: The UE Tx power becomes larger than an absolute threshold

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE transmission power (for TDD within a single TS) becomes larger than a predefined threshold. The corresponding report identifies the threshold that was exceeded.

When an UE internal measurement configuring event 6a is set up, the UE shall:

1> create a variable TRIGGERED_6A_EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

- 1> if the UE Tx power (for TDD within a single TS) is greater than the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time to trigger":
 - 2> if the variable TRIGGERED_6A_EVENT is set to FALSE:

3> set the variable TRIGGERED_6A_EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6a";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED 6A EVENT is set to TRUE and if the UE Tx power (for TDD within a single TS) is less or equal the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable <u>MEASUREMENT_IDENTITY:</u>

2> set the variable TRIGGERED 6A EVENT to FALSE

14.6.2.2 Reporting event 6B: The UE Tx power becomes less than an absolute threshold

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE transmission power (for TDD within a single TS) becomes less than a predefined threshold. The corresponding report identifies the threshold that the UE Tx power went below.

When an UE internal measurement configuring event 6b is set up, the UE shall:

1> create a variable TRIGGERED 6B EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power (for TDD within a single TS) is less than the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED 6B EVENT is set to FALSE:

3> set the variable TRIGGERED 6B EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6b";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6B_EVENT is set to TRUE and if the UE Tx power (for TDD within a single TS) is greater or equal the value in IE "UE Transmitted Power Tx power threshold" stored for this event in the variable MEASUREMENT_IDENTITY:

2> set the variable TRIGGERED_6B_EVENT to FALSE

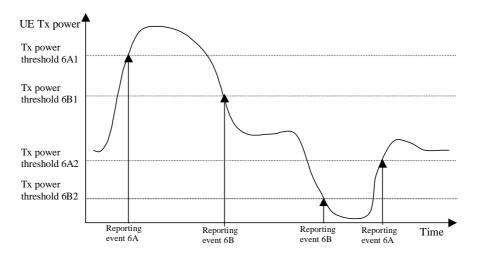


Figure 14.6.2.2-1: Event-triggered measurement reports when the UE Tx power becomes larger or less than absolute thresholds

14.6.2.3 Reporting event 6C: The UE Tx power reaches its minimum value

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE Tx power reaches its minimum value, for TDD its minimum value on a single timeslot.

When an UE internal measurement configuring event 6c is set up, the UE shall:

1> create a variable TRIGGERED 6C EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power is equal its minimum value (for TDD its minimum value on a single TS) for a time period indicated by the IE "time to trigger":

2> if the variable TRIGGERED_6C_EVENT is set to FALSE:

3> set the variable TRIGGERED 6C EVENT to TRUE;

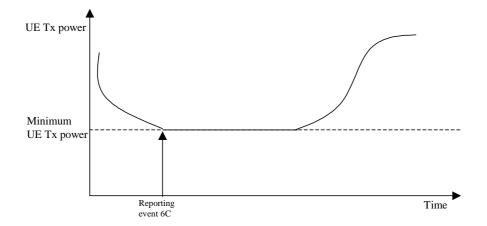
3> send a measurement report with IEs set as below:

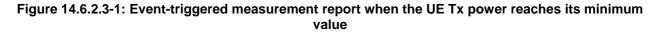
4> set in "UE internal measurement event results": "UE internal event identity" to "6c";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED 6C EVENT is set to TRUE and if the UE Tx power is greater than its minimum value:

2> set the variable TRIGGERED_6C_EVENT to FALSE





14.6.2.4 Reporting event 6D: The UE Tx power reaches its maximum value

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE Tx power reaches its maximum value, for TDD its maximum value on a single timeslot.

When an UE internal measurement configuring event 6d is set up, the UE shall:

1> create a variable TRIGGERED 6D EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Tx power equals the maximum allowed UE TX powerits maximum value (for TDD its maximum value on a single TS) for a time period indicated by the IE "time to trigger":

2> if the variable TRIGGERED_6D_EVENT is set to FALSE:

<u>3> set the variable TRIGGERED_6D_EVENT to TRUE;</u>

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6d";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED 6D EVENT is set to TRUE and if the UE Tx power is less than the maximum allowed UE TX powerits maximum value:

2> set the variable TRIGGERED_6D_EVENT to FALSE

Note: The maximum allowed UE TX power is defined in 8.6.6.8

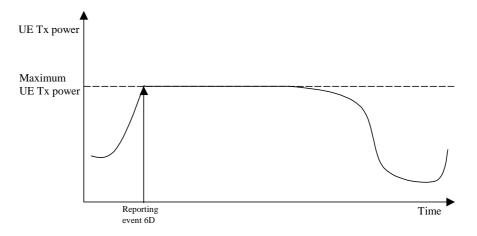


Figure 14.6.2.4-1: Event-triggered report when the UE Tx power reaches its maximum value

14.6.2.5 Reporting event 6E: The UE RSSI reaches the UE's dynamic receiver range

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report whenever the UE RSSI reaches the UE's dynamic receiver range.

When an UE internal measurement configuring event 6e is set up, the UE shall:

1> create a variable TRIGGERED 6E EVENT related to that measurement, which shall initially be set to FALSE;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

- 1> if the UE RSSI is greater or equal the UE's dynamic receiver range for a time period indicated by the IE "time_to_trigger":
 - 2> if the variable TRIGGERED_6E_EVENT is set to FALSE:

3> set the variable TRIGGERED 6E EVENT to TRUE;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6e";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6E_EVENT is set to TRUE and if the UE RSSI is less than the UE's dynamic receiver range:

2> set the variable TRIGGERED_6E_EVENT to FALSE

14.6.2.6 Reporting event 6F: The UE Rx-Tx time difference for a RL included in the active set becomes larger than an absolute threshold

When this event is ordered by UTRAN in a MEASUREMENT CONTROL message, the UE shall send a MEASUREMENT REPORT message whenever the UE Rx Tx time difference becomes larger than the threshold defined by the IE "UE Rx Tx time difference threshold".

When an UE internal measurement configuring event 6f is set up, the UE shall:

1> create a variable TRIGGERED_6F_EVENT related to that measurement, which shall initially be set to FALSE for each RL;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Rx-Tx time difference for a RL included in the active set is greater than the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT IDENTITY for a time period indicated by the IE "time_to_trigger":

2> if the variable TRIGGERED_6F_EVENT is set to FALSE for this RL:

3> set the variable TRIGGERED 6F EVENT to TRUE for this RL;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6f";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6F_EVENT is set to TRUE for a RL and if the UE RX-Tx time difference for athis RL included in the active set is less or equal the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT IDENTITY:

2> set the variable TRIGGERED 6F EVENT to FALSE for this RL

14.6.2.7 Reporting event 6G: The UE Rx-Tx time difference for a RL included in the active set becomes less than an absolute threshold

When this event is ordered by UTRAN in a MEASUREMENT CONTROL message, the UE shall send a MEASUREMENT REPORT whenever the UE Rx Tx time difference becomes less than the threshold defined by the IE "UE Rx Tx time difference threshold".

When an UE internal measurement configuring event 6g is set up, the UE shall:

1> create a variable TRIGGERED 6G EVENT related to that measurement, which shall initially be set to FALSE for each RL;

1> delete this variable when the measurement is released.

When this event is ordered by UTRAN in a measurement control message, the UE shall:

1> if the UE Rx-Tx time difference for a RL included in the active set is less than the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT_IDENTITY for a time period indicated by the IE "time to trigger":

2> if the variable TRIGGERED_6G_EVENT is set to FALSE for this RL:

3> set the variable TRIGGERED_6G_EVENT to TRUE for this RL;

3> send a measurement report with IEs set as below:

4> set in "UE internal measurement event results": "UE internal event identity" to "6g";

4> set the IE "measured results" and the IE "additional measured results" according to 8.4.2.

1> if the variable TRIGGERED_6G_EVENT is set to TRUE for a RL and if the UE RX-Tx time difference for athis RL included in the active set is greater or equal the value in IE "UE Rx-Tx time difference threshold" stored for this event in the variable MEASUREMENT IDENTITY:

2> set the variable TRIGGERED_6G_EVENT to FALSE for this RL

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3GPP TSG-RAN WG2 Meeting #31 Arlanda, Sweden, August 19-23, 2002

Tdoc # R2-022226

		CHAN	GE REQ	UEST		CR-For	rm-v7
¥	25.331	CR 1529	жrev	2 [#]	Current vers	^{iion:} 3.11.0 [#]	
For <u>HELP</u> of	n using this fo	rm, see bottom of	this page or l	look at the	e pop-up text	over the # symbols.	
Proposed chang	le affects:	UICC apps# 🦲	MEX	Radio Ad	ccess Netwo	rk X Core Network	(
Title:	ж UE beha	viour upon recept	ion of reconfig	guration			
Source:	ដ <mark>ី TSG-RAI</mark>	NWG2					
Work item code.	۳ ۳ TEI				Date: ೫	20/08/2002	
Category:	F (con A (con B (ad C (fur D (ed Detailed ex	the following categorection) recsponds to a corred dition of feature), actional modification itorial modification) planations of the ab 3GPP <u>TR 21.900</u> .	ection in an ear of feature)		2	R99 the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 4) (Release 5) (Release 6)	

Reason for change: ೫	The behaviour of a UE in CELL_FACH state is currently not sufficiently specified if the value of the IE "Activation time" in a received message is other than the default value "Now". For a message received in CELL_FACH state, "Now" is the only sensible value for FDD. InTDD, Actiation time relative to the CFN associated with the cell for which the message was received in is necessary for proper operation.
Summary of change: ೫	It is indicated in a note, that the UE behaviour is unspecified if the UE is in CELL_FACH state and the value of the IE "Activation time" is different from "Now" in FDD. In TDD the value of Activation Time in the received message is relative to the CFN associated with the cell from which the message was received.
	Impact analysis:
	The UE implementation is not affected. Also, UTRAN implementation is not directly affected, but UTRAN implementations causing unspecified UE behaviour are indicated. In TDD there is no implementation effect since the need to maintain CFN relative to Activation Time specified in RRC procedures in Cell FACH is already a known requirement.
Consequences if अ not approved:	Unpredictable behaviour of a UE that receives a message in CELL_FACH state when the IE "Activation Time" in the message is different from "Now".
Clauses affected: #	8.6.3.1
Ciauses allected. the	0.0.0.1
	YN

Other specs affected:	Ħ	X	XOther core specificationsXTest specificationsXO&M Specifications		B	TS 34.123
Other comments:	Ħ					

How to create CRs using this form:

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

8.6.3 UE information elements

8.6.3.1 Activation time

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is other than the default value "Now", the UE shall:

- 1> if the frame boundary immediately before the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time" is at the TTI boundary common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed:
 - 2> select that frame boundary as the activation time T.
- 1> else:
 - 2> select the next TTI boundary, which is common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed, after the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time", as the activation time T.
- 1> at the activation time T:
 - 2> for a physical channel reconfiguration caused by the received message:
 - 3> release the physical channel configuration, which was present before T;
 - 3> initiate the establishment of the physical channel configuration as specified for the physical channel information elements in the received message as specified elsewhere.
 - 2> for actions, other than a physical channel reconfiguration, caused by the received message:
 - 3> perform the actions for the information elements in the received message as specified elsewhere.

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is the default value "Now", the UE shall:

- 1> choose an activation time T as soon as possible after the reception of the message, respecting the performance requirements in subclause 13.5;
- 1> at the activation time T:

2> perform the actions for the information elements in the received message as specified elsewhere.

NOTE:In FDD, if the UE was in CELL FACH state upon reception of the message, regardless of the state the
UE enters after reception of the message, and the value of the IE "Activation time" in the received
message is different from "Now", the UE behaviour is unspecified. In TDD, if the UE was in
CELL FACH state upon reception of the message, the value of the IE "Activation time" in the received
message is relative to the CFN associated with the cell from which the message was received.

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3GPP TSG-RAN WG2 Meeting #31 Arlanda, Sweden, August 19-23, 2002

Tdoc #R2-022227

		CHANG		JEST			CR-Form-v7
ж	25.331	CR 1530	жrev	2 [#]	Current vers	^{ion:} 4.5.0	ж
For <u>HELP</u> or	n using this fo	rm, see bottom of	this page or l	ook at the	e pop-up text	over the X syr	nbols.
Proposed chang	e affects:	UICC apps#	MEX	Radio Ac	ccess Networ	k 🗶 Core Ne	etwork
Title:	¥ UE beha	viour upon reception	on of reconfig	uration			
Source:	ដ <mark>ី TSG-RA</mark>	N WG2					
Work item code:	ж <mark>ТЕІ</mark>				<i>Date:</i>	20/08/2002	
Category:	F (co A (co B (ad C (fui D (cd Detailed ex	the following catego rrection) rresponds to a correc ldition of feature), nctional modification litorial modification) splanations of the abo 3GPP <u>TR 21.900</u> .	ction in an earl of feature)		2 R96 R97 R98 R99	Rel-4 the following rele (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5) (Release 6)	eases:

Reason for change: ೫	The behaviour of a UE in CELL_FACH state is currently not sufficiently specified if the value of the IE "Activation time" in a received message is other than the default value "Now". For a message received in CELL_FACH state, "Now" is the only sensible value for FDD. InTDD, Actiation time relative to the CFN associated with the cell for which the message was received in is necessary for proper operation.
Summary of change: ೫	It is indicated in a note, that the UE behaviour is unspecified if the UE is in CELL_FACH state and the value of the IE "Activation time" is different from "Now" in FDD. In TDD the value of Activation Time in the received message is relative to the CFN associated with the cell from which the message was received.
	The UE implementation is not affected. Also, UTRAN implementation is not directly affected, but UTRAN implementations causing unspecified UE behaviour are indicated. In TDD there is no implementation effect since the need to maintain CFN relative to Activation Time specified in RRC procedures in Cell FACH is already a known requirement.
Consequences if % not approved:	Unpredictable behaviour of a UE that receives a message in CELL_FACH state when the IE "Activation Time" in the message is different from "Now".
Clauses affected: %	8.6.3.1 Y N

Other specs affected:	Ħ	X	X X	Other core specifications Test specifications O&M Specifications	€	TS 34.123
Other comments:	ж					

How to create CRs using this form:

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- 1) Fill out the above form. The symbols above marked **#** contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://ftp.3gpp.org/specs/</u> 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.

8.6.3 UE information elements

8.6.3.1 Activation time

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is other than the default value "Now", the UE shall:

- 1> if the frame boundary immediately before the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time" is at the TTI boundary common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed:
 - 2> select that frame boundary as the activation time T.
- 1> else:
 - 2> select the next TTI boundary, which is common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed, after the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time", as the activation time T.
- 1> at the activation time T:
 - 2> for a physical channel reconfiguration caused by the received message:
 - 3> release the physical channel configuration, which was present before T;
 - 3> initiate the establishment of the physical channel configuration as specified for the physical channel information elements in the received message as specified elsewhere.
 - 2> for actions, other than a physical channel reconfiguration, caused by the received message:
 - 3> perform the actions for the information elements in the received message as specified elsewhere.

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is the default value "Now", the UE shall:

- 1> choose an activation time T as soon as possible after the reception of the message, respecting the performance requirements in subclause 13.5;
- 1> at the activation time T:

2> perform the actions for the information elements in the received message as specified elsewhere.

NOTE:In FDD, if the UE was in CELL FACH state upon reception of the message, regardless of the state the
UE enters after reception of the message, and the value of the IE "Activation time" in the received
message is different from "Now", the UE behaviour is unspecified. In TDD, if the UE was in
CELL FACH state upon reception of the message, the value of the IE "Activation time" in the received
message is relative to the CFN associated with the cell from which the message was received.

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3GPP TSG-RAN WG2 Meeting #31 Arlanda, Sweden, August 19-23, 2002

Tdoc **# R2-022228**

		СН	ANGE R	REQU	EST	-		CR-Form-v7
æ	25.331	CR 15	<mark>31</mark>	rev 🖞	2 ^ж	Current vers	^{ion:} 5.1.	<mark>۶ ж</mark>
For <u>HELP</u> on	using this fo	rm, see bot	tom of this pa	ige or loo	ok at th	ne pop-up text	over the # s	symbols.
Proposed change	e affects:	UICC apps	¥ 📃 🛛 I	ME 🗶 F	Radio A	Access Netwo	rk X Core	Network
Title:	# UE beha	viour upon	reception of re	econfigu	ration			
Source:	# TSG-RAI	WG2						
000/00.		11102						
Work item code:	# TEI					<i>Date:</i>	20/08/2002	2
Category:	₩ <mark>A</mark>					Release: ೫		
	F (con A (con B (ad C (fur D (ed Detailed ex	rection) responds to dition of feat octional modi itorial modifie	fication of featu cation) f the above cat	ure)		2	the following I (GSM Phase (Release 199 (Release 199 (Release 199 (Release 199 (Release 4) (Release 5) (Release 6)	2) 16) 17) 18)

Reason for change: ೫	The behaviour of a UE in CELL_FACH state is currently not sufficiently specified if the value of the IE "Activation time" in a received message is other than the default value "Now". For a message received in CELL_FACH state, "Now" is the only sensible value for FDD. InTDD, Actiation time relative to the CFN associated with the cell for which the message was received in is necessary for proper operation.
Summary of change: ೫	It is indicated in a note, that the UE behaviour is unspecified if the UE is in CELL_FACH state and the value of the IE "Activation time" is different from "Now" in FDD. In TDD the value of Activation Time in the received message is relative to the CFN associated with the cell from which the message was received.
	Impact analysis:
	The UE implementation is not affected. Also, UTRAN implementation is not directly affected, but UTRAN implementations causing unspecified UE behaviour are indicated. In TDD there is no implementation effect since the need to maintain CFN relative to Activation Time specified in RRC procedures in Cell FACH is already a known requirement.
Consequences if # not approved:	Unpredictable behaviour of a UE that receives a message in CELL_FACH state when the IE "Activation Time" in the message is different from "Now".
Clauses affected: #	8.6.3.1
	Y N

Other specs affected:	Ħ	X	Other core specifications # Test specifications O&M Specifications	TS 34.123
Other comments:	Ħ			

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- 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.

8.6.3 UE information elements

8.6.3.1 Activation time

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is other than the default value "Now", the UE shall:

- 1> if the frame boundary immediately before the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time" is at the TTI boundary common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed:
 - 2> select that frame boundary as the activation time T.
- 1> else:
 - 2> select the next TTI boundary, which is common to all the transport channels that are multiplexed onto the same CCTrCh including any transport channel which is added, reconfigured or has been removed, after the frame with the CFN (Connection Frame Number) value indicated by the IE "Activation Time", as the activation time T.
- 1> at the activation time T:
 - 2> for a physical channel reconfiguration other than an HS-DSCH related reconfiguration, caused by the received message:
 - 3> release the physical channel configuration, which was present before T;
 - 3> initiate the establishment of the physical channel configuration as specified for the physical channel information elements in the received message as specified elsewhere.
 - 2> for an HS-DSCH related reconfiguration caused by the received message:
 - 3> select the HS-SCCH subframe boundary immediately before the first HS-SCCH subframe, which entirely falls within the 10 ms frame next after T;
 - 3> start using, at that HS-SCCH subframe boundary, the new HS-DSCH configuration in the received message, replacing any old HS-DSCH configuration.
 - 2> for actions, other than a physical channel reconfiguration, caused by the received message:
 - 3> perform the actions for the information elements in the received message as specified elsewhere.
- NOTE: An "HS-DSCH related reconfiguration" includes, in particular, reconfigurations that need to be timealigned with the 2ms subframe of the HS-SCCH, HS-PDSCH and/or HS-DPCCH. For example, start and stop of HS-SCCH reception and serving HS-DSCH cell change.

If the UE receives a message in which presence is needed for the IE "Activation time", and the value is the default value "Now", the UE shall:

- 1> choose an activation time T as soon as possible after the reception of the message, respecting the performance requirements in subclause 13.5;
- 1> at the activation time T:

2> perform the actions for the information elements in the received message as specified elsewhere.

NOTE:In FDD, if the UE was in CELL FACH state upon reception of the message, regardless of the state the
UE enters after reception of the message, and the value of the IE "Activation time" in the received
message is different from "Now", the UE behaviour is unspecified. In TDD, if the UE was in
CELL_FACH state upon reception of the message, the value of the IE "Activation time" in the received
message is relative to the CFN associated with the cell from which the message was received.

H	25.331 CR 1532 # rev - ^{# Current version: 3.11.0 [#]}
For <mark>HELP</mark> on u	using this form, see bottom of this page or look at the pop-up text over the X symbols.
Proposed change	affects: UICC apps# ME X Radio Access Network X Core Network
Title: #	Application of integrity keys in case of a pending CN domain switch during a SRNS relocation
Source: #	TSG-RAN WG2
Work item code: ℜ	TEI Date: % June 14, 2002
Category: ₩	F Release: % R99 Use one of the following categories: Use one of the following releases: F (correction) 2 (GSM Phase 2) A (corresponds to a correction in an earlier release) R96 (Release 1996) B (addition of feature), R97 (Release 1997) C (functional modification of feature) R98 (Release 1998) D (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6)
Reason for change	 e: # In RAN#16 a change request to 25.331 was approved which provided for the correct application of integrity keys on a SRNS relocation following a pending securit procedure an a signalling radio bearer. The text currently states: "consider the new integrity protection configuration to include any <i>new</i> keys that were activated through a security procedure received prior to the current message but not applied for the signalling radio bearer, due to the activation time for the corresponding signalling radio bearer not having elapsed" The word "new" can be construed to imply that only in case the previous security procedure activated new keys (for the same domain) shall the UE apply them immediately after the SRNS relocation procedure. The UE behavior, post SRNS relocation, in case the previous security procedure was caused due to the reception of a SECURITY MODE COMMAND with a domain change (i.e. SRBs are now to be integrity protected by the keys from latest configured CN domain) could be interpreted as missing. The relocation container from the source to the target does not include the pending activation times and merely conveys the LATEST_CONFIGURED_CN_DOMAIN to the target. Thus the target to apply the security keys of the wrong domain to the signalling messages. It is also unclear in the specification how the UE sets the HFN value after relocation in the case of pending security configuration due to change in LATEST_CONFIGURED_CN_DOMAIN triggerd by a previous SECURITY MODE COMMAND. Appropriate UTRAN setting of the activation times for the first security procedure

	may not solve the problem since the UTRAN cannot predict the UE's need to
	transmit signalling messages on SRB 1, 3 and 4. For similar reasons this
	problem cannot be solved by requiring the UTRAN to not initiate the SRNS
	relocation procedure until the pending activation times have elapsed since the
	UE actions of transmission of uplink signalling messages cannot be predicted.
	Clarification of UE behavior is therefore seen necessary.
	Frequency of problem : The frequency of this problem is linked to the frequency of the change of the controlling (from a SRB IP and ciphering) CN domain i.e. establishment of Iu connection, and the type of potential triggers of SRNS relocation at the UTRAN. Also linked is the state of the UE and how this influences the triggering of a SRNS relocation at the UTRAN.
Summary of change, 9	It is stated that the LIE shall apply the keys corresponding to the
Summary of change: ¥	LATEST_CONFIGURED_CN_DOMAIN following completion of the SRNS
	relocation procedure in case there is a pending application key due to a previous
	security procedure.
	Similar modifications are made in 8.6.3.4 for the case of ciphering.
	In case of a pending security configuration with change on the
	LATEST_CONFIGURED_CN_DOMAIN it is clarified that the UE shall set the most
	significant bits of the HFN to the START value of the
	LATEST_CONFIGURED_CN_DOMAIN.
	Impact Analysis:
	Affected Functionality: Integrity Protection post SRNS Relocation
	Correction to a function where specification was ambiguous/not sufficiently
	explicit/missing procedural text or rules/containing some contradiction. Would not
	affect implementations behaving like indicated in the CR, would affect
	implementations supporting the corrected functionality otherwise.
Consequences if #	UTRAN would not be able to perform SRNS relocation if the activation times for
not approved:	a security procedure for a signalling radio bearer have not elapsed or signalling
	messages will be lost in case of SRNS relocation.
Clauses affected: #	8.6.3.4, 8.6.3.5
	YN
Other specs #	X Other core specifications %
affected:	X Test specifications
	X O&M Specifications
Other comments: #	

How to create CRs using this form:

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- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

8.6.3.4 Ciphering mode info

The IE "Ciphering mode info" defines the new ciphering configuration. At any given time, the UE needs to store at most two different ciphering configurations (keyset and algorithm) per CN domain at any given time in total for all radio bearers and three configurations in total for all signalling radio bearers.

If the IE "Ciphering mode info" is present and if the IE "Reconfiguration" in the variable CIPHERING_STATUS is set to TRUE, the UE shall:

- 1> ignore this second attempt to change the ciphering configuration; and
- 1> set the variable INCOMPATIBLE_SECURITY_RECONFIGURATION to TRUE.

If the IE "Ciphering mode info" is present and if the IE "Reconfiguration" in the variable CIPHERING_STATUS is set to FALSE, the UE shall:

- 1> if the IE "Status" in the variable CIPHERING STATUS has the value "Not started", and this IE was included in a message that is not the message SECURITY MODE COMMAND; or
- 1> if the IE "Ciphering Mode Info" was received in the message SECURITY MODE COMMAND and there does not exist exactly one ciphering activation time in the IE "Radio bearer downlink ciphering activation time info" for each established RLC-AM and RLC-UM radio bearers included in the IE "RB information" in the IE "ESTABLISHED_RABS" for the CN domain as indicated in the variable LATEST_CONFIGURED_CN_DOMAIN; or
- 1> if the IE "Ciphering Mode Info" was received in the message SECURITY MODE COMMAND and the IE "Ciphering activation time for DPCH" is not included in the message, and there exist radio bearers using RLC-TM according to the IE "RB information" in the IE "ESTABLISHED_RABS" for the CN domain as indicated in the variable LATEST_CONFIGURED_CN_DOMAIN; or
- 1> if the IE "Ciphering Mode Info" was received in the message SECURITY MODE COMMAND and there does not exist exactly one ciphering activation time in the IE "Radio bearer downlink ciphering activation time info" for each established signalling radio bearer included in the IE "Signalling radio bearer information" in the IE "ESTABLISHED_RABS":
 - 2> ignore this attempt to change the ciphering configuration;
 - 2> set the variable INVALID_CONFIGURATION to TRUE;
 - 2> perform the actions as specified in subclause 8.1.12.4c.
- 1> set the IE "Reconfiguration" in the variable CIPHERING_STATUS to TRUE;
- 1> set the IE "Status" in the variable CIPHERING_STATUS of the CN domains for which the IE "Status" of the variable SECURITY_MODIFICATION is set to "Affected" to "Started";
- 1> apply the new ciphering configuration in the lower layers for all RBs that belong to a CN domain for which the IE "Status" of the variable SECURITY_MODIFICATION is set to "Affected" and all signalling radio bearers:
 - 2> using the ciphering algorithm (UEA [40]) indicated by the IE "Ciphering algorithm" as part of the new ciphering configuration;
 - 2> for each radio bearer that belongs to a CN domain for which the IE "Status" of the variable SECURITY_MODIFICATION is set to "Affected" and all signalling radio bearers:
 - 3> using the value of the IE "RB identity" in the variable ESTABLISHED_RABS minus one as the value of BEARER [40] in the ciphering algorithm.
- 1> apply the new ciphering configuration as follows:
 - 2> consider an activation time in downlink to be pending:
 - 3> for UM-RLC until an UMD PDU with sequence number equal to or larger than activation time -1 has been received;

- 3> for AM-RLC until all AMD PDUs with sequence numbers up to and including activation time -1 have been received;
- 3> for TM-RLC until the CFN indicated in the activation time has been reached.
- 2> if there are pending activation times in downlink set for ciphering by a previous procedure changing the ciphering configuration for a radio bearer or signalling radio bearer:

3> apply the ciphering configuration included in the current message at this pending activation time;

3> consider the ciphering keys that were to be applied following a previous procedure changing the ciphering configuration and which have not yet been applied due to the activation time not having elapsed for a given radio bearer, as part of the ciphering configuration received in the current message.

- 2> if the ciphering configuration is pending for a radio bearer or signalling radio bearer due to a previously received SECURITY MODE COMMAND and the current received message includes the IE "DL Counter Synch Info" or the current received message is a RADIO BEARER RECONFIGURATION message and includes the IE "New U-RNTI":
 - 3> if the previous SECURITY MODE COMMAND was received due to new keys being received:
 - 4> consider the new ciphering configuration to include the received new keys and,
 - 4> initialise the HFN values of the COUNT-C for the corresponding radio bearers or signalling radio bearers according to subclause 8.1.12;
 - <u>3> else</u>
 - <u>4> consider the new ciphering configuration to include the keys associated with the LATEST CONFIGURED CN DOMAIN and.</u>
 - 4> initialise the HFN values of the COUNT-C for the corresponding radio bearers or signalling radio bearers according to subclause 8.1.12 using the START value associated with the LATEST CONFIGURED CN DOMAIN to be transmitted in the response to the current message;
 - 3> apply the new ciphering configuration in uplink and downlink immediately following RLC reestablishment.
- 2> if the IE "Ciphering activation time for DPCH" is present in the IE "Ciphering mode info" and the UE was in CELL_DCH state prior to this procedure:
 - 3> for radio bearers using RLC-TM:
 - 4> apply the old ciphering configuration for CFN less than the number indicated in the IE "Ciphering activation time for DPCH";
 - 4> apply the new ciphering configuration for CFN greater than or equal to the number indicated in IE "Ciphering activation time for DPCH".
- 2> if the IE "Radio bearer downlink ciphering activation time info" is present:
 - 3> apply the following procedure for each radio bearer and signalling radio bearers using RLC-AM or RLC-UM indicated by the IE "RB identity":
 - 4> suspend uplink transmission on the radio bearer or the signalling radio bearer (except for the SRB where the response message is transmitted) according to the following:
 - 5> do not transmit RLC PDUs with sequence number greater than or equal to the uplink activation time, where the uplink activation time is selected according to the rules below.
 - 4> select an "RLC send sequence number" at which (activation) time the new ciphering configuration shall be applied in uplink for that radio bearer according to the following:
 - 5> for each radio bearer and signalling radio bearer that has no pending ciphering activation time in uplink as set by a previous procedure changing the security configuration:

- 6> set a suitable value that would ensure a minimised delay in the change to the latest security configuration.
- 5> for each radio bearer and signalling radio bearer that has a pending ciphering activation time in uplink as set by a previous procedure changing the security configuration:

6> set the same value as the pending ciphering activation time.

- 5> consider this activation time in uplink to be elapsed when the selected activation time (as above) is equal to the "RLC send sequence number";
- 4> store the selected "RLC send sequence number" for that radio bearer in the entry for the radio bearer in the variable RB_UPLINK_CIPHERING_ACTIVATION_TIME_INFO;
- 4> switch to the new ciphering configuration according to the following:
 - 5> use the old ciphering configuration for the transmitted and received RLC PDUs with RLC sequence numbers smaller than the corresponding RLC sequence numbers indicated in the IE "Radio bearer uplink ciphering activation time info" sent to UTRAN and in the received IE "Radio bearer downlink ciphering activation time info" received from UTRAN, respectively;
 - 5> use the new ciphering configuration for the transmitted and received RLC PDUs with RLC sequence numbers greater than or equal to the corresponding RLC sequence numbers indicated in the IE "Radio bearer uplink ciphering activation time info" sent to UTRAN and in the received IE "Radio bearer downlink ciphering activation time info" received from UTRAN, respectively;
 - 5> for a radio bearer using RLC-AM, when the RLC sequence number indicated in the IE "Radio bearer downlink ciphering activation time info" falls below the RLC receiving window and the RLC sequence number indicated in the IE "Radio bearer uplink ciphering activation time info" falls below the RLC transmission window, the UE may release the old ciphering configuration for that radio bearer;
 - 5> if an RLC reset or re-establishment occurs before the activation time for the new ciphering configuration has been reached, ignore the activation time and apply the new ciphering configuration immediately after the RLC reset or RLC re-establishment.

If the IE "Ciphering mode info" is not present, the UE shall:

1> not change the ciphering configuration.

8.6.3.5 Integrity protection mode info

The IE "Integrity protection mode info" defines the new integrity protection configuration. At any given time, the UE needs to store at most three different integrity protection configurations (keysets) in total for all signalling radio bearers for all CN domains.

If the IE "Integrity protection mode info" is present and if the IE "Reconfiguration" in the variable INTEGRITY_PROTECTION_INFO is set to TRUE, the UE shall:

- 1> ignore this second attempt to change the integrity protection configuration; and
- 1> set the variable INCOMPATIBLE_SECURITY_RECONFIGURATION to TRUE.
- If the IE "Integrity protection mode info" is present and if the IE "Reconfiguration" in the variable INTEGRITY_PROTECTION_INFO is set to FALSE, the UE shall:
- 1> set the IE "Reconfiguration" in the variable INTEGRITY_PROTECTION_INFO to TRUE;
- 1> if IE "Integrity protection mode command" has the value "start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not started", and this IE was included in the message SECURITY MODE COMMAND:
 - 2> initialise the information for all signalling radio bearers in the variable INTEGRITY_PROTECTION_INFO according to the following:

- 3> set the IE "Uplink RRC Message sequence number" in the variable INTEGRITY_PROTECTION_INFO to zero;
- 3> do not set the IE "Downlink RRC Message sequence number" in the variable INTEGRITY_PROTECTION_INFO;
- 3> set the variable INTEGRITY_PROTECTION_ACTIVATION_INFO to zero for each signalling radio bearer in the IE "ESTABLISHED_RABS".
- 2> set the IE "Status" in the variable INTEGRITY_PROTECTION_INFO to the value "Started";
- 2> perform integrity protection on the received message, applying the new integrity protection configuration, as described in subclause 8.5.10.1 by:
 - 3> using the algorithm (UIA [40]) indicated by the IE "Integrity protection algorithm" contained in the IE "Integrity protection mode info";
 - 3> using the IE "Integrity protection initialisation number", contained in the IE "Integrity protection mode info" as the value of FRESH [40].
- 2> start applying the new integrity protection configuration in the downlink for each signalling radio bearer in the IE "ESTABLISHED_RABS" except RB2 at the next received RRC message;
- 2> start applying the new integrity protection configuration in the downlink for signalling radio bearer RB2 from and including the received SECURITY MODE COMMAND message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearer RB2 from and including the transmitted SECURITY MODE COMPLETE message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearers other than RB2 at the uplink activation time included in the IE "Uplink integrity protection activation info".
- 1> if IE "Integrity protection mode command" has the value "start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started" and this IE was not included SECURITY MODE COMMAND:
- NOTE: This case is used in SRNS relocation
 - 2> perform integrity protection on the received message, applying the new integrity protection configuration, as described in subclause 8.5.10.1 by:
 - 3> using the algorithm (UIA [40]) indicated by the IE "Integrity protection algorithm" contained in the IE "Integrity protection mode info";
 - 3> using the IE "Integrity protection initialisation number", contained in the IE "Integrity protection mode info" as the value of FRESH [40].
 - 2> let RBm be the signalling radio bearer where the reconfiguration message was received and let RBn be the signalling radio bearer where the response message is transmitted;
 - 2> prohibit transmission of RRC messages on all signalling radio bearers in the IE "ESTABLISHED_RABS" except on RB0 and the radio bearer where the response message is transmitted;
 - 2> consider the new integrity protection configuration to include, <u>as appropriate</u>, any new keys<u>or keys</u> <u>associated with the LATEST_CONFIGURED_CN_DOMAIN</u>, that were activated through a security procedure received prior to the current message but not applied for the signalling radio bearer, due to the activation time for the corresponding signalling radio bearer not having elapsed;
 - 2> if for a signalling radio bearer, a security configuration triggered by a previous SECURITY MODE COMMAND is pending, due to the activation time for the signalling radio bearer not having elapsed:

3> if the previous SECURITY MODE COMMAND was received due to new keys being received:

4> consider the new integrity protectioon configuration to include the received new keys and,

<u>4> initialise the HFN of the COUNT-I values of the corresponding signalling radio bearers according to</u> <u>subclause 8.1.12.</u>

<u>3> else</u>

<u>4> consider the new Integrity Protection configuration to include the keys associated with the</u> <u>LATEST_CONFIGURED_CN_DOMAIN associated with the previously received SECURITY</u> <u>MODE COMMAND and</u>,

4> initialise the HFN of the COUNT-I values of the corresponding signalling radio bearers according to subclause 8.1.12 using the START value associated with the LATEST_CONFIGURED_CN_DOMAIN to be transmitted in the response to the current message.

- 2> start applying the new integrity protection configuration in the downlink for each signalling radio bearer in the IE "ESTABLISHED_RABS" except RBm at the next received RRC message disregarding any pending activation times for the corresponding signalling radio bearer;
- 2> start applying the new integrity protection configuration in the downlink for signalling radio bearer RBm from and including the received configuration message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearer RBn from and including the transmitted response message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearers other than RBn from the first message onwards.
- NOTE: The UTRAN should ignore the information included in the IE "Uplink integrity protection info".
- 1> if IE "Integrity protection mode command" has the value "modify" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started" and this IE was included in SECURITY MODE COMMAND:
 - 2> store the (oldest currently used) integrity protection configuration until activation times have elapsed for the new integrity protection configuration to be applied on all signalling radio bearers;
 - 2> if there are pending activation times set for integrity protection by a previous procedure changing the integrity protection configuration:
 - 3> apply the integrity protection configuration at this pending activation time as indicated in this procedure.
 - 2> start applying the new integrity protection configuration in the downlink at the RRC sequence number, for each signalling radio bearer n, indicated by the entry for signalling radio bearer n in the "RRC message sequence number list" in the IE "Downlink integrity protection activation info", included in the IE "Integrity protection mode info";
 - 2> perform integrity protection on the received message, applying the new integrity protection configuration, as described in subclause 8.5.10.1;
 - 3> if present, use the algorithm indicated by the IE "Integrity protection algorithm" (UIA [40]);
 - 2> set the content of the variable INTEGRITY_PROTECTION_ACTIVATION_INFO according to the following:
 - 3> for each established signalling radio bearer, stored in the variable ESTABLISHED_RABS:
 - 4> select a value of the RRC sequence number at which (activation) time the new integrity protection configuration shall be applied in uplink for that signalling radio bearer according to the following:
 - 5> for each signalling radio bearer that has no pending activation time as set for integrity protection by a previous procedure changing the integrity protection configuration:
 - 6> set a suitable value that would ensure a minimised delay in the change to the latest integrity protection configuration.

5> for signalling radio bearer that has a pending activation time as set for integrity protection by a previous procedure changing the integrity protection configuration:

6> set the same value as the pending activation time for integrity protection;

- 5> consider this (pending) activation time to be elapsed when the selected activation time (as above) is equal to the next RRC sequence number to be used, which means that the last RRC message using the old integrity protection configuration has been submitted to lower layers.
- 4> for signalling radio bearer RB0:
 - 5> set the value of the included RRC sequence number to greater than or equal to the current value of the RRC sequence number for signalling radio bearer RB0 in the variable INTEGRITY_PROTECTION_INFO, plus the value of the constant N302 plus one.
- 4> prohibit the transmission of RRC messages on all signalling radio bearers, except for RB2, with RRC SN greater than or equal to the value in the "RRC message sequence number list" for the signalling radio bearer in the IE "Uplink integrity protection activation info" of the variable INTEGRITY_PROTECTION_ACTIVATION_INFO.
- 2> start applying the new integrity protection configuration in the uplink at the RRC sequence number, for each RBn, except for signalling radio bearer RB2, indicated by the entry for signalling radio bearer n in the "RRC message sequence number list" in the IE "Uplink integrity protection activation info", included in the variable INTEGRITY_PROTECTION_ACTIVATION_INFO;
- 2> start applying the new integrity protection configuration in the uplink at the RRC sequence number for signalling radio bearer RB2, as specified for the procedure initiating the integrity protection reconfiguration;
- 2> start applying the new integrity protection configuration in the downlink at the RRC sequence number, for each RBn, except for signalling radio bearer RB2, indicated by the entry for signalling radio bearer n in the "RRC message sequence number list" in the IE "Downlink integrity protection activation info";
- NOTE: For signalling radio bearers that have a pending activation time as set for integrity protection by a previous procedure changing the integrity protection configuration, UTRAN should set this value in IE "Downlink integrity protection activation info".
 - 2> start applying the new integrity protection configuration in the downlink at the RRC sequence number for signalling radio bearer RB2, as specified for the procedure initiating the integrity protection reconfiguration.

If IE "Integrity protection mode command" has the value "Start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not started", and the IE "Integrity protection mode command info" was not included in the message SECURITY MODE COMMAND; or

If IE "Integrity protection mode command" has the value "Start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not started", and the IE "Integrity protection mode info" was included in the message SECURITY MODE COMMAND, and the IE "Integrity protection algorithm" is not included; or

If the IE "Integrity protection mode command" has the value "Modify" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not Started"; or

If IE "Integrity protection mode command" has the value "Start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started", and the IE "Integrity protection mode command info" was included in the message SECURITY MODE COMMAND; or

If there does not exist exactly one integrity protection activation time in the IE "Downlink integrity protection activation info" for each established signalling radio bearer included in the IE "Signalling radio bearer information" in the IE "ESTABLISHED_RABS"; or

If IE "Integrity protection mode command" has the value "Modify" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started", and the IE "Integrity protection mode info" was not included in the message SECURITY MODE COMMAND:

the UE shall:

1> ignore this attempt to change the integrity protection configuration; and

1> set the variable INVALID_CONFIGURATION to TRUE.

If the IE "Integrity protection mode info" is not present, the UE shall:

1> not change the integrity protection configuration.

Torino, italy, Julie 24-26, 2002				
	CHANGE REQUEST	CR-Form-v7		
æ	25.331 CR 1533 # rev - # Current vers	^{ion:} 4.5.0 [#]		
For <mark>HELP</mark> on u	using this form, see bottom of this page or look at the pop-up text	over the # symbols.		
Proposed change	e affects: UICC apps# ME X Radio Access Networ	k X Core Network		
Title: ೫	Application of integrity keys in case of a pending CN domain sy relocation	witch during a SRNS		
Source: भ्र	# TSG-RAN WG2			
Work item code: %	ж <mark>TEI Date:</mark> #	June 14, 2002		
Category: #	ж <mark>А</mark> Release: Ж	Rel-4		
Use one of the following categories: Use one of the following releases: F (correction) 2 (GSM Phase 2) A (corresponds to a correction in an earlier release) R96 (Release 1996) B (addition of feature), R97 (Release 1997) C (functional modification of feature) R98 (Release 1998) D (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can be found in 3GPP TR 21.900. Rel-4 (Release 5) Rel-6 (Release 6) Rel-6 (Release 6)				
	"consider the new integrity protection configuration to inclu- were activated through a security procedure received prio message but not applied for the signalling radio bearer, du for the corresponding signalling radio bearer not having el The word "new" can be construed to imply that only in cas procedure activated new keys (for the same domain) shal immediately after the SRNS relocation procedure. The UE relocation, in case the previous security procedure was ca reception of a SECURITY MODE COMMAND with a doma are now to be integrity protected by the keys from latest co could be interpreted as missing. The relocation container target does not include the pending activation times and no LATEST_CONFIGURED_CN_DOMAIN to the target. Thus unaware of any pending activation times and this would can the security keys of the wrong domain to the signalling me	ude any new keys that or to the current ue to the activation time lapsed" se the previous security I the UE apply them E behavior, post SRNS aused due to the ain change (i.e. SRBs onfigured CN domain) from the source to the nerely conveys the is the target RNC is ause the target to apply essages.		

case of pending security configuration due to change in LATEST_CONFIGURED_CN_DOMAIN triggerd by a previous SECURITY MODE COMMAND.

Appropriate UTRAN setting of the activation times for the first security procedure

may not solve the problem since the UTRAN cannot predict the UE's need to transmit signalling messages on SRB 1, 3 and 4. For similar reasons this problem cannot be solved by requiring the UTRAN to not initiate the SRNS relocation procedure until the pending activation times have elapsed since the UE actions of transmission of uplink signalling messages cannot be predicted	
Clarification of UE behavior is therefore seen necessary.	
Frequency of problem : The frequency of this problem is linked to the frequency of the change of the controlling (from a SRB IP and ciphering) CN domain i.e. establishment of Iu connection, and the type of potential triggers of SRNS relocation at the UTRAN. Also linked is the state of the UE and how this influences the triggering of a SRNS relocation at the UTRAN.	ю
Summary of change: # It is stated that the UE shall apply the keys corresponding to the LATEST_CONFIGURED_CN_DOMAIN following completion of the SRNS relocation procedure in case there is a pending application key due to a previous security procedure. Similar modifications are made in 8.6.3.4 for the case of ciphering.	ous
In case of a pending security configuration with change on the LATEST_CONFIGURED_CN_DOMAIN it is clarified that the UE shall set the most significant bits of the HFN to the START value of the LATEST_CONFIGURED_CN_DOMAIN.	
Impact Analysis:	
Affected Functionality: Integrity Protection post SRNS Relocation	
Correction to a function where specification was ambiguous/not sufficiently explicit/missing procedural text or rules/containing some contradiction. Would r affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.	ot
Consequences if not approved: * UTRAN would not be able to perform SRNS relocation if the activation times f a security procedure for a signalling radio bearer have not elapsed or signalling messages will be lost in case of SRNS relocation.	
Clauses affected: % 8.6.3.4, 8.6.3.5	
Other specs # X Other core specifications # affected: X Test specifications # X O&M Specifications O&M Specifications	
Other comments: #	

How to create CRs using this form:

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

8.6.3.4 Ciphering mode info

The IE "Ciphering mode info" defines the new ciphering configuration. At any given time, the UE needs to store at most two different ciphering configurations (keyset and algorithm) per CN domain at any given time in total for all radio bearers and three configurations in total for all signalling radio bearers.

If the IE "Ciphering mode info" is present and if the IE "Reconfiguration" in the variable CIPHERING_STATUS is set to TRUE, the UE shall:

- 1> ignore this second attempt to change the ciphering configuration; and
- 1> set the variable INCOMPATIBLE_SECURITY_RECONFIGURATION to TRUE.

If the IE "Ciphering mode info" is present and if the IE "Reconfiguration" in the variable CIPHERING_STATUS is set to FALSE, the UE shall:

- 1> if the IE "Status" in the variable CIPHERING STATUS has the value "Not started", and this IE was included in a message that is not the message SECURITY MODE COMMAND; or
- 1> if the IE "Ciphering Mode Info" was received in the message SECURITY MODE COMMAND and there does not exist exactly one ciphering activation time in the IE "Radio bearer downlink ciphering activation time info" for each established RLC-AM and RLC-UM radio bearers included in the IE "RB information" in the IE "ESTABLISHED_RABS" for the CN domain as indicated in the variable LATEST_CONFIGURED_CN_DOMAIN; or
- 1> if the IE "Ciphering Mode Info" was received in the message SECURITY MODE COMMAND and the IE "Ciphering activation time for DPCH" is not included in the message, and there exist radio bearers using RLC-TM according to the IE "RB information" in the IE "ESTABLISHED_RABS" for the CN domain as indicated in the variable LATEST_CONFIGURED_CN_DOMAIN; or
- 1> if the IE "Ciphering Mode Info" was received in the message SECURITY MODE COMMAND and there does not exist exactly one ciphering activation time in the IE "Radio bearer downlink ciphering activation time info" for each established signalling radio bearer included in the IE "Signalling radio bearer information" in the IE "ESTABLISHED_RABS":
 - 2> ignore this attempt to change the ciphering configuration;
 - 2> set the variable INVALID_CONFIGURATION to TRUE;
 - 2> perform the actions as specified in subclause 8.1.12.4c.
- 1> set the IE "Reconfiguration" in the variable CIPHERING_STATUS to TRUE;
- 1> set the IE "Status" in the variable CIPHERING_STATUS of the CN domains for which the IE "Status" of the variable SECURITY_MODIFICATION is set to "Affected" to "Started";
- 1> apply the new ciphering configuration in the lower layers for all RBs that belong to a CN domain for which the IE "Status" of the variable SECURITY_MODIFICATION is set to "Affected" and all signalling radio bearers:
 - 2> using the ciphering algorithm (UEA [40]) indicated by the IE "Ciphering algorithm" as part of the new ciphering configuration;
 - 2> for each radio bearer that belongs to a CN domain for which the IE "Status" of the variable SECURITY_MODIFICATION is set to "Affected" and all signalling radio bearers:
 - 3> using the value of the IE "RB identity" in the variable ESTABLISHED_RABS minus one as the value of BEARER [40] in the ciphering algorithm.
- 1> apply the new ciphering configuration as follows:
 - 2> consider an activation time in downlink to be pending:
 - 3> for UM-RLC until an UMD PDU with sequence number equal to or larger than activation time -1 has been received;

- 3> for AM-RLC until all AMD PDUs with sequence numbers up to and including activation time -1 have been received;
- 3> for TM-RLC until the CFN indicated in the activation time has been reached.
- 2> if there are pending activation times in downlink set for ciphering by a previous procedure changing the ciphering configuration for a radio bearer or signalling radio bearer:

3> apply the ciphering configuration included in the current message at this pending activation time;

- 3> consider the ciphering keys that were to be applied following a previous procedure changing the ciphering configuration and which have not yet been applied due to the activation time not having elapsed for a given radio bearer, as part of the ciphering configuration received in the current message.
- 2> if the ciphering configuration is pending for a radio bearer or signalling radio bearer due to a previously received SECURITY MODE COMMAND and the current received message includes the IE "DL Counter Synch Info" or the current received message is a RADIO BEARER RECONFIGURATION message and includes the IE "New U-RNTI":
 - 3> if the previous SECURITY MODE COMMAND was received due to new keys being received:
 - 4> consider the new ciphering configuration to include the received new keys and,
 - 4> initialise the HFN values of the COUNT-C for the corresponding radio bearers or signalling radio bearers according to subclause 8.1.12;
 - <u>3> else</u>
 - <u>4> consider the new ciphering configuration to include the keys associated with the</u> <u>LATEST CONFIGURED CN DOMAIN and</u>
 - 4> initialise the HFN values of the COUNT-C for the corresponding radio bearers or signalling radio bearers according to subclause 8.1.12 using the START value associated with the LATEST CONFIGURED CN DOMAIN to be transmitted in the response to the current message;

3> apply the new ciphering configuration in uplink and downlink immediately following RLC re-establishment.

- 2> if the IE "Ciphering activation time for DPCH" is present in the IE "Ciphering mode info" and the UE was in CELL_DCH state prior to this procedure:
 - 3> for radio bearers using RLC-TM:
 - 4> apply the old ciphering configuration for CFN less than the number indicated in the IE "Ciphering activation time for DPCH";
 - 4> apply the new ciphering configuration for CFN greater than or equal to the number indicated in IE "Ciphering activation time for DPCH".
- 2> if the IE "Radio bearer downlink ciphering activation time info" is present:
 - 3> apply the following procedure for each radio bearer and signalling radio bearers using RLC-AM or RLC-UM indicated by the IE "RB identity":
 - 4> suspend uplink transmission on the radio bearer or the signalling radio bearer (except for the SRB where the response message is transmitted) according to the following:
 - 5> do not transmit RLC PDUs with sequence number greater than or equal to the uplink activation time, where the uplink activation time is selected according to the rules below.
 - 4> select an "RLC send sequence number" at which (activation) time the new ciphering configuration shall be applied in uplink for that radio bearer according to the following:
 - 5> for each radio bearer and signalling radio bearer that has no pending ciphering activation time in uplink as set by a previous procedure changing the security configuration:
 - 6> set a suitable value that would ensure a minimised delay in the change to the latest security configuration.

5> for each radio bearer and signalling radio bearer that has a pending ciphering activation time in uplink as set by a previous procedure changing the security configuration:

6> set the same value as the pending ciphering activation time.

- 5> consider this activation time in uplink to be elapsed when the selected activation time (as above) is equal to the "RLC send sequence number";
- 4> store the selected "RLC send sequence number" for that radio bearer in the entry for the radio bearer in the variable RB_UPLINK_CIPHERING_ACTIVATION_TIME_INFO;
- 4> switch to the new ciphering configuration according to the following:
 - 5> use the old ciphering configuration for the transmitted and received RLC PDUs with RLC sequence numbers smaller than the corresponding RLC sequence numbers indicated in the IE "Radio bearer uplink ciphering activation time info" sent to UTRAN and in the received IE "Radio bearer downlink ciphering activation time info" received from UTRAN, respectively;
 - 5> use the new ciphering configuration for the transmitted and received RLC PDUs with RLC sequence numbers greater than or equal to the corresponding RLC sequence numbers indicated in the IE "Radio bearer uplink ciphering activation time info" sent to UTRAN and in the received IE "Radio bearer downlink ciphering activation time info" received from UTRAN, respectively;
 - 5> for a radio bearer using RLC-AM, when the RLC sequence number indicated in the IE "Radio bearer downlink ciphering activation time info" falls below the RLC receiving window and the RLC sequence number indicated in the IE "Radio bearer uplink ciphering activation time info" falls below the RLC transmission window, the UE may release the old ciphering configuration for that radio bearer;
 - 5> if an RLC reset or re-establishment occurs before the activation time for the new ciphering configuration has been reached, ignore the activation time and apply the new ciphering configuration immediately after the RLC reset or RLC re-establishment.

If the IE "Ciphering mode info" is not present, the UE shall:

1> not change the ciphering configuration.

8.6.3.5 Integrity protection mode info

The IE "Integrity protection mode info" defines the new integrity protection configuration. At any given time, the UE needs to store at most three different integrity protection configurations (keysets) in total for all signalling radio bearers for all CN domains.

If the IE "Integrity protection mode info" is present and if the IE "Reconfiguration" in the variable INTEGRITY_PROTECTION_INFO is set to TRUE, the UE shall:

1> ignore this second attempt to change the integrity protection configuration; and

1> set the variable INCOMPATIBLE_SECURITY_RECONFIGURATION to TRUE.

- If the IE "Integrity protection mode info" is present and if the IE "Reconfiguration" in the variable INTEGRITY_PROTECTION_INFO is set to FALSE, the UE shall:
- 1> set the IE "Reconfiguration" in the variable INTEGRITY_PROTECTION_INFO to TRUE;
- 1> if IE "Integrity protection mode command" has the value "start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not started", and this IE was included in the message SECURITY MODE COMMAND:
 - 2> initialise the information for all signalling radio bearers in the variable INTEGRITY_PROTECTION_INFO according to the following:
 - 3> set the IE "Uplink RRC Message sequence number" in the variable INTEGRITY_PROTECTION_INFO to zero;

- 3> do not set the IE "Downlink RRC Message sequence number" in the variable INTEGRITY_PROTECTION_INFO;
- 3> set the variable INTEGRITY_PROTECTION_ACTIVATION_INFO to zero for each signalling radio bearer in the IE "ESTABLISHED_RABS".
- 2> set the IE "Status" in the variable INTEGRITY_PROTECTION_INFO to the value "Started";
- 2> perform integrity protection on the received message, applying the new integrity protection configuration, as described in subclause 8.5.10.1 by:
 - 3> using the algorithm (UIA [40]) indicated by the IE "Integrity protection algorithm" contained in the IE "Integrity protection mode info";
 - 3> using the IE "Integrity protection initialisation number", contained in the IE "Integrity protection mode info" as the value of FRESH [40].
- 2> start applying the new integrity protection configuration in the downlink for each signalling radio bearer in the IE "ESTABLISHED_RABS" except RB2 at the next received RRC message;
- 2> start applying the new integrity protection configuration in the downlink for signalling radio bearer RB2 from and including the received SECURITY MODE COMMAND message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearer RB2 from and including the transmitted SECURITY MODE COMPLETE message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearers other than RB2 at the uplink activation time included in the IE "Uplink integrity protection activation info".
- 1> if IE "Integrity protection mode command" has the value "start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started" and this IE was not included SECURITY MODE COMMAND:
- NOTE: This case is used in SRNS relocation
 - 2> perform integrity protection on the received message, applying the new integrity protection configuration, as described in subclause 8.5.10.1 by:
 - 3> using the algorithm (UIA [40]) indicated by the IE "Integrity protection algorithm" contained in the IE "Integrity protection mode info";
 - 3> using the IE "Integrity protection initialisation number", contained in the IE "Integrity protection mode info" as the value of FRESH [40].
 - 2> let RBm be the signalling radio bearer where the reconfiguration message was received and let RBn be the signalling radio bearer where the response message is transmitted;
 - 2> prohibit transmission of RRC messages on all signalling radio bearers in the IE "ESTABLISHED_RABS" except on RB0 and the radio bearer where the response message is transmitted;
 - 2> consider the new integrity protection configuration to include any new keys that were activated through a security procedure received prior to the current message but not applied for the signalling radio bearer, due to the activation time for the corresponding signalling radio bearer not having elapsed;
 - 2> if for a signalling radio bearer, a security configuration triggered by a previous SECURITY MODE COMMAND is pending, due to the activation time for the signalling radio bearer not having elapsed:
 - 3> if the previous SECURITY MODE COMMAND was received due to new keys being received:
 - 4> consider the new integrity protectioon configuration to include the received new keys and,
 - <u>4> initialise the HFN of the COUNT-I values of the corresponding signalling radio bearers according to</u> <u>subclause 8.1.12.</u>

3> else

- <u>4> consider the new Integrity Protection configuration to include the keys associated with the</u> <u>LATEST CONFIGURED CN DOMAIN associated with the previously received SECURITY</u> <u>MODE COMMAND and</u>,
- 4> initialise the HFN of the COUNT-I values of the corresponding signalling radio bearers according to subclause 8.1.12 using the START value associated with the LATEST CONFIGURED CN DOMAIN to be transmitted in the response to the current message.
- 2> start applying the new integrity protection configuration in the downlink for each signalling radio bearer in the IE "ESTABLISHED_RABS" except RBm at the next received RRC message disregarding any pending activation times for the corresponding signalling radio bearer;
- 2> start applying the new integrity protection configuration in the downlink for signalling radio bearer RBm from and including the received configuration message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearer RBn from and including the transmitted response message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearers other than RBn from the first message onwards.
- NOTE: The UTRAN should ignore the information included in the IE "Uplink integrity protection info".
- 1> if IE "Integrity protection mode command" has the value "modify" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started" and this IE was included in SECURITY MODE COMMAND:
 - 2> store the (oldest currently used) integrity protection configuration until activation times have elapsed for the new integrity protection configuration to be applied on all signalling radio bearers;
 - 2> if there are pending activation times set for integrity protection by a previous procedure changing the integrity protection configuration:

3> apply the integrity protection configuration at this pending activation time as indicated in this procedure.

- 2> start applying the new integrity protection configuration in the downlink at the RRC sequence number, for each signalling radio bearer n, indicated by the entry for signalling radio bearer n in the "RRC message sequence number list" in the IE "Downlink integrity protection activation info", included in the IE "Integrity protection mode info";
- 2> perform integrity protection on the received message, applying the new integrity protection configuration, as described in subclause 8.5.10.1;
 - 3> if present, use the algorithm indicated by the IE "Integrity protection algorithm" (UIA [40]);
- 2> set the content of the variable INTEGRITY_PROTECTION_ACTIVATION_INFO according to the following:
 - 3> for each established signalling radio bearer, stored in the variable ESTABLISHED_RABS:
 - 4> select a value of the RRC sequence number at which (activation) time the new integrity protection configuration shall be applied in uplink for that signalling radio bearer according to the following:
 - 5> for each signalling radio bearer that has no pending activation time as set for integrity protection by a previous procedure changing the integrity protection configuration:
 - 6> set a suitable value that would ensure a minimised delay in the change to the latest integrity protection configuration.
 - 5> for signalling radio bearer that has a pending activation time as set for integrity protection by a previous procedure changing the integrity protection configuration:

6> set the same value as the pending activation time for integrity protection;

- 5> consider this (pending) activation time to be elapsed when the selected activation time (as above) is equal to the next RRC sequence number to be used, which means that the last RRC message using the old integrity protection configuration has been submitted to lower layers.
- 4> for signalling radio bearer RB0:
 - 5> set the value of the included RRC sequence number to greater than or equal to the current value of the RRC sequence number for signalling radio bearer RB0 in the variable INTEGRITY_PROTECTION_INFO, plus the value of the constant N302 plus one.
- 4> prohibit the transmission of RRC messages on all signalling radio bearers, except for RB2, with RRC SN greater than or equal to the value in the "RRC message sequence number list" for the signalling radio bearer in the IE "Uplink integrity protection activation info" of the variable INTEGRITY_PROTECTION_ACTIVATION_INFO.
- 2> start applying the new integrity protection configuration in the uplink at the RRC sequence number, for each RBn, except for signalling radio bearer RB2, indicated by the entry for signalling radio bearer n in the "RRC message sequence number list" in the IE "Uplink integrity protection activation info", included in the variable INTEGRITY_PROTECTION_ACTIVATION_INFO;
- 2> start applying the new integrity protection configuration in the uplink at the RRC sequence number for signalling radio bearer RB2, as specified for the procedure initiating the integrity protection reconfiguration;
- 2> start applying the new integrity protection configuration in the downlink at the RRC sequence number, for each RBn, except for signalling radio bearer RB2, indicated by the entry for signalling radio bearer n in the "RRC message sequence number list" in the IE "Downlink integrity protection activation info";
- NOTE: For signalling radio bearers that have a pending activation time as set for integrity protection by a previous procedure changing the integrity protection configuration, UTRAN should set this value in IE "Downlink integrity protection activation info".
 - 2> start applying the new integrity protection configuration in the downlink at the RRC sequence number for signalling radio bearer RB2, as specified for the procedure initiating the integrity protection reconfiguration.

If IE "Integrity protection mode command" has the value "Start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not started", and the IE "Integrity protection mode command info" was not included in the message SECURITY MODE COMMAND; or

If IE "Integrity protection mode command" has the value "Start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not started", and the IE "Integrity protection mode info" was included in the message SECURITY MODE COMMAND, and the IE "Integrity protection algorithm" is not included; or

If the IE "Integrity protection mode command" has the value "Modify" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not Started"; or

If IE "Integrity protection mode command" has the value "Start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started", and the IE "Integrity protection mode command info" was included in the message SECURITY MODE COMMAND; or

If there does not exist exactly one integrity protection activation time in the IE "Downlink integrity protection activation info" for each established signalling radio bearer included in the IE "Signalling radio bearer information" in the IE "ESTABLISHED_RABS"; or

If IE "Integrity protection mode command" has the value "Modify" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started", and the IE "Integrity protection mode info" was not included in the message SECURITY MODE COMMAND:

the UE shall:

1> ignore this attempt to change the integrity protection configuration; and

1> set the variable INVALID_CONFIGURATION to TRUE.

If the IE "Integrity protection mode info" is not present, the UE shall:

1> not change the integrity protection configuration.

9

	Tie 24-26, 2002
¥	25.331 CR 1534 # rev - # Current version: 5.1.0 #
For <u>HELP</u> on u Proposed change	affects: UICC apps# ME X Radio Access Network X Core Network
Title: भ Source: भ	relocation
Work item code: भ	TEI Date: 육 June 14, 2002
Category: अ	ARelease: #Rel-5Use one of the following categories:Use one of the following releases:F (correction)2A (corresponds to a correction in an earlier release)R96B (addition of feature),R97C (functional modification of feature)R98D (editorial modification)R99D tetailed explanations of the above categories canRel-4be found in 3GPP TR 21.900.Rel-5C (Release 6)
Reason for change	 In RAN#16 a change request to 25.331 was approved which provided for the correct application of integrity keys on a SRNS relocation following a pending securit procedure an a signalling radio bearer. The text currently states: "consider the new integrity protection configuration to include any <i>new</i> keys that were activated through a security procedure received prior to the current message but not applied for the signalling radio bearer, due to the activation time for the corresponding signalling radio bearer not having elapsed" The word "new" can be construed to imply that only in case the previous security procedure activated new keys (for the same domain) shall the UE apply them immediately after the SRNS relocation procedure. The UE behavior, post SRNS relocation, in case the previous security procedure was caused due to the reception of a SECURITY MODE COMMAND with a domain change (i.e. SRBs are now to be integrity protected by the keys from latest configured CN domain) could be interpreted as missing. The relocation container from the source to the target does not include the pending activation times and merely conveys the LATEST_CONFIGURED_CN_DOMAIN to the target. Thus the target RNC is unaware of any pending activation times and this would cause the target to apply the security keys of the wrong domain to the signalling messages.

LATEST_CONFIGURED_CN_DOMAIN triggerd by a previous SECURITY MODE COMMAND.

Appropriate UTRAN setting of the activation times for the first security procedure

may not solve the problem since the UTRAN cannot predict the UE's need to transmit signalling messages on SRB 1, 3 and 4. For similar reasons this problem cannot be solved by requiring the UTRAN to not initiate the SRNS relocation procedure until the pending activation times have elapsed since the UE actions of transmission of uplink signalling messages cannot be predicted	
Clarification of UE behavior is therefore seen necessary.	
Frequency of problem : The frequency of this problem is linked to the frequency of the change of the controlling (from a SRB IP and ciphering) CN domain i.e. establishment of Iu connection, and the type of potential triggers of SRNS relocation at the UTRAN. Also linked is the state of the UE and how this influences the triggering of a SRNS relocation at the UTRAN.	ю
Summary of change: # It is stated that the UE shall apply the keys corresponding to the LATEST_CONFIGURED_CN_DOMAIN following completion of the SRNS relocation procedure in case there is a pending application key due to a previous security procedure. Similar modifications are made in 8.6.3.4 for the case of ciphering.	ous
In case of a pending security configuration with change on the LATEST_CONFIGURED_CN_DOMAIN it is clarified that the UE shall set the most significant bits of the HFN to the START value of the LATEST_CONFIGURED_CN_DOMAIN.	
Impact Analysis:	
Affected Functionality: Integrity Protection post SRNS Relocation	
Correction to a function where specification was ambiguous/not sufficiently explicit/missing procedural text or rules/containing some contradiction. Would r affect implementations behaving like indicated in the CR, would affect implementations supporting the corrected functionality otherwise.	ot
Consequences if not approved: * UTRAN would not be able to perform SRNS relocation if the activation times f a security procedure for a signalling radio bearer have not elapsed or signalling messages will be lost in case of SRNS relocation.	
Clauses affected: % 8.6.3.4, 8.6.3.5	
Other specs # X Other core specifications # affected: X Test specifications # X O&M Specifications O&M Specifications	
Other comments: #	

How to create CRs using this form:

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

8.6.3.4 Ciphering mode info

The IE "Ciphering mode info" defines the new ciphering configuration. At any given time, the UE needs to store at most two different ciphering configurations (keyset and algorithm) per CN domain at any given time in total for all radio bearers and three configurations in total for all signalling radio bearers.

If the IE "Ciphering mode info" is present and if the IE "Reconfiguration" in the variable CIPHERING_STATUS is set to TRUE, the UE shall:

- 1> ignore this second attempt to change the ciphering configuration; and
- 1> set the variable INCOMPATIBLE_SECURITY_RECONFIGURATION to TRUE.

If the IE "Ciphering mode info" is present and if the IE "Reconfiguration" in the variable CIPHERING_STATUS is set to FALSE, the UE shall:

- 1> if the IE "Status" in the variable CIPHERING STATUS has the value "Not started", and this IE was included in a message that is not the message SECURITY MODE COMMAND; or
- 1> if the IE "Ciphering Mode Info" was received in the message SECURITY MODE COMMAND and there does not exist exactly one ciphering activation time in the IE "Radio bearer downlink ciphering activation time info" for each established RLC-AM and RLC-UM radio bearers included in the IE "RB information" in the IE "ESTABLISHED_RABS" for the CN domain as indicated in the variable LATEST_CONFIGURED_CN_DOMAIN; or
- 1> if the IE "Ciphering Mode Info" was received in the message SECURITY MODE COMMAND and the IE "Ciphering activation time for DPCH" is not included in the message, and there exist radio bearers using RLC-TM according to the IE "RB information" in the IE "ESTABLISHED_RABS" for the CN domain as indicated in the variable LATEST_CONFIGURED_CN_DOMAIN; or
- 1> if the IE "Ciphering Mode Info" was received in the message SECURITY MODE COMMAND and there does not exist exactly one ciphering activation time in the IE "Radio bearer downlink ciphering activation time info" for each established signalling radio bearer included in the IE "Signalling radio bearer information" in the IE "ESTABLISHED_RABS":
 - 2> ignore this attempt to change the ciphering configuration;
 - 2> set the variable INVALID_CONFIGURATION to TRUE;
 - 2> perform the actions as specified in subclause 8.1.12.4c.
- 1> set the IE "Reconfiguration" in the variable CIPHERING_STATUS to TRUE;
- 1> set the IE "Status" in the variable CIPHERING_STATUS of the CN domains for which the IE "Status" of the variable SECURITY_MODIFICATION is set to "Affected" to "Started";
- 1> apply the new ciphering configuration in the lower layers for all RBs that belong to a CN domain for which the IE "Status" of the variable SECURITY_MODIFICATION is set to "Affected" and all signalling radio bearers:
 - 2> using the ciphering algorithm (UEA [40]) indicated by the IE "Ciphering algorithm" as part of the new ciphering configuration;
 - 2> for each radio bearer that belongs to a CN domain for which the IE "Status" of the variable SECURITY_MODIFICATION is set to "Affected" and all signalling radio bearers:
 - 3> using the value of the IE "RB identity" in the variable ESTABLISHED_RABS minus one as the value of BEARER [40] in the ciphering algorithm.
- 1> apply the new ciphering configuration as follows:
 - 2> consider an activation time in downlink to be pending:
 - 3> for UM-RLC until an UMD PDU with sequence number equal to or larger than activation time -1 has been received;

- 3> for AM-RLC until all AMD PDUs with sequence numbers up to and including activation time -1 have been received;
- 3> for TM-RLC until the CFN indicated in the activation time has been reached.
- 2> if there are pending activation times in downlink set for ciphering by a previous procedure changing the ciphering configuration for a radio bearer or signalling radio bearer:

3> apply the ciphering configuration included in the current message at this pending activation time;

- 3> consider the ciphering keys that were to be applied following a previous procedure changing the ciphering configuration and which have not yet been applied due to the activation time not having elapsed for a given radio bearer, as part of the ciphering configuration received in the current message.
- 2> if the ciphering configuration is pending for a radio bearer or signalling radio bearer due to a previously received SECURITY MODE COMMAND and the current received message includes the IE "DL Counter Synch Info" or the current received message is a RADIO BEARER RECONFIGURATION message and includes the IE "New U-RNTI":
 - 3> if the previous SECURITY MODE COMMAND was received due to new keys being received:
 - 4> consider the new ciphering configuration to include the received new keys and,
 - 4> initialise the HFN values of the COUNT-C for the corresponding radio bearers or signalling radio bearers according to subclause 8.1.12;
 - <u>3> else</u>
 - <u>4> consider the new ciphering configuration to include the keys associated with the</u> <u>LATEST CONFIGURED CN DOMAIN and</u>
 - 4> initialise the HFN values of the COUNT-C for the corresponding radio bearers or signalling radio bearers according to subclause 8.1.12 using the START value associated with the LATEST CONFIGURED CN DOMAIN to be transmitted in the response to the current message;

3> apply the new ciphering configuration in uplink and downlink immediately following RLC re-establishment.

- 2> if the IE "Ciphering activation time for DPCH" is present in the IE "Ciphering mode info" and the UE was in CELL_DCH state prior to this procedure:
 - 3> for radio bearers using RLC-TM:
 - 4> apply the old ciphering configuration for CFN less than the number indicated in the IE "Ciphering activation time for DPCH";
 - 4> apply the new ciphering configuration for CFN greater than or equal to the number indicated in IE "Ciphering activation time for DPCH".
- 2> if the IE "Radio bearer downlink ciphering activation time info" is present:
 - 3> apply the following procedure for each radio bearer and signalling radio bearers using RLC-AM or RLC-UM indicated by the IE "RB identity":
 - 4> suspend uplink transmission on the radio bearer or the signalling radio bearer (except for the SRB where the response message is transmitted) according to the following:
 - 5> do not transmit RLC PDUs with sequence number greater than or equal to the uplink activation time, where the uplink activation time is selected according to the rules below.
 - 4> select an "RLC send sequence number" at which (activation) time the new ciphering configuration shall be applied in uplink for that radio bearer according to the following:
 - 5> for each radio bearer and signalling radio bearer that has no pending ciphering activation time in uplink as set by a previous procedure changing the security configuration:
 - 6> set a suitable value that would ensure a minimised delay in the change to the latest security configuration.

5> for each radio bearer and signalling radio bearer that has a pending ciphering activation time in uplink as set by a previous procedure changing the security configuration:

6> set the same value as the pending ciphering activation time.

- 5> consider this activation time in uplink to be elapsed when the selected activation time (as above) is equal to the "RLC send sequence number";
- 4> store the selected "RLC send sequence number" for that radio bearer in the entry for the radio bearer in the variable RB_UPLINK_CIPHERING_ACTIVATION_TIME_INFO;
- 4> switch to the new ciphering configuration according to the following:
 - 5> use the old ciphering configuration for the transmitted and received RLC PDUs with RLC sequence numbers smaller than the corresponding RLC sequence numbers indicated in the IE "Radio bearer uplink ciphering activation time info" sent to UTRAN and in the received IE "Radio bearer downlink ciphering activation time info" received from UTRAN, respectively;
 - 5> use the new ciphering configuration for the transmitted and received RLC PDUs with RLC sequence numbers greater than or equal to the corresponding RLC sequence numbers indicated in the IE "Radio bearer uplink ciphering activation time info" sent to UTRAN and in the received IE "Radio bearer downlink ciphering activation time info" received from UTRAN, respectively;
 - 5> for a radio bearer using RLC-AM, when the RLC sequence number indicated in the IE "Radio bearer downlink ciphering activation time info" falls below the RLC receiving window and the RLC sequence number indicated in the IE "Radio bearer uplink ciphering activation time info" falls below the RLC transmission window, the UE may release the old ciphering configuration for that radio bearer;
 - 5> if an RLC reset or re-establishment occurs before the activation time for the new ciphering configuration has been reached, ignore the activation time and apply the new ciphering configuration immediately after the RLC reset or RLC re-establishment.

If the IE "Ciphering mode info" is not present, the UE shall:

1> not change the ciphering configuration.

8.6.3.5 Integrity protection mode info

The IE "Integrity protection mode info" defines the new integrity protection configuration. At any given time, the UE needs to store at most three different integrity protection configurations (keysets) in total for all signalling radio bearers for all CN domains.

If the IE "Integrity protection mode info" is present and if the IE "Reconfiguration" in the variable INTEGRITY_PROTECTION_INFO is set to TRUE, the UE shall:

1> ignore this second attempt to change the integrity protection configuration; and

1> set the variable INCOMPATIBLE_SECURITY_RECONFIGURATION to TRUE.

- If the IE "Integrity protection mode info" is present and if the IE "Reconfiguration" in the variable INTEGRITY_PROTECTION_INFO is set to FALSE, the UE shall:
- 1> set the IE "Reconfiguration" in the variable INTEGRITY_PROTECTION_INFO to TRUE;
- 1> if IE "Integrity protection mode command" has the value "start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not started", and this IE was included in the message SECURITY MODE COMMAND:
 - 2> initialise the information for all signalling radio bearers in the variable INTEGRITY_PROTECTION_INFO according to the following:
 - 3> set the IE "Uplink RRC Message sequence number" in the variable INTEGRITY_PROTECTION_INFO to zero;

- 3> do not set the IE "Downlink RRC Message sequence number" in the variable INTEGRITY_PROTECTION_INFO;
- 3> set the variable INTEGRITY_PROTECTION_ACTIVATION_INFO to zero for each signalling radio bearer in the IE "ESTABLISHED_RABS".
- 2> set the IE "Status" in the variable INTEGRITY_PROTECTION_INFO to the value "Started";
- 2> perform integrity protection on the received message, applying the new integrity protection configuration, as described in subclause 8.5.10.1 by:
 - 3> using the algorithm (UIA [40]) indicated by the IE "Integrity protection algorithm" contained in the IE "Integrity protection mode info";
 - 3> using the IE "Integrity protection initialisation number", contained in the IE "Integrity protection mode info" as the value of FRESH [40].
- 2> start applying the new integrity protection configuration in the downlink for each signalling radio bearer in the IE "ESTABLISHED_RABS" except RB2 at the next received RRC message;
- 2> start applying the new integrity protection configuration in the downlink for signalling radio bearer RB2 from and including the received SECURITY MODE COMMAND message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearer RB2 from and including the transmitted SECURITY MODE COMPLETE message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearers other than RB2 at the uplink activation time included in the IE "Uplink integrity protection activation info".
- 1> if IE "Integrity protection mode command" has the value "start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started" and this IE was not included SECURITY MODE COMMAND:
- NOTE: This case is used in SRNS relocation
 - 2> perform integrity protection on the received message, applying the new integrity protection configuration, as described in subclause 8.5.10.1 by:
 - 3> using the algorithm (UIA [40]) indicated by the IE "Integrity protection algorithm" contained in the IE "Integrity protection mode info";
 - 3> using the IE "Integrity protection initialisation number", contained in the IE "Integrity protection mode info" as the value of FRESH [40].
 - 2> let RBm be the signalling radio bearer where the reconfiguration message was received and let RBn be the signalling radio bearer where the response message is transmitted;
 - 2> prohibit transmission of RRC messages on all signalling radio bearers in the IE "ESTABLISHED_RABS" except on RB0 and the radio bearer where the response message is transmitted;
 - 2> consider the new integrity protection configuration to include any new keys that were activated through a security procedure received prior to the current message but not applied for the signalling radio bearer, due to the activation time for the corresponding signalling radio bearer not having elapsed;
 - 2> if for a signalling radio bearer, a security configuration triggered by a previous SECURITY MODE COMMAND is pending, due to the activation time for the signalling radio bearer not having elapsed:
 - 3> if the previous SECURITY MODE COMMAND was received due to new keys being received:
 - 4> consider the new integrity protectioon configuration to include the received new keys and,
 - <u>4> initialise the HFN of the COUNT-I values of the corresponding signalling radio bearers according to</u> <u>subclause 8.1.12.</u>

3> else

- <u>4> consider the new Integrity Protection configuration to include the keys associated with the</u> <u>LATEST CONFIGURED CN DOMAIN associated with the previously received SECURITY</u> <u>MODE COMMAND and</u>,
- 4> initialise the HFN of the COUNT-I values of the corresponding signalling radio bearers according to subclause 8.1.12 using the START value associated with the LATEST CONFIGURED CN DOMAIN to be transmitted in the response to the current message.
- 2> start applying the new integrity protection configuration in the downlink for each signalling radio bearer in the IE "ESTABLISHED_RABS" except RBm at the next received RRC message disregarding any pending activation times for the corresponding signalling radio bearer;
- 2> start applying the new integrity protection configuration in the downlink for signalling radio bearer RBm from and including the received configuration message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearer RBn from and including the transmitted response message;
- 2> start applying the new integrity protection configuration in the uplink for signalling radio bearers other than RBn from the first message onwards.
- NOTE: The UTRAN should ignore the information included in the IE "Uplink integrity protection info".
- 1> if IE "Integrity protection mode command" has the value "modify" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started" and this IE was included in SECURITY MODE COMMAND:
 - 2> store the (oldest currently used) integrity protection configuration until activation times have elapsed for the new integrity protection configuration to be applied on all signalling radio bearers;
 - 2> if there are pending activation times set for integrity protection by a previous procedure changing the integrity protection configuration:

3> apply the integrity protection configuration at this pending activation time as indicated in this procedure.

- 2> start applying the new integrity protection configuration in the downlink at the RRC sequence number, for each signalling radio bearer n, indicated by the entry for signalling radio bearer n in the "RRC message sequence number list" in the IE "Downlink integrity protection activation info", included in the IE "Integrity protection mode info";
- 2> perform integrity protection on the received message, applying the new integrity protection configuration, as described in subclause 8.5.10.1;
 - 3> if present, use the algorithm indicated by the IE "Integrity protection algorithm" (UIA [40]);
- 2> set the content of the variable INTEGRITY_PROTECTION_ACTIVATION_INFO according to the following:
 - 3> for each established signalling radio bearer, stored in the variable ESTABLISHED_RABS:
 - 4> select a value of the RRC sequence number at which (activation) time the new integrity protection configuration shall be applied in uplink for that signalling radio bearer according to the following:
 - 5> for each signalling radio bearer that has no pending activation time as set for integrity protection by a previous procedure changing the integrity protection configuration:
 - 6> set a suitable value that would ensure a minimised delay in the change to the latest integrity protection configuration.
 - 5> for signalling radio bearer that has a pending activation time as set for integrity protection by a previous procedure changing the integrity protection configuration:

6> set the same value as the pending activation time for integrity protection;

- 5> consider this (pending) activation time to be elapsed when the selected activation time (as above) is equal to the next RRC sequence number to be used, which means that the last RRC message using the old integrity protection configuration has been submitted to lower layers.
- 4> for signalling radio bearer RB0:
 - 5> set the value of the included RRC sequence number to greater than or equal to the current value of the RRC sequence number for signalling radio bearer RB0 in the variable INTEGRITY_PROTECTION_INFO, plus the value of the constant N302 plus one.
- 4> prohibit the transmission of RRC messages on all signalling radio bearers, except for RB2, with RRC SN greater than or equal to the value in the "RRC message sequence number list" for the signalling radio bearer in the IE "Uplink integrity protection activation info" of the variable INTEGRITY_PROTECTION_ACTIVATION_INFO.
- 2> start applying the new integrity protection configuration in the uplink at the RRC sequence number, for each RBn, except for signalling radio bearer RB2, indicated by the entry for signalling radio bearer n in the "RRC message sequence number list" in the IE "Uplink integrity protection activation info", included in the variable INTEGRITY_PROTECTION_ACTIVATION_INFO;
- 2> start applying the new integrity protection configuration in the uplink at the RRC sequence number for signalling radio bearer RB2, as specified for the procedure initiating the integrity protection reconfiguration;
- 2> start applying the new integrity protection configuration in the downlink at the RRC sequence number, for each RBn, except for signalling radio bearer RB2, indicated by the entry for signalling radio bearer n in the "RRC message sequence number list" in the IE "Downlink integrity protection activation info";
- NOTE: For signalling radio bearers that have a pending activation time as set for integrity protection by a previous procedure changing the integrity protection configuration, UTRAN should set this value in IE "Downlink integrity protection activation info".
 - 2> start applying the new integrity protection configuration in the downlink at the RRC sequence number for signalling radio bearer RB2, as specified for the procedure initiating the integrity protection reconfiguration.

If IE "Integrity protection mode command" has the value "Start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not started", and the IE "Integrity protection mode command info" was not included in the message SECURITY MODE COMMAND; or

If IE "Integrity protection mode command" has the value "Start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not started", and the IE "Integrity protection mode info" was included in the message SECURITY MODE COMMAND, and the IE "Integrity protection algorithm" is not included; or

If the IE "Integrity protection mode command" has the value "Modify" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Not Started"; or

If IE "Integrity protection mode command" has the value "Start" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started", and the IE "Integrity protection mode command info" was included in the message SECURITY MODE COMMAND; or

If there does not exist exactly one integrity protection activation time in the IE "Downlink integrity protection activation info" for each established signalling radio bearer included in the IE "Signalling radio bearer information" in the IE "ESTABLISHED_RABS"; or

If IE "Integrity protection mode command" has the value "Modify" and the IE "Status" in the variable INTEGRITY_PROTECTION_INFO has the value "Started", and the IE "Integrity protection mode info" was not included in the message SECURITY MODE COMMAND:

the UE shall:

1> ignore this attempt to change the integrity protection configuration; and

1> set the variable INVALID_CONFIGURATION to TRUE.

If the IE "Integrity protection mode info" is not present, the UE shall:

1> not change the integrity protection configuration.

9

	CHANGE REQUEST		CR-Form-v7
x	25.331 CR 1535	Current vers	^{ion:} 3.11.0 [#]
For <u>HELP</u> or	using this form, see bottom of this page or look at the	pop-up text	over the X symbols.
Proposed chang	e affects: UICC apps೫ ME X Radio Acc	cess Networ	k X Core Network
Title:	Clarifications on Quality Measurements		
Source:	# TSG-RAN WG2		
Work item code:	# TEI	Date: ೫	21/08/2002
Category:	 F Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>. 	2 R96 R97 R98 R99 Rel-4 Rel-5	R99 the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5) (Release 6)

Reason for change: ೫	During RAN2#29, it was pointed out that no measurement period was defined for additional quality measurements or for quality measurements triggered by a quality event (see R2-21303). Also during RAN2#29 it was agreed that zero length transport blocks should not contribute to quality measurements (see R2-021369) RAN1 have clarified that zero-length transport blocks should be considered for
	guality measurements and events.
Summary of change: #	In R99 it is proposed to constrain quality measurement reporting to periodical measurement only.
	It is proposed to explicitly add statements to the quality measurement sections to indicate that zero length transport blocks do not contribute to quality measurements nor quality events.
	Impact Analysis: Impact is isolated only to quality measurement function: • Correction to a function where the specification was o Unclear Would not affect implementations behaving as indicated in the CR, may affect implementations supporting the corrected functionality otherwise.
0	LIC helessieur is not en sified far esses where additional suglity measurements
Consequences if % not approved:	UE behaviour is not specified for cases where additional quality measurements or quality measurements triggered by a quality event.

Clauses affected: Other specs	% 10.3.7.56 % X Other core specifications %
affected: Other comments:	X Test specifications X O&M Specifications %

How to create CRs using this form:

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

10.3.7.56 Quality measurement

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Quality reporting quantity	OP		Quality reporting quantity 10.3.7.59	
CHOICE report criteria	MP			
>Quality measurement reporting criteria >Periodical reporting criteria			Quality measuremen t reporting criteria 10.3.7.58 Periodical	NOTE Given this choice, the IE "DL Transport Channel BLER" shall be set to "False" (see 10.3.7.59) NOTE
			reporting criteria 10.3.7.53	
>No reporting				NOTE (no data) Chosen when this measurement only is used as additional measurement to another measurement

NOTE: In this version of the specification, BLER as additional measurement is not supported.

10.3.7.57 Quality measurement event results

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Transport channels causing the event	OP	1 to <maxtrch ></maxtrch 		
>DL Transport channel identity	MP		Transport channel identity 10.3.5.18	transport channel type = DCH

10.3.7.58 Quality measurement reporting criteria

Event 5a: Number of bad CRCs on a certain transport channel exceeds a threshold.

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Parameters sent for each transport channel	MP	1 to <maxtrch< td=""><td></td><td></td></maxtrch<>		
>DL Transport channel identity	MP	>	Transport channel identity 10.3.5.18	transport channel type = DCH
>Total CRC	MP		Integer(151 2)	Number of CRCs
>Bad CRC	MP		Integer(151 2)	Number of CRCs
>Pending after trigger	MP		Integer(151 2)	Number of CRCs

10.3.7.59 Quality reporting quantity

Information Element/Group name	Need	Multi	Type and reference	Semantics description
DL Transport Channel BLER	MP		Boolean	TRUE means report requested
Transport channels for BLER reporting	CV-BLER reporting	1 to <maxtrch ></maxtrch 		The default, if no transport channel identities are present, is that the BLER is reported for all downlink transport channels
>DL Transport channel identity	MP		Transport channel identity 10.3.5.18	transport channel type = DCH
CHOICE mode	MP			
>FDD				No data
>TDD				
>>SIR measurement list	OP	1 to <maxcctr CH></maxcctr 		SIR measurements shall be reported for all listed TFCS IDs
>>>TFCS ID	MP		Integer(18)	

Condition	Explanation
BLER reporting	This IE is not needed if the IE "DL Transport Channel BLER" is "False" and optional if the IE "DL Transport Channel BLER" is "True"

14.5 Quality Measurements

14.5.1 Quality reporting measurement quantities

For quality measurements, the following measurement quantities are used:

- 1. Downlink transport channel BLER
- 2. Timeslot SIR (TDD only)

14.5.2 Quality reporting events

14.5.2.1 Reporting event 5A: A predefined number of bad CRCs is exceeded

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report when the amount of bad CRCs during a predefined sliding window exceeds a predefined number.

The following three parameters are used in the scheme:

- Total CRC = the length of the sliding window over which the number of bad CRCs are counted.
- **Bad CRC** = the number of bad CRC that is required within the latest "Total CRC" received CRCs for the event to be triggered.
- Pending after trigger = a new event can not be triggered until "Pending after trigger" CRCs have been received,

When a DCH is established, the UE shall begin to count the number of bad CRCs within the last "Total CRC" received CRCs. No event can be triggered until at least "Total CRC" CRCs have been received. For each new received CRC, the UE shall compare the number of bad CRCs within the latest "Total CRC" received CRCs with the parameter "Bad CRC". An event shall be triggered if the number of bad CRCs is equal or larger than "Bad CRC".

At the time when the event is triggered a pending time after trigger timer is started with the length of "Pending after trigger" CRCs. A new event can not be triggered until Pending after trigger" CRCs have been received. When Pending after trigger" CRCs have been received the event evaluation start again and a new event can be triggered.

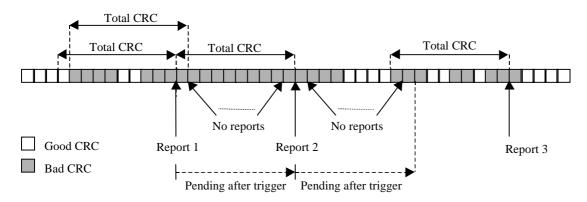


Figure 14.5.2.1-1: Event triggered CRC error reporting

ж		<mark>25.331</mark>	CR	1536	жrev	1	ж	Current vers	ion:	4.5.0	ж
For HELP on using this form, see bottom of this page or look at the pop-up text over the # symbols.										nbols.	
Proposed change affects: UICC apps# ME X Radio Access Network X Core Network											
Title:	Ж	Clarificati	ons on	Quality Meas	urements						
Source:	ж	TSG-RAN	IWG2								
Work item code:	: X	TEI						Date: ೫	20/0	08/2002	
Category:	[F (con A (cor B (add C (fun D (edi	rection) respond lition of ctional r torial mo planation	owing categorie. Is to a correctic feature), modification of to odification) ns of the above <u>R 21.900</u> .	on in an eai feature)			Release: ₩ Use <u>one</u> of 2 9) R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	the fol (GSM (Relea (Relea (Relea	lowing rele I Phase 2) ase 1996) ase 1997) ase 1998) ase 1999) ase 4) ase 5)	eases:

Reason for change: ೫	During RAN2#29, it was pointed out that no measurement period was defined for additional quality measurements or for quality measurements triggered by a quality event (see R2-21303). Also during RAN2#29 it was agreed that zero length transport blocks should not contribute to quality measurements (see R2-021369) RAN1 have clarified that zero-length transport blocks should be considered for
	guality measurements and events.
Summary of change: #	In R99 it is proposed to constrain quality measurement reporting to periodical measurement only.
	It is proposed to explicitly add statements to the quality measurement sections to indicate that zero length transport blocks do not contribute to quality measurements nor quality events.
	Impact Analysis: Impact is isolated only to quality measurement function: • Correction to a function where the specification was o Unclear Would not affect implementations behaving as indicated in the CR, may affect implementations supporting the corrected functionality otherwise.
0	LIC helesticut is not encodified for econo where additional suplitudes and
Consequences if % not approved:	UE behaviour is not specified for cases where additional quality measurements or quality measurements triggered by a quality event.

Clauses affected: Other specs	% 10.3.7.56 % X Other core specifications %
affected: Other comments:	X Test specifications X O&M Specifications %

How to create CRs using this form:

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- 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.

10.3.7.56 Quality measurement

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Quality reporting quantity	OP		Quality reporting quantity 10.3.7.59	
CHOICE report criteria	MP		10.0.7.00	
>Quality measurement reporting criteria >Periodical reporting criteria			Quality measuremen t reporting criteria 10.3.7.58 Periodical reporting criteria	NOTE Given this choice, the IE "DL Transport Channel BLER" shall be set to "False" (see 10.3.7.59) NOTE
>No reporting			10.3.7.53	NOTE (no data) Chosen when this measurement only is used as additional measurement to another measurement

NOTE: In this version of the specification, BLER as additional measurement is not supported.

14.5.2.1 Reporting event 5A: A predefined number of bad CRCs is exceeded

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report when the amount of bad CRCs during a predefined sliding window exceeds a predefined number.

The following three parameters are used in the scheme:

- Total CRC = the length of the sliding window over which the number of bad CRCs are counted.
- **Bad CRC** = the number of bad CRC that is required within the latest "Total CRC" received CRCs for the event to be triggered.
- **Pending after trigger** = a new event can not be triggered until "Pending after trigger" CRCs have been received,

When a DCH is established, the UE shall begin to count the number of bad CRCs within the last "Total CRC" received CRCs. No event can be triggered until at least "Total CRC" CRCs have been received. For each new received CRC, the UE shall compare the number of bad CRCs within the latest "Total CRC" received CRCs with the parameter "Bad CRC". An event shall be triggered if the number of bad CRCs is equal or larger than "Bad CRC".

At the time when the event is triggered a pending time after trigger timer is started with the length of "Pending after trigger" CRCs. A new event can not be triggered until Pending after trigger" CRCs have been received. When Pending after trigger" CRCs have been received the event evaluation start again and a new event can be triggered.

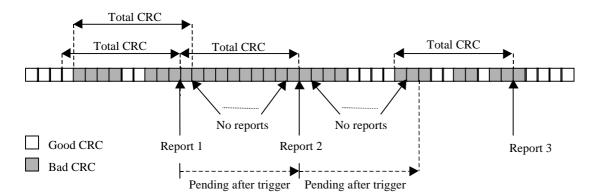


Figure 14.5.2.1-1: Event triggered CRC error reporting

											CR-Form-v7	
ж		25.331	CR	1537	жľ	ev	1	Ħ	Current v	ersion:	5.1.0	ж
For HELP on using this form, see bottom of this page or look at the pop-up text over the # symbols.												
Proposed change affects: UICC apps# ME X Radio Access Network X Core Network												
Title:	ж	Clarifica	tions on	Quality Me	asuren	nents						
Source:	ж	TSG-RA	<mark>N WG2</mark>									
Work item code:	:Ж	TEI							Date	: ೫ <mark>21</mark>	/08/2002	
Category:	Ħ	F (cc A (cc B (ac C (fu D (cc	nrection) prrespond dition of nctional h ditorial m xplanatio	wing catego ds to a correc feature), modification (odification) ns of the abo <u>R 21.900</u> .	ction in a of featu	re)			2	of the fo (GSI (Relo (Relo (Relo (Relo (Relo 5 (Relo	el-5 ollowing rele M Phase 2) ease 1996) ease 1998) ease 1999) ease 4) ease 5) ease 6)	eases:

Reason for change: ೫	During RAN2#29, it was pointed out that no measurement period was defined for additional quality measurements or for quality measurements triggered by a quality event (see R2-21303).
	Also during RAN2#29 it was agreed that zero length transport blocks should not contribute to quality measurements (see R2-021369) RAN1 have clarified that zero-length transport blocks should be considered for
	guality measurements and events.
Summary of change: #	In R99 it is proposed to constrain quality measurement reporting to periodical measurement only.
	It is proposed to explicitly add statements to the quality measurement sections to indicate that zero length transport blocks do not contribute to quality measurements nor quality events.
	Impact Analysis
	Impact Analysis: Impact is isolated only to quality measurement function:
	 Correction to a function where the specification was
	 Unclear Would not affect implementations behaving as indicated in the CR, may affect implementations supporting the corrected functionality otherwise.
Consequences if % not approved:	UE behaviour is not specified for cases where additional quality measurements or quality measurements triggered by a quality event.

Clauses affected: Other specs	% 10.3.7.56 % X Other core specifications %
affected: Other comments:	X Test specifications X O&M Specifications %

How to create CRs using this form:

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

10.3.7.56 Quality measurement

Information Element/Group name	Need	Multi	Type and reference	Semantics description
Quality reporting quantity	OP		Quality reporting quantity 10.3.7.59	
CHOICE report criteria	MP			
 >Quality measurement reporting criteria >Periodical reporting criteria 			Quality measuremen t reporting criteria 10.3.7.58 Periodical	NOTE Given this choice, the IE "DL Transport Channel BLER" shall be set to "False" (see 10.3.7.59) NOTE
			reporting criteria 10.3.7.53	
>No reporting				NOTE (no data) Chosen when this measurement only is used as additional measurement to another measurement

NOTE: In this version of the specification, BLER as additional measurement is not supported.

14.5.2.1 Reporting event 5A: A predefined number of bad CRCs is exceeded

When this event is ordered by UTRAN in a measurement control message, the UE shall send a measurement report when the amount of bad CRCs during a predefined sliding window exceeds a predefined number.

The following three parameters are used in the scheme:

- Total CRC = the length of the sliding window over which the number of bad CRCs are counted.
- **Bad CRC** = the number of bad CRC that is required within the latest "Total CRC" received CRCs for the event to be triggered.
- **Pending after trigger** = a new event can not be triggered until "Pending after trigger" CRCs have been received,

When a DCH is established, the UE shall begin to count the number of bad CRCs within the last "Total CRC" received CRCs. No event can be triggered until at least "Total CRC" CRCs have been received. For each new received CRC, the UE shall compare the number of bad CRCs within the latest "Total CRC" received CRCs with the parameter "Bad CRC". An event shall be triggered if the number of bad CRCs is equal or larger than "Bad CRC".

At the time when the event is triggered a pending time after trigger timer is started with the length of "Pending after trigger" CRCs. A new event can not be triggered until Pending after trigger" CRCs have been received. When Pending after trigger" CRCs have been received the event evaluation start again and a new event can be triggered.

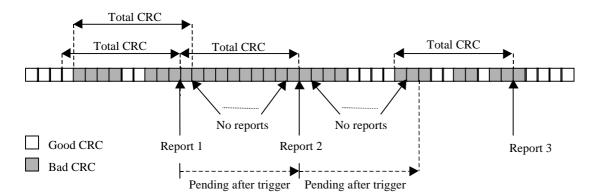


Figure 14.5.2.1-1: Event triggered CRC error reporting

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ж	2	5.331	CR	1538	жrev	-	ж	Current vers	^{ion:} 3.11.0 [#]
For <u>HELP</u> or	n usın	g this for	m, see	bottom of this	s page or	look	at th	e pop-up text	over the # symbols.
Proposed change affects: UICC apps # ME X Radio Access Network Core Network									
Title:	ж	Correction	n of DF	CH constant	value in T	DD d	lefau	It radio config	urations
Source:	ж Т	SG-RAN	WG2						
Work item code:	:Ж Т	EI						<i>Date:</i>	25/06/2002
Category:	ж F	-						Release: ೫	R99
	De	F (con A (cor B (add C (fun D (edi etailed exp	rection) respond lition of ctional torial m planatio	owing categories ds to a correctio feature), modification of t odification) ns of the above <u>FR 21.900</u> .	n in an eai feature)		elease	2	the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5) (Release 6)

Reason for change: ೫	Currently the DPCH-ConstantValue set in the default radio configurations (used by TDD open loop power control) is set to -20. The UL power for DPCH is calculated using the function:
	$P_{DPCH} = \alpha L_{PCCPCH} + (1-\alpha)L_0 + I_{BTS} + SIR_{TARGET} + DPCH Constant value$
	So if DPCH-ConstantValue is set to -20 then the SIR at the node B will be 20dB below the SIR target value.
	Note that CR1228 in RAN27 has been accepted and this corrected the range of the constant value for TDD so that 0dB was an allowed value.
Summary of change: #	In section 13.7 the DPCH-ConstantValue is modified to 0 from -20.
Consequences if % not approved:	Uplink power control will not work for TDD using the default radio configurations.
	Impact analysis: This CR is considered to have isolated impact since it affects the default radio configurations in TDD mode only. If the UE does not implement this CR TDD power control will not work when using the default radio configurations.

Clauses affected:	¥ <u>13.7</u>
Other specs affected:	Y N X Other core specifications % X Test specifications % X O&M Specifications %
Other comments:	¥

How to create CRs using this form:

- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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 both FDD and TDD parameters are specified. All parameters apply to both FDD and 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.

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech + 3.4 kbps signalling	12.2 kbps speech + 3.4 kbps signalling
Ref 34.108	2	3	6	4
Default configuration identity	0	1	2	3
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info	Rlc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5-RB6: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard RB5- RB6: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15 RB5- RB6: N/A	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128 RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300 RB5- RB6: N/A	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1 RB5- RB6: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 100	RB2- RB3: 300	RB2- RB3: 300

Configuration	3.4 kbps signalling	13.6 kbps	7.95 kbps speech	12.2 kbps speech
		signalling	+ 3.4 kbps signalling	+ 3.4 kbps signalling
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5- RB6: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE RB5- RB6: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128 RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 100	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo				
>UL- LogicalChannelMappings >>ul-	OneLogicalChannel Dch	OneLogicalChannel Dch	OneLogicalChannel Dch	OneLogicalChannel
7>01- TransportChannelType	DCII	DCII	DCH	DCH
>>>transportChannelldentit y	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured	RB1- RB3: configured	RB1- RB3: configured RB5- RB6: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL- logicalChannelMappingList				
>>Mapping option 1 >>>dl- TransportChannelType	One mapping option Dch	One mapping option Dch	One mapping option Dch	One mapping option Dch
>>>>transportChannellden tity	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH				
UL- AddReconfTransChInfoList				
>Uplink transport channel type	dch	dch	dch	dch
>transportChannelIdentity	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information				

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signaling	- 3.4 kbps signalling	- 3.4 kbps signalling
>>>tf0/ tf0,1	TrCH1: (0x144, 1x144)	TrCH1: (0x144, 1x144)	TrCH1: (0x75) TrCH2: (0x 84 1x84) TrCH3: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103, 1x103) TrCH3: (0x 60, 1x60) TrCH4: (0x144, 1x144)
>>>rlcSize	BitMode	BitMode	BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 75 TrCH2: type 1: 84 TrCH3: 2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>numberOfTbSizeList	TrCH1: Zero, one	TrCH1: Zero, one	TrCH1: Zero TrCH2-3: Zero, one	TrCH1: Zero TrCH2-4: Zero, one
>>>logicalChannelList	All	All	All	All
>>>tf 1	N/A	N/A	TrCH1: (1x39) TrCH2- TrCH4: N/A	TrCH1: (1x39) TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: One	TrCH1: One
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: 1: 39	TrCH1: 1: 39
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList			TrCH1: all	TrCH1: all
>>>tf 2	N/A	N/A	TrCH1: (1x75) TrCH2- TrCH3: N/A	TrCH1: (1x81) TrCH2- TrCH4: N/A
>>>>numberOfTransportBl ocks			TrCH1: Zero	TrCH1: Zero
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 75	TrCH1: type 1: 81
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList >>semistaticTF-Information			TrCH1: all	TrCH1: all
>>>tti	TrCH1: 40	TrCH1: 10	TrCH1- TrCH2: 20 TrCH3: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	Convolutional	Convolutional	Convolutional	Convolutional
>>>>codingRate	TrCH1: Third	TrCH1: Third	TrCH1- TrCH2: Third TrCH3: Third	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 160	TrCH1: 160	TrCH1: 200 TrCH2: 190 TrCH3: 160	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 12 TrCH2: 0 TrCH3: 16	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL-				
AddReconfTransChInfoList				
>Downlink transport	dch	dch	dch	dch
channel type >dl- TransportChannelIdentity (should be as for UL)	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>tfs-SignallingMode	SameAsUL	SameAsUL	Explicit <only on="" tf0="" trch1<br="">is different and shown below></only>	Explicit <only on="" tf0="" trch1<br="">is different and shown below></only>
>>transportFormatSet			DedicatedTransChT FS	DedicatedTransChT FS
>>>dynamicTF-information				

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech	
		Signaling	3.4 kbps signalling	т 3.4 kbps signalling	
>>>>tf0/ tf0,1			TrCH1: (1x0)	TrCH1: (1x0)	
>>>>rlcSize			BitMode	bitMode	
>>>>sizeType			TrCH1: type 1: 0	TrCH1: type 1: 0	
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One	
>>>logicalChannelList			All	All	
>>ULTrCH-Id	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4	
>dch-QualityTarget				0	
>>bler-QualityValue	TrCH1: 5x10 ⁻²	TrCH1: 5x10 ⁻²	TrCH1: 7x10 ⁻³ TrCH2- TrCH3: Absent	TrCH1: 7x10 ⁻³ TrCH2- TrCH4: Absent	
TrCH INFORMATION, COMMON					
ul-CommonTransChInfo					
>tfcs-ID (TDD only)	1	1	1	1	
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE	
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required	
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling	
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete	Complete	
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit	Ctfc6Bit	
>>>>TFCS representation	Addition	Addition	Addition	Addition	
>>>>TFCS list					
>>>>>TFCS 1	(TF0)	(TF0)	(TF0, TF0, TF0)	(TF0, TF0, TF0, TF0)	
>>>>>ctfc	0	0	0	0	
>>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed	
>>>>>>referenceTFCId	0	0	0	0	
>>>>>TFCS 2	(TF1)	(TF1)	(TF1, TF0, TF0)	(TF1, TF0, TF0, TF0)	
>>>>>ctfc	1	1	1	1	
>>>>>>gainFactorInform ation	Signalled	Signalled	Computed	Computed	
>>>>>βc (FDD only)	11	11	N/A	N/A	
>>>>>βd	15	15	N/A	N/A	
>>>>>>>referenceTFCId	0	0	0	0	
>>>>>TFCS 3		0	(TF2, TF1, TF0)	(TF2, TF1, TF1, TF0)	
>>>>>ctfc			5	11	
>>>>>>gainFactorInform ation			Computed	Computed	
>>>>>>referenceTFCId			0	0	
>>>>>TFCS 4			(TF0, TF0, TF1)	(TF0, TF0, TF0, TF1)	
>>>>>ctfc			6	12	
>>>>>>sgainFactorInform ation			Computed	Computed	
>>>>>βc (FDD only)	1		N/A	N/A	
>>>>>βd			N/A	N/A	
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			0	0	
>>>>>TFCS 5			(TF1, TF0, TF1)	(TF1, TF0, TF0, TF1)	
>>>>>ctfc			7	13	
>>>>>>gainFactorInform			Computed	Computed	
>>>>>referenceTFCId			0	0	
>>>>>TFCS 6			(TF2, TF1, TF1)	(TF2, TF1, TF1, TF1)	

Configuration	3.4 kbps signalling	13.6 kbps	7.95 kbps speech	12.2 kbps speech
		signalling	+ 3.4 kbps signalling	+ 3.4 kbps signalling
>>>>>ctfc			11	23
>>>>>>gainFactorInform ation			Signalled	Signalled
>>>>>βc (FDD only)			11	11
>>>>>βd			15	15
>>>>>>referenceTFCId			0	0
dl-CommonTransChInfo				
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>puncturingLimit	1	1	1	0.88
DL-				
CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>spreadingFactor	256	128	128	128
>>tfci-Existence	FALSE	FALSE	FALSE	FALSE
>>pilotBits	4	4	4	4
>>positionFixed	N/A	N/A	Fixed	Fixed
PhyCH INFORMATION TDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>dpch-ConstantValue	<u>-200</u>	<u>-200</u>	<u>-200</u>	<u>-200</u>
>commonTimeslotInfo				
>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	4	4	16	16
>>puncturingLimit	1	0.92	0.52	0.88
>>repetitionPeriodAndLeng th	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL-				
CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	4	4	16	16
>>>puncturingLimit	1	0.92	0.52	0.92
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data + 3.4 kbps signalling
Ref 34.108	12	14	13	15
Default configuration identity	4	5	6	7
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5
rlc-InfoChoice	RIc-info	RIc-info	RIc-info	RIc-info

Configuration	28.8 kbps conv.	32 kbps conv. CS-	64kbps conv. CS-	14.4 kbps
	CS- data + 3.4 kbps signalling	data + 3.4 kbps signalling	data + 3.4 kbps signalling	streaming CS- data +
	o.+ hopo orginaling			3.4 kbps signalling
>ul-RLC-Mode	RB1: UM	RB1: UM	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM
>>transmissionRLC-	RB5: TM RB1: N/A	RB5: TM RB1: N/A	RB5: TM RB1: N/A	RB5: TM RB1: N/A
DiscardMode	RB2- RB3:	RB2- RB3:	RB2- RB3:	RB2- RB3:
	NoDiscard	NoDiscard	NoDiscard	NoDiscard
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>transmissionWindowSiz	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
е	RB2- RB3: 128	RB2- RB3: 128	RB2- RB3: 128	RB2- RB3: 128
ting a pot	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>timerRST	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>max-RST	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 1	RB2- RB3: 1	RB2- RB3: 1	RB2- RB3: 1
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A
>dl-RLC-Mode	RB5: FALSE RB1: UM	RB5: FALSE RB1: UM	RB5: FALSE RB1: UM	RB5: FALSE RB1: UM
	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM
	RB5: TM	RB5: TM	RB5: TM	RB5: TM
>>inSequenceDelivery	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: TRUE RB5: N/A	RB2- RB3: TRUE RB5: N/A	RB2- RB3: TRUE RB5: N/A	RB2- RB3: TRUE RB5: N/A
>>receivingWindowSize	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 128	RB2- RB3: 128	RB2- RB3: 128	RB2- RB3: 128
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>dl-RLC-StatusInfo	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: as below RB5: N/A	RB2- RB3: as below RB5: N/A	RB2- RB3: as below RB5: N/A	RB2- RB3: as below RB5: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A
rb-MappingInfo	RB5: FALSE	RB5: FALSE	RB5: FALSE	RB5: FALSE
>UL-	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
LogicalChannelMappings	Shoeogicalonanine	Sheegoaronanner	Shoeogical Charmer	Shoeogioaronanner
>>ul- TransportChannelType	Dch	Dch	Dch	Dch
>>>transportChannelldenti	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2
ty	RB5: 1	RB5: 1	RB5: 1	RB5: 1
>>logicalChannelIdentity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
	RB3: 3 RB5: N/A	RB3: 3 RB5: N/A	RB3: 3 RB5: N/A	RB3: 3 RB5: N/A
>>rlc-SizeList	RB1- RB3:	RB1- RB3:	RB1- RB3:	RB1- RB3:
	configured	configured	configured	configured
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>mac-	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
LogicalChannelPriority	RB3: 3 RB5: 5	RB3: 3 RB5: 5	RB3: 3 RB5: 5	RB3: 3 RB5: 5
	NDJ. J	NDJ. J	NDJ. J	NDJ. J

Configuration	28.8 kbps conv.	32 kbps conv. CS-	64kbps conv. CS-	14.4 kbps
	CS- data + 3.4 kbps signalling	data + 3.4 kbps signalling	data + 3.4 kbps signalling	streaming CS- data + 3.4 kbps signalling
>DL-				
logicalChannelMappingList	On a sur a la sur a sti a s	0	0	On a manufacture station
>Mapping option 1 >>dl-	One mapping option	One mapping option	One mapping option	One mapping option
TransportChannelType	Den	Den	Den	DCII
>>>transportChannellden	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2	RB1- RB3: 2
tity	RB5: 1	RB5: 1	RB5: 1	RB5: 1
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A
TrCH INFORMATION PER TrCH UL-				
AddReconfTransChInfoLis				
 > Uplink transport channel type 	dch	dch	dch	dch
>transportChannelldentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information	T-014. (0.570	T-014. (0-040	T-014. (0-040	
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576)	TrCH1: (0x640, 1x640)	TrCH1: (0x640, 2x640)	TrCH1: (0x576, 1x576)
	TrCH2: (0x144,	TrCH2: (0x144,	TrCH2: (0x144,	TrCH2: (0x144,
	1x144)	1x144)	1x144)	1x144)
>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode
>>>>sizeType	TrCH1: type 2,	TrCH1: type 2,	TrCH1: type 2,	TrCH1: type 2,
	part1= 11, part2= 2 (576)	part1= 11, part2= 2 (640)	part1= 11, part2= 2 (640)	part1= 9, part2= 2 (576)
	TrCH2: type 2,	TrCH2: type 2,	TrCH2: type 2,	TrCH2: type 2,
	part1= 2, part2= 0 (144)	part1= 2, part2= 0 (144)	part1= 2, part2= 0 (144)	part1= 2, part2= 0 (144)
>>>numberOfTbSizeList	TrCH1: Zero,1, 2 (4) TrCH2: Zero, one	TrCH1: Zero, one TrCH2: Zero, one	TrCH1: Zero, 2 (4) TrCH2: Zero, one	TrCH1: Zero, one, TrCH2: Zero, one
>>>logicalChannelList	All	All	All	All
>>semiStaticTF- Information				
>>>tti	TrCH1: 40 TrCH2: 40	TrCH1: 20 TrCH2: 40	TrCH1: 20 TrCH2: 40	TrCH1: 40 TrCH2: 40
>>>channelCodingType	TrCH1: Turbo	TrCH1: Turbo	TrCH1: Turbo	TrCH1: Turbo
	TrCH2: Convolutional	TrCH2: Convolutional	TrCH2: Convolutional	TrCH2: Convolutional
>>>>codingRate	TrCH1: N/A	TrCH1: N/A	TrCH1: N/A	TrCH1: N/A
	TrCH2: Third	TrCH2: Third	TrCH2: Third	TrCH2: Third
>>>rateMatchingAttribute	TrCH1: 180	TrCH1: 185	TrCH1: 170	TrCH1: 165
	TrCH2: 160	TrCH2: 160	TrCH2: 160	TrCH2: 160
>>>crc-Size	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16	TrCH1: 16 TrCH2: 16
DL- AddReconfTransChInfoLis t				
>Downlink transport channel type	dch	dch	dch	dch
>dl- TransportChannelldentity (should be as for UL)	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>tfs-SignallingMode	SameAsUL	SameAsUL	SameAsUL	SameAsUL
>>transportFormatSet				
>>>dynamicTF-information				
>>>>tf0/ tf0,1 >>>>rlcSize				
~~>>IIUUI2E				

Configuration	28.8 kbps conv. CS- data +	32 kbps conv. CS- data +	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data +
	3.4 kbps signalling	3.4 kbps signalling	3.4 Kops signalling	3.4 kbps signalling
>>>>sizeType				
>>>numberOfTbSizeList				
>>>>logicalChannelList				
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>dch-QualityTarget		2		
>>bler-QualityValue	TrCH1: 2x10 ⁻³ TrCH2: Absent	TrCH1: 2x10 ⁻³ TrCH2: Absent	TrCH1: 2x10 ⁻³ TrCH2: Absent	TrCH1: 1x10 ⁻² TrCH2: Absent
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo				
>tfcs-ID (TDD only)			1	
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI	Normal TFCI	Normal TFCI	Normal TFCI
	signalling	signalling	signalling	signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete	Complete
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit
>>>>TFCS representation	Addition	Addition	Addition	Addition
>>>>TFCS list				
>>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)
>>>>>ctfc	0	0	0	0
>>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0	0
>>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)
>>>>>ctfc	1	1	1	1
>>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A	N/A
>>>>>>>referenceTFCId	0	0	0	0
>>>>>TFCS 3	(TF2, TF0)	(TF0, TF1)	(TF0, TF1)	(TF0, TF1)
>>>>>>ctfc	2	2	2	2
>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0	0
>>>>>TFCS 4	(TF0, TF1)	(TF1, TF1)	(TF1, TF1)	(TF1, TF1)
>>>>>>ctfc	3	3	3	3
>>>>>>gainFactorInform	Computed	Signalled	Signalled	Signalled
>>>>>βc (FDD only)	N/A	8	8	11
>>>>>>βd	N/A	15	15	15
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	0	0	0	0
>>>>>TFCS 5	(TF1, TF1)	0 N/A	0 N/A	0
>>>>>>>>ctfc	4		1.1V/7	
>>>>>>gainFactorInform	Computed			
ation >>>>>>referenceTFCId	0			
	0 (TE2_TE1)	NI/A	NI/A	
>>>>>TFCS 6 >>>>>ctfc	(TF2, TF1) 5	N/A	N/A	
>>>>>>gainFactorInform	Signalled			
ation	8			
>>>>>βc (FDD only)				
>>>>>βd >>>>>>referenceTFCId	15 0			
>>>>>>TFCS 7				
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	+			
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u> </u>	l	I	l

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data +
				3.4 kbps signalling
>>>>>gainFactorInform				
ation				
>>>>>>referenceTFCId				
>>>>>TFCS 8				
>>>>>>ctfc				
>>>>>gainFactorInform				
ation				
>>>>>referenceTFCId				
>>>>>TFCS 9				
>>>>>>ctfc				
>>>>>>gainFactorInform				
ation				
>>>>>>referenceTFCld				
>>>>>TFCS 10				
>>>>>ctfc				
>>>>>>gainFactorInform				
ation				
>>>>>βc (FDD only)				
>>>>>βd				
>>>>>referenceTFCId				
dl-CommonTransChInfo				
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize		1	1	
>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>puncturingLimit	0.92	0.8	0.92	1
DL- CommonInformationPrede	0.32	0.0	0.32	
f				
>dl-DPCH-InfoCommon	C4	C 4	22	400
>>spreadingFactor	64	64	32	128
>>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>>pilotBits	8	8	8	8
>>positionFixed	Flexible	Flexible	Flexible	Flexible
PhyCH INFORMATION TDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>dpch-ConstantValue	<u>-200</u>	<u>-200</u>	<u>-200</u>	<u>-200</u>
>commonTimeslotInfo				
>>secondInterleavingMod	frameRelated	frameRelated	frameRelated	frameRelated
е				
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.44	0.8	0.56	0.8
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPrede f				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMo	frameRelated	frameRelated	frameRelated	frameRelated
de				

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data + 3.4 kbps signalling
>>>puncturingLimit	0.44	0.64	0.56	0.8
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps streaming CS- data +	57.6 kbps streaming CS- data +	12.2 kbps speech(multimode ) +
D (04400	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
Ref 34.108	16	17	4a
Default configuration identity	8	9	10
RB INFORMATION			
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5: N/A	RB1: N/A RB2- RB3: NoDiscard RB5: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15 RB5: N/A	RB1: N/A RB2- RB3: 15 RB5: N/A	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128 RB5: N/A	RB1: N/A RB2- RB3: 128 RB5: N/A	RB1: N/A RB2- RB3: 128 RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300 RB5: N/A	RB1: N/A RB2- RB3: 300 RB5: N/A	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5: N/A	RB1: N/A RB2- RB3: TRUE RB5: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 RB5: N/A	RB1: N/A RB2- RB3: 128 RB5: N/A	RB1: N/A RB2- RB3: 128 RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300

Configuration	28.8 kbps streaming CS- data +	57.6 kbps streaming CS- data +	12.2 kbps speech(multimode ) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo			
>UL- LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
>>ul- TransportChannelType	Dch	Dch	Dch
>>>transportChannelldenti ty	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3
>DL-	RB5: 5	RB5: 5	RB5- RB7: 5
logicalChannelMappingList	One mension	One mension	One menning anti-
>>Mapping option 1 >>>dl- TransportChannelType	One mapping option Dch	One mapping option Dch	One mapping option Dch
>>>transportChannellden tity	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH			
UL- AddReconfTransChInfoLis t			
>Uplink transport channel type	dch	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information			
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576) TrCH2: (0x144, 1x144)	TrCH1: (0x576, 1x576, 2x576, 3x576, 4x576) TrCH2: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103 TrCH3: (0x 60) TrCH4: (0x144)
>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero, one, 2 TrCH2: Zero, one	TrCH1: Zero, one, 2, 3, 4 TrCH2: Zero, one	TrCH1-4: Zero
>>>logicalChannelList	All	All	All
>>>tf 1			TrCH1: (1x39) TrCH2: (1x53) TrCH3: (1x60) TrCH4: (1x144)

Configuration	28.8 kbps streaming CS-	57.6 kbps streaming CS-	12.2 kbps speech(multimode
	data +	data +	)+
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>>numberOfTransportBl			TrCH1-3: One
ocks			
>>>rlc-Size			TrCH1-3: BitMode
>>>>sizeType			TrCH1: 1: 39 TrCH2: 1: 53
			TrCH2: 1: 55 TrCH3: 1: 60
>>>numberOfTbSizeList			TrCH1-3: One
>>>logicalChannelList			TrCH1-3: all
>>>tf 2			TrCH1: (1x42)
			TrCH2: (1x63) TrCH3- TrCH4: N/A
>>>numberOfTransportBl			TrCH1-2: One
ocks			
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 42
,			TrCH2: type 1: 63
>>>>numberOfTbSizeList			TrCH1-2: One
>>>logicalChannelList			TrCH1: all TrCH1: (1x55)
>>>ti 3			TrCH1: (1x55) TrCH2: (1x84)
			TrCH2: (1x64) TrCH3- TrCH4: N/A
>>>numberOfTransportBl			TrCH1-2: Zero
ocks			
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 55
			TrCH2: type 1: 84
>>>numberOfTbSizeList			TrCH1-2: One
>>>>logicalChannelList			TrCH1: all
>>>tf 4			TrCH1: (1x75)
			TrCH2: (1x103) TrCH3- TrCH4: N/A
>>>>numberOfTransportBl ocks			TrCH1-2: One
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 75
71			TrCH2: type 1: 103
>>>>numberOfTbSizeList			TrCH1-2: One
>>>>logicalChannelList			TrCH1: all
>>>tf 5			TrCH1: (1x81)
			TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: One
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 81
>>>>numberOfTbSizeList			TrCH1: One
>>>>logicalChannelList			TrCH1: all
>>semiStaticTF- Information	T-014, 42		
>>>tti	TrCH1: 40 TrCH2: 40	TrCH1: 40 TrCH2: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	TrCH1: Turbo	TrCH1: Turbo	Convolutional
0.71	TrCH2: Convolutional	TrCH2: Convolutional	
>>>codingRate	TrCH1: N/A	TrCH1: N/A	TrCH1- TrCH2:
J	TrCH2: Third	TrCH2: Third	Third
			TrCH3: Half
			TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 155	TrCH1: 145	TrCH1: 200
	TrCH2: 160	TrCH2: 160	TrCH2: 190
			TrCH3: 235 TrCH4: 160
	1	1	

Configuration	28.8 kbps	57.6 kbps	12.2 kbps	
j	streaming CS- data +	streaming CS- data +	speech(multimode ) +	
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 12	
	TrCH2: 16	TrCH2: 16	TrCH2- TrCH3: 0 TrCH4: 16	
DL-				
AddReconfTransChInfoLis t				
>Downlink transport channel type	dch	dch	dch	
>dl-	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2,	
TransportChannelIdentity (should be as for UL)			TrCH3: 3, TrCH4: 4	
>tfs-SignallingMode	SameAsUL	SameAsUL	Independent	
			<only on="" td="" tf0="" trch1<=""></only>	
			is different and	
			shown below>	
>>transportFormatSet			DedicatedTransChT FS	
>>>dynamicTF-information				
>>>>tf0/ tf0,1			TrCH1: (1x0)	
>>>rlcSize			bitMode	
>>>>sizeType			TrCH1: type 1: 0	
>>>>numberOfTbSizeList			TrCH1: One	
>>>>logicalChannelList			All	
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4	
>dch-QualityTarget	, , , , , , , , , , , , , , , , , , , ,		-3	
>>bler-QualityValue	TrCH1: 1x10 ⁻²	TrCH1: 1x10 ⁻²	TrCH1: 7x10 ⁻³	
	TrCH2: Absent	TrCH2: Absent	TrCH2- TrCH4: Absent	
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1	1	
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	
>ul-TFCS	Normal TFCI	Normal TFCI	Normal TFCI	
	signalling	signalling	signalling	
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete	
>>>ctfcSize	Ctfc4Bit	Ctfc4Bit	Ctfc8Bit	
>>>>TFCS representation	Addition	Addition	Addition	
>>>>TFCS list				
>>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0, TF0, TF0)	
>>>>>>ctfc	0	0	0	
>>>>>>gainFactorInform ation	Computed	Computed	Computed	
>>>>>>referenceTFCId	0	0	0	
>>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0, TF0, TF0)	
>>>>>ctfc	1	1	1	
>>>>>gainFactorInform ation	Computed	Computed	Computed	
>>>>>βc (FDD only)	N/A	N/A	N/A	
	N/A	N/A	N/A	
>>>>>βd				
>>>>>>referenceTFCId				
>>>>>TFCS 3	(TF2, TF0)	(TF2, TF0)	(TF2, TF1, TF0, TF0)	
>>>>>>ctfc	2	2	8	

Configuration	28.8 kbps streaming CS-	57.6 kbps streaming CS-	12.2 kbps speech(multimode
	data +	data +	)+
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>>>>gainFactorInform	Computed	Computed	Computed
ation			
>>>>>referenceTFCId			
>>>>>TFCS 4	(TF0, TF1)	(TF3, TF0)	(TF3, TF2, TF0, TF0)
>>>>>ctfc	3	3	15
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>>>>referenceTFCId	0	0	0
>>>>TFCS 5	(TF1, TF1)	(TF4, TF0)	(TF4, TF3, TF0,
			TF0)
>>>>>ctfc	4	4	22
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0
>>>>>TFCS 6	(TF2, TF1)	(TF0, TF1)	(TF5, TF4, TF1, TF0)
>>>>>ctfc	5	5	59
>>>>>>sgainFactorInform	Signalled	Computed	Computed
ation	8	N/A	N/A
>>>>>βc (FDD only)			
>>>>>βd	15	N/A	N/A
>>>>>>referenceTFCld	0		
>>>>>TFCS 7		(TF1, TF1)	(TF0,TF0,TF0,TF1)
>>>>>ctfc		6	60
>>>>>>gainFactorInform ation		Computed	Computed
>>>>>>>referenceTFCId		0	0
>>>>>TFCS 8		(TF2, TF1)	(TF1,TF0,TF0,TF1)
>>>>>>ctfc		7	61
>>>>>>gainFactorInform ation		Computed	Computed
>>>>>>>referenceTFCId		0	0
>>>>>TFCS 9		(TF3, TF1)	(TF2,TF1,TF0,TF1)
>>>>>ctfc		8	68
>>>>>>gainFactorInform ation		Computed	Computed
>>>>>>referenceTFCld		0	0
>>>>TFCS 10		(TF4, TF1)	(TF3,TF2,TF0,TF1)
>>>>>>ctfc		9	75
>>>>>gainFactorInform ation		Signalled	Computed
>>>>>βc (FDD only)		8	N/A
>>>>>βd		15	N/A
>>>>>>>>>referenceTFCId		0	0
>>>>>TFCS 11			(TF4,TF3,TF0,TF1)
>>>>>>ctfc			82
>>>>>>gainFactorInform			Computed
ation >>>>>>referenceTFCId			0
>>>>>TFCS 12			(TF5,TF4,TF1,TF1)
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			(1F5,1F4,1F1,1F1) 119
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			Signalled
ation			-
>>>>>βc (FDD only)			11
>>>>>βd			15
>>>>>>referenceTFCId			0
dl-CommonTransChInfo			

Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode ) + 3.4 kbps signalling
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD			
UL-DPCH-InfoPredef			
>ul-DPCH- PowerControlInfo			
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE
>puncturingLimit	1	1	0.88
DL- CommonInformationPrede f			
>dl-DPCH-InfoCommon			
>>spreadingFactor	64	32	128
>>tfci-Existence	TRUE	TRUE	FALSE
>>pilotBits	8	8	4
>>positionFixed	Flexible	Flexible	Fixed
PhyCH INFORMATION TDD			
UL-DPCH-InfoPredef			
>ul-DPCH- PowerControlInfo			
>>dpch-ConstantValue	<u>-200</u>	<u>-200</u>	- <del>20</del> 0
>commonTimeslotInfo			
>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	16	16
>>puncturingLimit	0.44	0.48	0.88
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPrede f			
>dl-DPCH-InfoCommon			
>>commonTimeslotInfo			
>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	16	16
>>>puncturingLimit	0.44	0.48	0.92
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

	CHANGE REQUEST		CR-Form-v7			
ж	25.331 CR 1539 <b>% rev</b> - ^{# (}	Current versi	^{on:} <b>4.5.0</b> [#]			
For <u>HELP</u> or	using this form, see bottom of this page or look at the	pop-up text	over the X symbols.			
Proposed change affects: UICC apps# ME X Radio Access Network Core Network						
Title:	Correction of DPCH constant value in TDD default	radio config	urations			
Source:	# TSG-RAN WG2					
Work item code:	¥ TEI	Date: ೫	25/06/2002			
Category:	<ul> <li>A</li> <li>Use <u>one</u> of the following categories:</li> <li>F (correction)</li> <li>A (corresponds to a correction in an earlier release)</li> <li>B (addition of feature),</li> <li>C (functional modification of feature)</li> <li>D (editorial modification)</li> <li>Detailed explanations of the above categories can be found in 3GPP <u>TR 21.900</u>.</li> </ul>	2 R96 R97 R98 R99 Rel-4 Rel-5	Rel-4 the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5) (Release 6)			

Reason for change: ೫	Currently the DPCH-ConstantValue set in the default radio configurations (used by 3.84Mcps TDD open loop power control) is set to -20. The UL power for DPCH is calculated using the function:
	$P_{DPCH} = \alpha L_{PCCPCH} + (1-\alpha)L_0 + I_{BTS} + SIR_{TARGET} + DPCH \text{ Constant value}$
	So if DPCH-ConstantValue is set to -20 then the SIR at the node B will be 20dB below the SIR target value.
	Note that CR1228 in RAN27 has been accepted and this corrected the range of the constant value for TDD so that 0dB was an allowed value.
Summary of change: ೫	In section 13.7 the DPCH-ConstantValue is modified to 0 from -20.
Consequences if % not approved:	Uplink power control will not work for 3.84Mcps TDD using the default radio configurations.
	<b>Impact analysis:</b> This CR is considered to have isolated impact since it affects the default radio configurations in 3.84Mcps TDD mode only. If the UE does not implement this CR 3.84Mcps TDD power control will not work when using the default radio configurations.

	r - r		
	YN		
Other specs #	X		₩
affected:	X	Test specifications	
	X	O&M Specifications	

#### Other comments: #

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

- 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 <u>ftp://ftp.3gpp.org/specs/</u> 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.

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech + 3.4 kbps signalling	12.2 kbps speech + 3.4 kbps signalling
Ref 34.108	2	3	6	4
Default configuration identity	0	1	2	3
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	Rlc-info	RIc-info	Rlc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5-RB6: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard RB5- RB6: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15 RB5- RB6: N/A	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128 RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300 RB5- RB6: N/A	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1 RB5- RB6: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 100	RB2- RB3: 300	RB2- RB3: 300

Configuration	3.4 kbps signalling	13.6 kbps	7.95 kbps speech	12.2 kbps speech
		signalling	+ 3.4 kbps signalling	+ 3.4 kbps signalling
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5- RB6: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE RB5- RB6: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128 RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 100	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo				
>UL- LogicalChannelMappings >>ul-	OneLogicalChannel Dch	OneLogicalChannel Dch	OneLogicalChannel Dch	OneLogicalChannel
7>01- TransportChannelType	DCII	DCII	DCH	DCH
>>>transportChannelldentit y	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured	RB1- RB3: configured	RB1- RB3: configured RB5- RB6: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL- logicalChannelMappingList				
>>Mapping option 1 >>>dl- TransportChannelType	One mapping option Dch	One mapping option Dch	One mapping option Dch	One mapping option Dch
>>>>transportChannellden tity	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH				
UL- AddReconfTransChInfoList				
>Uplink transport channel type	dch	dch	dch	dch
>transportChannelIdentity	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information				

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signaling	- 3.4 kbps signalling	- 3.4 kbps signalling
>>>tf0/ tf0,1	TrCH1: (0x144, 1x144)	TrCH1: (0x144, 1x144)	TrCH1: (0x75) TrCH2: (0x 84 1x84) TrCH3: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103, 1x103) TrCH3: (0x 60, 1x60) TrCH4: (0x144, 1x144)
>>>rlcSize	BitMode	BitMode	BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 75 TrCH2: type 1: 84 TrCH3: 2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>numberOfTbSizeList	TrCH1: Zero, one	TrCH1: Zero, one	TrCH1: Zero TrCH2-3: Zero, one	TrCH1: Zero TrCH2-4: Zero, one
>>>logicalChannelList	All	All	All	All
>>>tf 1	N/A	N/A	TrCH1: (1x39) TrCH2- TrCH4: N/A	TrCH1: (1x39) TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: One	TrCH1: One
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: 1: 39	TrCH1: 1: 39
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList			TrCH1: all	TrCH1: all
>>>tf 2	N/A	N/A	TrCH1: (1x75) TrCH2- TrCH3: N/A	TrCH1: (1x81) TrCH2- TrCH4: N/A
>>>>numberOfTransportBl ocks			TrCH1: Zero	TrCH1: Zero
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 75	TrCH1: type 1: 81
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList >>semistaticTF-Information			TrCH1: all	TrCH1: all
>>>tti	TrCH1: 40	TrCH1: 10	TrCH1- TrCH2: 20 TrCH3: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	Convolutional	Convolutional	Convolutional	Convolutional
>>>>codingRate	TrCH1: Third	TrCH1: Third	TrCH1- TrCH2: Third TrCH3: Third	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 160	TrCH1: 160	TrCH1: 200 TrCH2: 190 TrCH3: 160	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 12 TrCH2: 0 TrCH3: 16	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL-				
AddReconfTransChInfoList				
>Downlink transport	dch	dch	dch	dch
channel type >dl- TransportChannelIdentity (should be as for UL)	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>tfs-SignallingMode	SameAsUL	SameAsUL	Explicit <only on="" tf0="" trch1<br="">is different and shown below&gt;</only>	Explicit <only on="" tf0="" trch1<br="">is different and shown below&gt;</only>
>>transportFormatSet			DedicatedTransChT FS	DedicatedTransChT FS
>>>dynamicTF-information				

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signaling	3.4 kbps signalling	т 3.4 kbps signalling
>>>>tf0/ tf0,1			TrCH1: (1x0)	TrCH1: (1x0)
>>>>rlcSize			BitMode	bitMode
>>>>sizeType			TrCH1: type 1: 0	TrCH1: type 1: 0
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList			All	All
>>ULTrCH-Id	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget				
>>bler-QualityValue	TrCH1: 5x10 ⁻²	TrCH1: 5x10 ⁻²	TrCH1: 7x10 ⁻³ TrCH2- TrCH3: Absent	TrCH1: 7x10 ⁻³ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete	Complete
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit	Ctfc6Bit
>>>>TFCS representation	Addition	Addition	Addition	Addition
>>>>TFCS list				
>>>>>TFCS 1	(TF0)	(TF0)	(TF0, TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>ctfc	0	0	0	0
>>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0	0
>>>>>TFCS 2	(TF1)	(TF1)	(TF1, TF0, TF0)	(TF1, TF0, TF0, TF0)
>>>>>ctfc	1	1	1	1
>>>>>>gainFactorInform ation	Signalled	Signalled	Computed	Computed
>>>>>βc (FDD only)	11	11	N/A	N/A
>>>>>βd	15	15	N/A	N/A
>>>>>>>referenceTFCId	0	0	0	0
>>>>>TFCS 3		0	(TF2, TF1, TF0)	(TF2, TF1, TF1, TF0)
>>>>>ctfc			5	11
>>>>>>gainFactorInform ation			Computed	Computed
>>>>>>referenceTFCId			0	0
>>>>>TFCS 4			(TF0, TF0, TF1)	(TF0, TF0, TF0, TF1)
>>>>>ctfc			6	12
>>>>>>sgainFactorInform ation			Computed	Computed
>>>>>βc (FDD only)	1		N/A	N/A
>>>>>βd			N/A	N/A
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			0	0
>>>>>TFCS 5			(TF1, TF0, TF1)	(TF1, TF0, TF0, TF1)
>>>>>ctfc			7	13
>>>>>>gainFactorInform			Computed	Computed
>>>>>referenceTFCId			0	0
>>>>>TFCS 6			(TF2, TF1, TF1)	(TF2, TF1, TF1, TF1)

Configuration	3.4 kbps signalling	13.6 kbps	7.95 kbps speech	12.2 kbps speech
		signalling	+ 3.4 kbps signalling	+ 3.4 kbps signalling
>>>>>ctfc			11	23
>>>>>>gainFactorInform			Signalled	Signalled
ation				44
>>>>>βc (FDD only)			11	11
>>>>>βd			15	15
>>>>>>referenceTFCId dl-CommonTransChInfo			0	0
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize				
>tfci-Existence >puncturingLimit	TRUE 1	TRUE 1	TRUE 1	TRUE 0.88
DL- CommonInformationPredef				0.00
>dl-DPCH-InfoCommon	050	100	400	100
>>spreadingFactor >>tfci-Existence	256 FALSE	128 FALSE	128 FALSE	128 FALSE
>>pilotBits	4	4	4	4
>>positionFixed	A N/A	N/A	Fixed	Fixed
				TINCO
PhyCH INFORMATION 3.84 Mcps TDD				
UL-DPCH-InfoPredef				
>ul-DPCH- PowerControlInfo				
>>dpch-ConstantValue	<del>-20</del> 0	<u>-20</u> 0	<u>-20</u> 0	<u>-20</u> 0
>commonTimeslotInfo	200	200	200	200
>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	4	4	16	16
>>puncturingLimit	1	0.92	0.52	0.88
>>repetitionPeriodAndLeng th	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL-				
CommonInformationPredef >dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>secondInterleavingMod	frameRelated	frameRelated	frameRelated	frameRelated
е				
>>>tfci-Coding	4	4	16	16
>>>puncturingLimit	1	0.92	0.52	0.92
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef				
>commonTimeslotInfo				
>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	4	4	16	16
>>puncturingLimit	1	0.64	0.80	0.60
>>repetitionPeriodAndLeng th	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPredef				
>dl-DPCH-InfoCommon >>commonTimeslotInfo				
>>common millesioumo				

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech + 3.4 kbps signalling	12.2 kbps speech + 3.4 kbps signalling
>>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	4	4	16	16
>>>puncturingLimit	1	0.64	0.80	0.60
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps conv.	32 kbps conv. CS-	64kbps conv. CS-	14.4 kbps
	CS- data +	data +	data +	streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data + 3.4 kbps signalling
Ref 34.108	12	14	13	15
Default configuration identity	4	5	6	7
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2,			
	RB3: 3, RB5: 5			
rlc-InfoChoice	Rlc-info	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM	RB1: UM	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM
	RB5: TM	RB5: TM	RB5: TM	RB5: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5: N/A			
>>>maxDat	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 15	RB2- RB3: 15	RB2- RB3: 15	RB2- RB3: 15
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128 RB5: N/A			
>>timerRST	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>max-RST	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 1	RB2- RB3: 1	RB2- RB3: 1	RB2- RB3: 1
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>pollingInfo	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: as below			
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A
	RB5: FALSE	RB5: FALSE	RB5: FALSE	RB5: FALSE
>dl-RLC-Mode	RB1: UM	RB1: UM	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM	RB2- RB3: AM
	RB5: TM	RB5: TM	RB5: TM	RB5: TM
>>inSequenceDelivery	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: TRUE	RB2- RB3: TRUE	RB2- RB3: TRUE	RB2- RB3: TRUE
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>receivingWindowSize	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 128	RB2- RB3: 128	RB2- RB3: 128	RB2- RB3: 128
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>dl-RLC-StatusInfo	RB1: N/A	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: as below			
	RB5: N/A	RB5: N/A	RB5: N/A	RB5: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE

CS- data + 3.4 kbps signalling RB2- RB3: 300	data + 3.4 kbps signalling	data + 3.4 kbps signalling	streaming CS-
		5.4 Kbps signaling	data + 3.4 kbps signalling
KDZ-KD3. 300	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE
_		-	OneLogicalChannel
Dch	Dch	Dch	Dch
RB5: 1	RB1- RB3: 2 RB5: 1	RB5: 1	RB1- RB3: 2 RB5: 1
RB3: 3	RB3: 3	RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5: N/A
RB1- RB3: configured	RB1- RB3: configured	RB1- RB3: configured	RB1- RB3: configured RB5: N/A
RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5: 5
One mapping option	One mapping option	One mapping option	One mapping option
Dch	Dch	Dch	Dch
RB5: 1	RB5: 1	RB5: 1	RB1- RB3: 2 RB5: 1
RB3: 3	RB3: 3	RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5: N/A
dch	dch	dch	dch
TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
T 0114 (0 570	T 0114 /0 040	T 0114 /0 040	T 0114 (0 570
1x576, 2x576) TrCH2: (0x144,	1x640) TrCH2: (0x144,	2x640) TrCH2: (0x144,	TrCH1: (0x576, 1x576) TrCH2: (0x144, 1x144)
TrCH1: OctetMode	TrCH1: OctetMode	TrCH1: OctetMode	TrCH1: OctetMode TrCH2:BitMode
TrCH1: type 2, part1= 11, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)
TrCH1: Zero,1, 2 (4) TrCH2: Zero, one	TrCH1: Zero, one TrCH2: Zero, one	TrCH1: Zero, 2 (4) TrCH2: Zero, one	TrCH1: Zero, one, TrCH2: Zero, one
All	All	All	All
<b></b>	<b>T</b> 0114 00	<b>T</b> 0114 02	<b>T</b> 0114 40
TrCH2: 40	TrCH2: 40	TrCH2: 40	TrCH1: 40 TrCH2: 40
TrCH2:	TrCH2:	TrCH2:	TrCH1: Turbo TrCH2: Convolutional
	RB5: FALSE         OneLogicalChannel         Dch         RB1- RB3: 2         RB5: 1         RB1: 1, RB2: 2,         RB3: 3         RB5: N/A         RB1- RB3: configured         RB5: N/A         RB1: 1, RB2: 2,         RB3: 3         RB5: N/A         RB1: 1, RB2: 2,         RB3: 3         RB5: 5         One mapping option         Dch         RB1: 1, RB2: 2,         RB5: 1         RB1: 1, RB2: 2,         RB5: 1         RB1: 1, RB2: 2,         RB3: 3         RB5: N/A         dch         TrCH1: 0x576,         TrCH1: 0x576,         1x576, 2x576)         TrCH1: 0x576,         1x576, 2x576,         TrCH1: 0x576,         1x576,         2x576,         TrCH1: 0x576,         1x576,         2x576,<	RB5: FALSE         RB5: FALSE           OneLogicalChannel         OneLogicalChannel           Dch         Dch           RB1- RB3: 2         RB1- RB3: 2           RB5: 1         RB5: 1           RB1: 1, RB2: 2,         RB5: 1           RB3: 3         RB5: N/A           RB1- RB3:         RB1- RB3:           configured         configured           RB5: N/A         RB5: N/A           RB1: 1, RB2: 2,         RB1: 1, RB2: 2,           RB3: 3         RB3: 3           RB5: N/A         RB5: N/A           RB1: 1, RB2: 2,         RB1: 1, RB2: 2,           RB3: 3         RB3: 3           RB5: 5         RB5: 5           One mapping option         One mapping option           Dch         Dch           RB1: 1, RB2: 2,         RB1: 1, RB2: 2,           RB5: 1         RB3: 3           RB5: N/A         RB5: N/A           RB5: N/A         RB5: N/A           Gdch         dch           dch         dch           TrCH1: 1, TrCH2: 2         TrCH1: 1, TrCH2: 2           DedicatedTransChT         FS           S         FS           TrCH1: (0x576, 1x576, 1x576, 1x640)         TrC	RB5: FALSE         RB5: FALSE         RB5: FALSE           OneLogicalChannel         OneLogicalChannel         OneLogicalChannel           Dch         Dch         Dch           RB1- RB3: 2 RB5: 1         RB1- RB3: 2 RB5: 1         RB1- RB3: 2 RB5: 1         RB1- RB3: 2 RB5: 1           RB1: RB2: 2, RB5: 3         RB1- RB3: 2 RB5: N/A         RB1- RB3: configured configured configured         RB1- RB3: configured configured           RB1: RB2: 2, RB5: N/A         RB1: RB2: 2, RB5: N/A         RB1: RB2: 2, RB5: N/A         RB1: RB2: 2, RB5: 1         RB1: RB2: 2, RB5: 5           One mapping option         One mapping option         One mapping option           Dch         Dch         Dch           RB1: RB3: 2 RB5: 1         RB1: RB3: 2 RB5: 1         RB1: RB3: 2 RB5: 1           RB1: RB3: 2 RB5: 1         RB1: RB3: 2 RB5: 1         RB1: RB2: 2, RB3: 3 RB5: N/A           RB1: RB3: 2 RB5: 1         RB1: RB3: 2 RB5: 1         RB1: RB3: 2 RB5: 1           RB1: RB3: 2 RB5: 1         RB1: RB3: 2 RB5: 1         RB1: RB3: 2 RB3: 3 RB5: N/A           Cdch         dch         dch           dch         dch         dch           TrCH1: (0x576, TCH2: (0x144, Tx144)         TrCH1: (0x640, TrCH2: (0x144, Tx144)         TrCH1: (0x640, TrCH2: (0x144, Tx144)           TrCH1: 0cotetMode TrCH2: BitMode         TrCH1:

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data + 3.4 kbps signalling
	TrCH2: Third	TrCH2: Third	TrCH2: Third	TrCH2: Third
>>>rateMatchingAttribute	TrCH1: 180	TrCH1: 185	TrCH1: 170	TrCH1: 165
	TrCH2: 160	TrCH2: 160	TrCH2: 160	TrCH2: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 16	TrCH1: 16
D	TrCH2: 16	TrCH2: 16	TrCH2: 16	TrCH2: 16
DL- AddReconfTransChInfoLis t				
>Downlink transport channel type	dch	dch	dch	dch
>dl-	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
TransportChannelldentity (should be as for UL)				
>tfs-SignallingMode	SameAsUL	SameAsUL	SameAsUL	SameAsUL
>>transportFormatSet				
>>>dynamicTF-information				
>>>>tf0/ tf0,1				
>>>>rlcSize				
>>>>sizeType				
>>>>numberOfTbSizeList				
>>>logicalChannelList				
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>dch-QualityTarget				
>>bler-QualityValue	TrCH1: 2x10 ⁻³	TrCH1: 2x10 ⁻³	TrCH1: 2x10 ⁻³	TrCH1: 1x10 ⁻²
TrCH INFORMATION, COMMON	TrCH2: Absent	TrCH2: Absent	TrCH2: Absent	TrCH2: Absent
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI	Normal TFCI	Normal TFCI	Normal TFCI
	signalling	signalling	signalling	signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete	Complete
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit
>>>>TFCS representation	Addition	Addition	Addition	Addition
>>>>TFCS list				
>>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)
>>>>>>ctfc	0 Computed	0 Computed	0 Computed	0 Computed
>>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>>>>referenceTFCId	0	0	0	0
>>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)
>>>>>>>>>ctfc	1	1	1	1
>>>>>sgainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A
>>>>>βd >>>>>>referenceTFCId	0	0	0	0
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	(TF2, TF0)	(TF0, TF1)	(TF0, TF1)	(TF0, TF1)
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	2	2	2	2
>>>>>>sainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0	0
>>>>TFCS 4	(TF0, TF1)	(TF1, TF1)	(TF1, TF1)	(TF1, TF1)
>>>>>>ctfc	3	3	3	3
>>>>>gainFactorInform	Computed	Signalled	Signalled	Signalled

Configuration	28.8 kbps conv.	32 kbps conv. CS-	64kbps conv. CS-	14.4 kbps
	CS- data + 3.4 kbps signalling	data + 3.4 kbps signalling	data + 3.4 kbps signalling	streaming CS- data + 3.4 kbps signalling
>>>>>βc (FDD only)	N/A	8	8	11
>>>>>βd	N/A	15	15	15
>>>>>>referenceTFCId	0	0	0	0
>>>>>TFCS 5	(TF1, TF1)	N/A	N/A	-
>>>>>>ctfc	4			
>>>>>>sgainFactorInform	Computed			
ation				
>>>>>>referenceTFCId		N1/A	N1/A	
>>>>>TFCS 6 >>>>>>ctfc	(TF2, TF1) 5	N/A	N/A	
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Signalled			
ation	Signalieu			
>>>>>>βc (FDD only)	8			
>>>>>βd	15			
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	0			
>>>>>TFCS 7	· ·			
>>>>>>ctfc				
>>>>>sgainFactorInform				
ation				
>>>>>referenceTFCId				
>>>>>TFCS 8				
>>>>>>ctfc				
>>>>>>gainFactorInform				
ation >>>>>>referenceTFCId				
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>				
>>>>>>>ctfc				
>>>>>>>>>>>sgainFactorInform				
ation				
>>>>>>referenceTFCId				
>>>>>TFCS 10				
>>>>>ctfc				
>>>>>>sgainFactorInform				
ation				
>>>>>>βc (FDD only)				
>>>>>βd				
>>>>>>referenceTFCId				
dl-CommonTransChInfo				
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION				
FDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>puncturingLimit	0.92	0.8	0.92	1
DL- CommonInformationBrada				
CommonInformationPrede				
>dl-DPCH-InfoCommon				
>>spreadingFactor	64	64	32	128
>>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>>pilotBits	8	8	8	8
>>positionFixed	Flexible	Flexible	Flexible	Flexible
PhyCH INFORMATION				
3.84 Mcps TDD				
UL-DPCH-InfoPredef				

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data + 3.4 kbps signalling
>ul-DPCH-				
PowerControlInfo				
>>dpch-ConstantValue	<del>-20</del> 0	<del>-20</del> 0	<del>-20</del> 0	<del>-20</del> 0
>commonTimeslotInfo				
>>secondInterleavingMod	frameRelated	frameRelated	frameRelated	frameRelated
е				
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.44	0.8	0.56	0.8
>>repetitionPeriodAndLen	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
gth				repetition eneur
DL- CommonInformationPrede f				
- >dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>secondInterleavingMo	frameRelated	frameRelated	frameRelated	frameRelated
de		Tamertelated		Tamercelated
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.44	0.64	0.56	0.8
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD				
UL-DPCH-InfoPredef				
>commonTimeslotInfo				
>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.64	0.60	0.64	1
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPrede				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.64	0.60	0.64	0.88
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode ) + 3.4 kbps signalling
Ref 34.108	16	17	1a
Default configuration identity	8	9	10
RB INFORMATION			
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM

Configuration	28.8 kbps	57.6 kbps	12.2 kbps
<b>J</b>	streaming CS-	streaming CS-	speech(multimode
	data + 3.4 kbps signalling	data + 3.4 kbps signalling	) + 3.4 kbps signalling
	5.4 Kops signaling	5.4 Kops signaling	5.4 Kbps Signaling
>>transmissionRLC-	RB1: N/A	RB1: N/A	RB1: N/A
DiscardMode	RB2- RB3:	RB2- RB3:	RB2- RB3:
	NoDiscard RB5: N/A	NoDiscard RB5: N/A	NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 15	RB2- RB3: 15	RB2- RB3: 15
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128
0	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>timerRST	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>max-RST	RB5: N/A RB1: N/A	RB5: N/A RB1: N/A	RB5- RB7: N/A RB1: N/A
>>max-RS1	RB2- RB3: 1	RB2- RB3: 1	RB2- RB3: 1
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>pollingInfo	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: as below RB5: N/A	RB2- RB3: as below RB5: N/A	RB2- RB3: as below RB5- RB7: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM	RB1: UM	RB1: UM
	RB2- RB3: AM RB5: TM	RB2- RB3: AM RB5: TM	RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: TRUE RB5: N/A	RB2- RB3: TRUE RB5: N/A	RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: 128	RB2- RB3: 128	RB2- RB3: 128
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A	RB1: N/A	RB1: N/A
	RB2- RB3: as below RB5: N/A	RB2- RB3: as below RB5: N/A	RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 300	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A
rb-MappingInfo	RB5: FALSE	RB5: FALSE	RB5- RB7: FALSE
>UL-	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
LogicalChannelMappings	0.10209.000.0100.010	0.10209.000.0100.010	enellegioarenamier
>>ul-	Dch	Dch	Dch
TransportChannelType			
>>>transportChannelIdenti ty	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2,
-			RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3
	RB5: N/A	RB5: N/A	RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3:	RB1- RB3:	RB1- RB3:
	configured	configured	configured
>>mac-	RB5: N/A RB1: 1, RB2: 2,	RB5: N/A RB1: 1, RB2: 2,	RB5- RB7: N/A RB1: 1, RB2: 2,
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL-	1.00.0	NDJ. J	
logicalChannelMappingList			

Configuration	28.8 kbps streaming CS-	57.6 kbps streaming CS-	12.2 kbps speech(multimode
	data +	data +	) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>Mapping option 1	One mapping option	One mapping option	One mapping option
>>>dl- TransportChannelType	Dch	Dch	Dch
>>>transportChannellden tity	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH			
UL- AddReconfTransChInfoLis t			
>Uplink transport channel type	dch	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information			
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576)	TrCH1: (0x576, 1x576, 2x576,	TrCH1: (0x81) TrCH2: (0x 103
	TrCH2: (0x144, 1x144)	3x576, 4x576) TrCH2: (0x144, 1x144)	TrCH3: (0x 60) TrCH4: (0x144)
>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 9,	TrCH1: type 2, part1= 9,	TrCH1: type 1: 81 TrCH2: type 1: 103
	part2= 2 (576) TrCH2: type 2,	part2= 2 (576) TrCH2: type 2,	TrCH3: type 1: 60 TrCH4: 2: type 2,
	part1= 2, part2= 0 (144)	part1= 2, part2= 0 (144)	part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero, one, 2	TrCH1: Zero, one,	TrCH1-4: Zero
	TrCH2: Zero, one	2, 3, 4 TrCH2: Zero, one	
>>>>logicalChannelList	All	All	All
>>>tf 1			TrCH1: (1x39)
			TrCH2: (1x53) TrCH3: (1x60) TrCH4: (1x144)
>>>numberOfTransportBl ocks			TrCH4: (1x144) TrCH1-3: One
>>>rlc-Size			TrCH1-3: BitMode
>>>>sizeType			TrCH1: 1: 39
			TrCH2: 1: 53 TrCH3: 1: 60
>>>>numberOfTbSizeList			TrCH1-3: One
>>>>logicalChannelList			TrCH1-3: all
>>>tf 2			TrCH1: (1x42) TrCH2: (1x63) TrCH3- TrCH4: N/A
>>>>numberOfTransportBl ocks			TrCH1-2: One
>>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 42 TrCH2: type 1: 63
>>>>numberOfTbSizeList			TrCH1-2: One
>>>logicalChannelList			TrCH1: all

Configuration	28.8 kbps	57.6 kbps	12.2 kbps
	streaming CS- data +	streaming CS- data +	speech(multimode ) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>tf 3			TrCH1: (1x55)
			TrCH2: (1x84)
			TrCH3- TrCH4: N/A
>>>>numberOfTransportBl ocks			TrCH1-2: Zero
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 55
Contraction of the Simol int			TrCH2: type 1: 84 TrCH1-2: One
>>>>numberOfTbSizeList >>>>logicalChannelList			TrCH1: all
>>>tf 4			TrCH1: (1x75)
			TrCH2: (1x103)
			TrCH3- TrCH4: N/A
>>>numberOfTransportBl			TrCH1-2: One
ocks			T OLIVE DYNA I
>>>>rlc-Size >>>>sizeType			TrCH1: BitMode TrCH1: type 1: 75
>>>>size i ype			TrCH1: type 1: 75 TrCH2: type 1: 103
>>>numberOfTbSizeList			TrCH1-2: One
>>>logicalChannelList			TrCH1: all
>>>tf 5			TrCH1: (1x81)
			TrCH2- TrCH4: N/A
>>>>numberOfTransportBl ocks			TrCH1: One
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 81
>>>>numberOfTbSizeList			TrCH1: One
>>>logicalChannelList			TrCH1: all
>>semiStaticTF- Information			
>>>tti	TrCH1: 40	TrCH1: 40	TrCH1- TrCH3: 20
	TrCH2: 40	TrCH2: 40	TrCH4: 40
>>>channelCodingType	TrCH1: Turbo	TrCH1: Turbo	Convolutional
	TrCH2: Convolutional	TrCH2: Convolutional	
>>>codingRate	TrCH1: N/A	TrCH1: N/A	TrCH1- TrCH2:
	TrCH2: Third	TrCH2: Third	Third
			TrCH3: Half
			TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 155	TrCH1: 145	TrCH1: 200
	TrCH2: 160	TrCH2: 160	TrCH2: 190 TrCH3: 235
			TrCH4: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 12
	TrCH2: 16	TrCH2: 16	TrCH2- TrCH3: 0
			TrCH4: 16
DL- AddReconfTransChInfoLis			
t Downlink transport	dab	dab	dah
>Downlink transport channel type	dch	dch	dch
>dl-	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2,
TransportChannelldentity (should be as for UL)			TrCH3: 3, TrCH4: 4
>tfs-SignallingMode	SameAsUL	SameAsUL	Independent
			<only on="" td="" tf0="" trch1<=""></only>
			is different and
· · · tropoportEorm - +0 - +			shown below>
>>transportFormatSet			DedicatedTransChT FS
>>>dynamicTF-information			

Configuration	28.8 kbps streaming CS- data +	57.6 kbps streaming CS- data +	12.2 kbps speech(multimode ) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>>tf0/ tf0,1			TrCH1: (1x0)
>>>rlcSize			bitMode
>>>>sizeType			TrCH1: type 1: 0
>>>>numberOfTbSizeList			TrCH1: One
>>>>logicalChannelList			All
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget			<b>–</b> <u>–</u> <u>–</u> <del>–</del> <del>3</del>
>>bler-QualityValue	TrCH1: 1x10 ⁻² TrCH2: Absent	TrCH1: 1x10 ⁻² TrCH2: Absent	TrCH1: 7x10 ⁻³ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON			
ul-CommonTransChInfo			
>tfcs-ID (TDD only)	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI	Normal TFCI	Normal TFCI
	signalling	signalling	signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete
>>>ctfcSize	Ctfc4Bit	Ctfc4Bit	Ctfc8Bit
>>>>TFCS representation	Addition	Addition	Addition
>>>>TFCS list			
>>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>>ctfc	0	0	0
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0
>>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0, TF0, TF0)
>>>>>>ctfc	1	1	1
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>>referenceTFCId	0	0	0
>>>>>TFCS 3	(TF2, TF0)	(TF2, TF0)	(TF2, TF1, TF0, TF0)
>>>>>>ctfc	2	2	8
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0
>>>>>TFCS 4	(TF0, TF1)	(TF3, TF0)	(TF3, TF2, TF0, TF0)
>>>>>>ctfc	3	3	15
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>>>referenceTFCId	0	0	0
>>>>TFCS 5	(TF1, TF1)	(TF4, TF0)	(TF4, TF3, TF0, TF0)
>>>>>ctfc	4	4	22
>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>referenceTFCId	0	0	0

Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode ) + 3.4 kbps signalling
>>>>>TFCS 6	(TF2, TF1)	(TF0, TF1)	(TF5, TF4, TF1,
>>>>>ctfc	5	5	TF0) 59
>>>>>>>>>>sgainFactorInform	Signalled	Computed	Computed
ation		• • · · · F • · • •	p
>>>>>βc (FDD only)	8	N/A	N/A
>>>>>βd	15	N/A	N/A
>>>>>>referenceTFCId	0	0	0
>>>>>TFCS 7		(TF1, TF1)	(TF0,TF0,TF0,TF1)
>>>>>>ctfc >>>>>>gainFactorInform		6 Computed	60 Computed
ation		Computed	Computed
>>>>>>referenceTFCId		0	0
>>>>>TFCS 8		(TF2, TF1)	(TF1,TF0,TF0,TF1)
>>>>>ctfc		7	61
>>>>>>gainFactorInform ation		Computed	Computed
>>>>>>>referenceTFCId		0	0
>>>>>TFCS 9		(TF3, TF1)	(TF2,TF1,TF0,TF1)
>>>>>ctfc		8	68
>>>>>>gainFactorInform ation		Computed	Computed
>>>>>>referenceTFCId		0	0
>>>>>TFCS 10		(TF4, TF1)	(TF3,TF2,TF0,TF1)
>>>>>ctfc		9	75
>>>>>>gainFactorInform ation		Signalled	Computed
>>>>>βc (FDD only)		8	N/A
>>>>>βd		15	N/A
>>>>>>referenceTFCId		0	0
>>>>>TFCS 11			(TF4,TF3,TF0,TF1)
>>>>>ctfc >>>>>>gainFactorInform			82 Computed
ation			Computed
>>>>>>referenceTFCId			0
>>>>>TFCS 12			(TF5,TF4,TF1,TF1)
>>>>>ctfc			119
>>>>>>sgainFactorInform			Signalled
ation			11
>>>>>βc (FDD only)			15
>>>>>βd >>>>>>referenceTFCId	 	 	0
dl-CommonTransChInfo			0
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD			
UL-DPCH-InfoPredef			
>ul-DPCH- PowerControlInfo			
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE
>puncturingLimit	1	1	0.88
DL- CommonInformationPrede			
f >dl-DPCH-InfoCommon			
>spreadingFactor	64	32	128
>>tfci-Existence	TRUE	TRUE	FALSE

Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode ) + 3.4 kbps signalling
>>pilotBits	8	8	4
>>positionFixed	Flexible	Flexible	Fixed
PhyCH INFORMATION 3.84 Mcps TDD			
UL-DPCH-InfoPredef			
>ul-DPCH- PowerControlInfo			
>>dpch-ConstantValue	<u>-200</u>	<u>-200</u>	<u>-200</u>
>commonTimeslotInfo			
>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	16	16
>>puncturingLimit	0.44	0.48	0.88
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPrede f			
>dl-DPCH-InfoCommon			
>>commonTimeslotInfo			
>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	16	16
>>>puncturingLimit	0.44	0.48	0.92
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD			
UL-DPCH-InfoPredef			
>commonTimeslotInfo			
>>secondInterleavingMod e	frameRelated	frameRelated	
>>tfci-Coding	16	16	
>>puncturingLimit	0.64	0.72	
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	
DL- CommonInformationPrede f			
>dl-DPCH-InfoCommon			
>>commonTimeslotInfo			
>>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	16	16
>>>puncturingLimit	0.64	0.72	0.92
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	10.2/6.7/5.9/4.75	7.4/6.7/5.9/4.75
	kbps speech +	kbps speech +
	3.4 kbps signalling	3.4 kbps signalling
Ref 34.108	N/A	N/A
Default configuration	11	12
identity		
RB INFORMATION rb-Identity		
rb-identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5,	RB1: 1, RB2: 2, RB3: 3, RB5: 5,
	RB6: 6, RB7: 7,	RB6: 6, RB7: 7
	RB8: 8	,
rlc-InfoChoice	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM
>>transmissionRLC-	RB5-RB7: TM RB1: N/A	RB5-RB6: TM RB1: N/A
DiscardMode	RB2- RB3:	RB1. N/A RB2- RB3:
Discardinouc	NoDiscard	NoDiscard
	RB5- RB7: N/A	RB5- RB6: N/A
>>>maxDat	RB1: N/A	RB1: N/A
	RB2- RB3: 15	RB2- RB3: 15
>>transmissionWindowSiz	RB5- RB7: N/A RB1: N/A	RB5- RB6: N/A RB1: N/A
e	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128
e	RB5- RB7: N/A	RB5- RB6: N/A
>>timerRST	RB1: N/A	RB1: N/A
	RB2- RB3: 300	RB2- RB3: 300
	RB5- RB7: N/A	RB5- RB6: N/A
>>max-RST	RB1: N/A	RB1: N/A
	RB2- RB3: 1 RB5- RB7: N/A	RB2- RB3: 1 RB5- RB6: N/A
>>pollingInfo	RB1: N/A	RB3- RB0. N/A RB1: N/A
>>poliniginio	RB2- RB3: as below	RB2- RB3: as below
	RB5- RB7: N/A	RB5- RB6: N/A
>>>lastTransmissionPDU-	RB2- RB3: FALSE	RB2- RB3: FALSE
Poll >>>lastRetransmissionPD	RB2- RB3: FALSE	RB2- RB3: FALSE
U-Poll		
>>>timerPollPeriodic	RB2- RB3: 300	RB2- RB3: 300
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A
	RB5- RB7: FALSE	RB5- RB6: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM
	RB5- RB7: TM	RB5- RB6: TM
	RB8: TM	RB7: TM
>>inSequenceDelivery	RB1: N/A	RB1: N/A
	RB2- RB3: TRUE	RB2- RB3: TRUE
	RB5- RB8: N/A	RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128
	RB5- RB8: N/A	RB2- RB3: 126 RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A	RB1: N/A
	RB2- RB3: as below	RB2- RB3: as below
	RB5- RB8: N/A	RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic >>segmentationIndication	RB2- RB3: 300 RB1- RB3: N/A	RB2- RB3: 300 RB1- RB3: N/A
	RB5- RB8: FALSE	RB5- RB7: FALSE
rb-MappingInfo		
>UL-	OneLogicalChannel	OneLogicalChannel
LogicalChannelMappings		<b>.</b>
>>ul-	Dch	Dch
TransportChannelType		

>>>tf 2

ocks

>>>rlc-Size

>>>>sizeType

>>>numberOfTbSizeList

>>>>numberOfTransportBl

>>>>logicalChannelList

>>>transportChannelldentit	RB1- RB3: 4	RB1- RB3: 3
y	RB5: 1, RB6: 2,	RB5: 1, RB6: 2
3	RB7: 3,	11201 1, 11201 2
>>logicalChannelIdentity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
5	RB3: 3	RB3: 3
	RB5- RB7: N/A	RB5- RB6: N/A
>>rlc-SizeList	RB1- RB3:	RB1- RB3:
	configured	configured
	RB5- RB7: N/A	RB5- RB6: N/A
>>mac-	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
LogicalChannelPriority	RB3: 3	RB3: 3
	RB5- RB7: 5	RB5- RB6: 5
>DL-		
logicalChannelMappingList		
>>Mapping option 1	One mapping option	One mapping option
>>>dl-	Dch	Dch
TransportChannelType		
>>>>transportChannellden	RB1- RB3: 4	RB1- RB3: 3
tity	RB5: 1, RB6: 2,	RB5: 1, RB6: 2,
	RB7: 3, RB8: 5	RB7:4
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3
	RB3: 3 RB5- RB8: N/A	RB5- RB7: N/A
TrCH INFORMATION PER	RDJ- RDO. N/A	RDJ- RDT. N/A
TrCH		
UL-		
AddReconfTransChInfoList		
>Uplink transport channel	dch	dch
type		
>transportChannelIdentity	TrCH1: 1, TrCH2: 2,	TrCH1: 1, TrCH2: 2,
	TrCH3: 3, TrCH4: 4	TrCH3: 3
>transportFormatSet	DedicatedTransChT	DedicatedTransChT
al an anni a <b>TE</b> in fa ann a tian	FS	FS
>>dynamicTF-information		
>>>tf0/ tf0,1	TrCH1: (0x65)	TrCH1: (0x61)
	TrCH2: (0x 99)	TrCH2: (0x 87)
	TrCH3: (0x 40,	TrCH3: (0x 144,
	1x40)	1x144)
	TrCH4: (0x144, 1x144)	
>>>>rlcSize	BitMode	BitMode
>>>>sizeType	TrCH1: type 1: 65	TrCH1: type 1: 61
served to the	TrCH2: type 1: 99	TrCH2: type 1: 87
	TrCH3: type 1: 40	TrCH3: 2: type 2,
	TrCH4: 2: type 2,	part1 = 2, part2 = 0
	part1 = 2, part2 = 0	(144)
	(144)	····/
>>>>numberOfTbSizeList	TrCH1-2: Zero	TrCH1-2: Zero
	TrCH3-4: Zero, one	TrCH3: Zero, one
>>>>logicalChannelList	All	All
>>>tf 1	TrCH1: (1x39)	TrCH1: (1x39)
	TrCH2: (1x 53)	TrCH2: (1x53)
	TrCH3- TrCH4: N/A	TrCH3: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks	TrCH2: One	TrCH2: One
>>>>rlc-Size	TrCH1-2: BitMode	TrCH1-2: BitMode
>>>>sizoTypo		

TrCH1: 1: 39

TrCH2: 1: 53

TrCH1: all

TrCH1-2: One

TrCH1: (1x42)

TrCH2: (1x63)

TrCH1: One

TrCh2: One

TrCH1: BitMode

TrCH3- TrCH4: N/A

TrCH1: BitMode

TrCH1: 1: 39

TrCH1: 1: 53

TrCH1: all

TrCH1-2: One

TrCH1: (1x42)

TrCH2: (1x63)

TrCH3: N/A

TrCH1: One

TrCh2: One

	1	
>>>>sizeType	TrCH1: type 1: 42	TrCH1: type 1: 42
	TrCH2: type 1: 63	TrCH2: type 1: 63
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
	TrCH2: One TrCH1: all	TrCH2: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all TrCH2: all
>>>tf 3	TrCH1: (1x55)	TrCH1: (1x55)
>>>(1 3		
	TrCH2: (1x76) TrCH3- TrCH4: N/A	TrCH2: (1x76) TrCH3: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks	TrCh2: One	TrCh2: One
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 55	TrCH1: type 1: 55
	TrCH2: type 1: 76	TrCH2: type 1: 76
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
	TrCH2: One	TrCH2: One
>>>logicalChannelList	TrCH1: all	TrCH1: all
	TrCH2: all	TrCH2: all
>>>tf 4	TrCH1: (1x58)	TrCH1: (1x58)
	TrCH2: (1x99)	TrCH2: (1x87)
	TrCH3- TrCH4: N/A	TrCH3: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks	TrCh2: One	TrCh2: One
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 58	TrCH1: type 1: 58
<i>.</i>	TrCH2: type 1: 99	TrCH2: type 1: 87
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
	TrCH2: One	TrCH2: One
>>>logicalChannelList	TrCH1: all	TrCH1: all
C C	TrCH2: all	TrCH2: all
>>>tf 5	TrCH1: (1x65)	TrCH1: (1x61)
	TrCH2- TrCH4: N/A	TrCH2- TrCH4: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks		
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType	TrCH1: type 1: 42	TrCH1: type 1: 42
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
>>>>logicalChannelList	TrCH1: all	TrCH1: all
>>semistaticTF-Information		
>>>tti	TrCH1- TrCH3: 20	TrCH1- TrCH2: 20
	TrCH4: 40	TrCH3: 40
>>>channelCodingType		
>>>>codingPoto	Convolutional	Convolutional
>>>>codingRate	Convolutional TrCH1- TrCH2:	TrCH1- TrCH2:
	Convolutional TrCH1- TrCH2: Third	TrCH1- TrCH2: Third
	Convolutional TrCH1- TrCH2: Third TrCH3: Half	TrCH1- TrCH2:
	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third	TrCH1- TrCH2: Third TrCH3: Third
>>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200
	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190
	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH1: 200 TrCH2: 190 TrCH3: 235	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200
>>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160
	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12
>>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0
>>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12
>>>rateMatchingAttribute >>>crc-Size	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0
>>>rateMatchingAttribute >>>crc-Size DL- AddReconfTransChInfoList	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0
>>>rateMatchingAttribute >>>crc-Size DL- AddReconfTransChInfoList >Downlink transport	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16
>>>rateMatchingAttribute >>>crc-Size DL- AddReconfTransChInfoList	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dI-</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16 dch	TrCH1- TrCH2:           Third           TrCH3: Third           TrCH1: 200           TrCH2: 190           TrCH3: 160           TrCH1: 12           TrCH2: 0           TrCH3: 16           dch
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dI-</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16 dch	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16 dch
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16 dch	TrCH1- TrCH2:           Third           TrCH3: Third           TrCH1: 200           TrCH2: 190           TrCH3: 160           TrCH1: 12           TrCH2: 0           TrCH3: 16           dch
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16 dch Independent <only on="" td="" tf0="" trch1<=""><td>TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16 dch Independent <only on="" td="" tf0="" trch1<=""></only></td></only>	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16 dch Independent <only on="" td="" tf0="" trch1<=""></only>
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre>	Convolutional           TrCH1- TrCH2:           Third           TrCH3: Half           TrCH4: Third           TrCH1: 200           TrCH2: 190           TrCH3: 235           TrCH4: 160           TrCH2- TrCH3: 0           TrCH4: 16           dch           Independent           <0nly tf0 on TrCH1	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16 dch Independent <only on="" tf0="" trch1<br="">and tf0/tf1 on</only>
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16 dch Independent <only on="" tf0="" trch1<br="">and tf0/tf1 on TrCH5 are different</only>	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16 dch Independent <only on="" tf0="" trch1<br="">and tf0/tf1 on TrCH4 are different</only>

>>>>tf0/ tf0,1	TrCH1: (1x0)	TrCH1: (1x0)
	TrCH5: (0x3, 1x3)	TrCH4: (0x3, 1x3)
>>>rlcSize	BitMode	bitMode
>>>>sizeType	TrCH1: type 1: 0	TrCH1: type 1: 0
	TrCH5: type 1: 3	TrCH4: type 1: 3
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One
	TrCH5: Zero, one	TrCH4: Zero, one
>>>>logicalChannelList	All	All
>>>semistaticTF-	same as UL except	same as DL except
Information	for TrCH5	for TrCH4
>>>>tti	TrCH5: 20	TrCH4: 20
>>>>channelCodingType	Convolutional	Convolutional
>>>>codingRate	TrCH5: Third	TrCH4: Third
>>>rateMatchingAttribute	TrCH5: 200	TrCH4: 200
>>>>crc-Size	TrCH5: 12	TrCH4: 12
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2,	TrCH1: 1, TrCH2: 2,
	TrCH3: 3, TrCH4: 4,	TrCH3: 3
>dch-QualityTarget	<b>TOUR 7 40⁻³</b>	T-014.7.10 ⁻³
>>bler-QualityValue		TrCH1: 7x10 ⁻³
	TrCH2- TrCH5: Absent	TrCH2- TrCH4: Absent
TrCH INFORMATION,	ADSEIIL	ADSEIII
COMMON		
ul-CommonTransChInfo		
>tfcs-ID (TDD only)	1	1
>sharedChannelIndicator	FALSE	FALSE
(TDD only)	FALSE	FALSE
> tfc-Subset	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI	Normal TFCI
20-11 00	signalling	signalling
>>explicitTFCS-	Complete	Complete
ConfigurationMode	Complete	Complete
>>>ctfcSize	Ctfc6Bit	Ctfc6Bit
	0	
	Addition	Addition
>>>>TFCS representation	Addition	Addition
>>>>TFCS representation >>>>>TFC list		
>>>>TFCS representation	(TF0, TF0, TF0,	Addition (TF0, TF0, TF0)
>>>>TFCS representation >>>>>TFC list		
>>>>TFCS representation >>>>>TFC list >>>>>TFC 1 >>>>>>ctfc	(TF0, TF0, TF0, TF0) 0	(TF0, TF0, TF0)
>>>>TFCS representation >>>>>TFC list >>>>>TFC 1	(TF0, TF0, TF0, TF0)	(TF0, TF0, TF0) 0
>>>>TFCS representation >>>>>TFC list >>>>>TFC 1 >>>>>>ctfc >>>>>>ctfc	(TF0, TF0, TF0, TF0) 0	(TF0, TF0, TF0) 0
>>>>TFCS representation >>>>>TFC list >>>>>TFC 1 >>>>>>ctfc >>>>>>sgainFactorInform ation	(TF0, TF0, TF0, TF0) 0 Computed	(TF0, TF0, TF0) 0 Computed
>>>>TFCS representation >>>>>TFC list >>>>>TFC 1 >>>>>>ctfc >>>>>>gainFactorInform ation >>>>>referenceTFCId	(TF0, TF0, TF0, TF0) 0 Computed 0	(TF0, TF0, TF0) 0 Computed 0
>>>>TFCS representation >>>>>TFC list >>>>>TFC 1 >>>>>>ctfc >>>>>>gainFactorInform ation >>>>>>referenceTFCId >>>>>TFC 2 >>>>>ctfc	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1
>>>>TFCS representation >>>>>TFC list >>>>>TFC 1 >>>>>>ctfc >>>>>>gainFactorInform ation >>>>>>referenceTFCId >>>>>TFC 2	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0)	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0)
>>>>TFCS representation >>>>>TFC list >>>>>TFC 1 >>>>>>ctfc >>>>>>gainFactorInform ation >>>>>>referenceTFCId >>>>>TFC 2 >>>>>ctfc	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed
>>>>TFCS representation >>>>>TFC list >>>>>TFC 1 >>>>>>ctfc >>>>>>gainFactorInform ation >>>>>>referenceTFCId >>>>>TFC 2 >>>>>ctfc >>>>>ctfc	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1
>>>>TFCS representation >>>>TFC list >>>>>Ctfc >>>>>>gainFactorInform ation >>>>>>referenceTFCId >>>>>>TFC 2 >>>>>ctfc >>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>>>>>>>Ctfc	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed
>>>>TFCS representation >>>>TFC list >>>>>>TFC 1 >>>>>>ctfc >>>>>>gainFactorInform ation >>>>>>referenceTFCId >>>>>>TFC 2 >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>>Ctfc >>>>>>Ctfc >>>>>>>>>>>>Ctfc >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A
>>>>TFCS representation         >>>>TFC list         >>>>>TFC 1         >>>>>sqainFactorInform         ation         >>>>>referenceTFCId         >>>>>TFC 2         >>>>>ctfc         >>>>>ctfc         >>>>>TFC 2         >>>>>ctfc         >>>>>spainFactorInform         ation         >>>>>>bfc (FDD only)         >>>>>>>>>>>>bfd         >>>>>>sreferenceTFCId	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0
>>>>TFCS representation >>>>TFC list >>>>>>TFC 1 >>>>>>ctfc >>>>>>gainFactorInform ation >>>>>>referenceTFCId >>>>>>TFC 2 >>>>>>ctfc >>>>>>ctfc >>>>>>ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>Ctfc >>>>>>>Ctfc >>>>>>Ctfc >>>>>>>>>>>>Ctfc >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0,	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A
>>>>TFCS representation         >>>>TFC list         >>>>>TFC 1         >>>>>sqainFactorInform         ation         >>>>>referenceTFCId         >>>>>TFC 2         >>>>>ctfc         >>>>>ctfc         >>>>>TFC 2         >>>>>ctfc         >>>>>spainFactorInform         ation         >>>>>>bfc (FDD only)         >>>>>>>>>>>>bfd         >>>>>>sreferenceTFCId	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0, TF0)	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0
$\begin{array}{l} >>>> TFCS representation \\ >>>> TFC list \\ >>>>> TFC 1 \\ \hline \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> referenceTFCId \\ >>>>> TFC 2 \\ \hline \\ >>>>> ctfc \\ >>>>> ctfc \\ >>>>> fc (FDD only) \\ >>>>> \betad \\ >>>>> FeferenceTFCId \\ >>>>>> feferenceTFCId \\ >>>>>> ffc 3 \\ >>>>> ctfc 3 \\ >>>>> ctfc 3 \\ >>>>>> ctfc 3 \\ >>>>>>>>>> ctfc 3 \\ >>>>>>>>>>>>>> ctfc 3 \\ >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>$	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8
$\begin{array}{l} >>>> TFCS representation \\ >>>> TFC list \\ >>>>> TFC 1 \\ \hline \\ >>>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>>> referenceTFCId \\ >>>>> TFC 2 \\ \hline \\ >>>>> ctfc \\ >>>>> ctfc \\ >>>>> ctfc \\ >>>>> fc (FDD only) \\ >>>>> \betad \\ >>>>> TFC 3 \\ \hline \\ \end{array}$	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0, TF0)	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0)
$\begin{array}{l} >>>> TFCS representation \\ >>>> TFC list \\ >>>>> TFC 1 \\ \hline \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> referenceTFCId \\ >>>>> TFC 2 \\ \hline \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> fc (FDD only) \\ >>>>> fd \\ >>>>> fc 3 \\ >>>>> ctfc 3 \\ \hline \\ \ \\ >>>>> ctfc 3 \\ \hline \\ \ \\ \ \\ \ \\ \ \\ \ \\ \ \\ \ \\ \ \\ \$	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8
$\begin{array}{l} >>>> TFCS representation \\ >>>> TFC list \\ >>>>> TFC 1 \\ \hline \\ >>>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>>> referenceTFCId \\ >>>>> TFC 2 \\ \hline \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>>> \betac (FDD only) \\ >>>>> \betad \\ >>>>> fFC 3 \\ \hline \\ >>>>> ctfc \\ >>>>> ctfc \\ >>>>> referenceTFCId \\ >>>>>> ffC 3 \\ \hline \\ >>>>>> ctfc \\ >>>>> ctfc \\ >>>>> referenceTFCId \\ >>>>> referenceTFCId \\ >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>$	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed 0
$\begin{array}{l} >>>> TFCS representation \\ >>>> TFC list \\ >>>>> TFC 1 \\ \hline \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> referenceTFCId \\ >>>>> TFC 2 \\ \hline \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> fc (FDD only) \\ >>>>> fd \\ >>>>> fc 3 \\ >>>>> ctfc 3 \\ \hline \\ \ \\ >>>>> ctfc 3 \\ \hline \\ \ \\ \ \\ \ \\ \ \\ \ \\ \ \\ \ \\ \ \\ \$	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0,	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed
$\begin{array}{l} >>>> TFCS representation \\ >>>> TFC list \\ >>>>> TFC 1 \\ \hline \\ >>>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>>> referenceTFCId \\ >>>>> TFC 2 \\ \hline \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>>> \betac (FDD only) \\ >>>>> \betad \\ >>>>> fFC 3 \\ \hline \\ >>>>> ctfc \\ >>>>> ctfc \\ >>>>> referenceTFCId \\ >>>>>> ffC 3 \\ \hline \\ >>>>>> ctfc \\ >>>>> ctfc \\ >>>>> referenceTFCId \\ >>>>> referenceTFCId \\ >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>$	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed 0
$\begin{array}{l} >>>> TFCS representation \\ >>>> TFC list \\ >>>>> TFC 1 \\ \hline \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> referenceTFCId \\ >>>>> TFC 2 \\ \hline \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> fc (FDD only) \\ >>>>>> fc (FDD only) \\ >>>>> fc (FDD only) \\ >>>> fc (FDD only) \\ >>>>> fc (FDD only) \\ >>>> fc (FDD only) \\ >>>>> fc (FDD only) \\ >>>> fc (FDD only) \\ >>>>> fc (FDD only) \\ < fd (FD only) \\ $	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0) 15	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed 0 (TF3, TF2, TF0) 15
$\begin{array}{l} >>>> TFCS representation \\ >>>> TFC list \\ >>>>> TFC 1 \\ \hline \\ >>>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> referenceTFCId \\ >>>>> TFC 2 \\ \hline \\ >>>>> ctfc \\ >>>>> ctfc \\ >>>>> gainFactorInform \\ ation \\ >>>>> bc (FDD only) \\ >>>>> bfd \\ >>>>> ffC 3 \\ \hline \\ >>>>> ctfc \\ >>>>>> ctfc \\ >>>>>> ctfc \\ >>>>>> ctfc \\ >>>>>> ctfc \\ >>>>>>> ctfc \\ >>>>>> ctfc \\ >>>>>>>>> ctfc \\ >>>>>> ctfc \\ >>>>>>>> ctfc \\ >>>>>> ctfc \\ >>>>>> ctfc \\ >>>>>>>>> ctfc \\ >>>>>>>>>>>> ctfc \\ >>>>>>>>>> ctfc \\ >>>>>>>>>>>>>>> ctfc \\ >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>$	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0)	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed 0 (TF3, TF2, TF0)
$>>>>TFCS representation \\>>>>>TFC list \\>>>>>>TFC 1 \\\\>>>>>>gainFactorInform \\ation \\>>>>>>TFC 2 \\\\>>>>>>TFC 2 \\\\>>>>>>SgainFactorInform \\ation \\>>>>>>fc (FDD only) \\>>>>>>bfc (FDD only) \\>>>>>>bfc (FDD only) \\>>>>>>bfc 3 \\\\>>>>>>TFC 3 \\\\>>>>>>tffc 3 \\\\>>>>>>teferenceTFCId \\>>>>>>bfc 4 \\\\>>>>>>teferenceTFCId \\>>>>>>teferenceTFCId \\>>>>>>>>>teferenceTFCId \\>>>>>>>>>>teferenceTFCId \\>>>>>>>>>>teferenceTFCId \\>>>>>>>>>>teferenceTFCId \\>>>>>>>>>>>>>>>>bfc 4 \\\\>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>$	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0) 15	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed 0 (TF3, TF2, TF0) 15
$>>>>TFCS representation \\>>>>>TFC list \\>>>>>>TFC 1 \\\\>>>>>>gainFactorInform \\ation \\>>>>>>referenceTFCId \\>>>>>>TFC 2 \\\\>>>>>>tfC 2 \\\\>>>>>>tfC 2 \\\\>>>>>>gainFactorInform \\ation \\>>>>>>bfc (FDD only) \\>>>>>bfd \\>>>>>bfc 3 \\\\>>>>>>tffC 3 \\\\>>>>>>tffC 3 \\\\>>>>>>tffC 4 \\\\>>>>>>>>>tffC 4 \\\\>>>>>>bfc (FDD only) \\\\>>>>>>tffC 4 \\\\>>>>>>bfc (FDD only) \\\\>>>>>>tffC 4 \\\\>>>>>>bfc (FDD only) \\\\>>>>>>tffC 4 \\\\>>>>>>>>>>>>>>bfc (FDD only) \\\\>>>>>>>>>>tffC 4 \\\\>>>>>>>>>>>bfc (FDD only) \\\\>>>>>>>>>>>>>>>tffC 4 \\\\>>>>>>>>>>>>>>>>>>>>>>>>>>>bfc (FDD only) \\\\>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>$	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0) 15	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed 0 (TF3, TF2, TF0) 15
$>>>>TFCS representation \\>>>>TFC list \\>>>>>TFC 1 \\\\>>>>>>stFC 1 \\\\>>>>>>stFC 1 \\\\>>>>>>stfC 1 \\\\>>>>>>stfC 2 \\\\>>>>>TFC 2 \\\\>>>>>teferenceTFCld \\>>>>>stfC 2 \\\\>>>>>>tfC 2 \\\\>>>>>stfC 2 \\\\>>>>>tfC 2 \\\\<>>>>>>tfC 2 \\\\>>>>>tfC 2 \\\\>>>>>tfC 2 \\\\<>>>>>tfC 3 \\\\>>>>>tffC 3 \\\\>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>>tffC 4 \\\\>>>>tffC 4 \\\\>>>>tffC 4 \\\\>>>>tffC 4 \\\\>>>>tffC 4 \\\\>>>>tffC 4 \\\\\\$	(TF0, TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0) 15	(TF0, TF0, TF0) 0 Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed 0 (TF3, TF2, TF0) 15

750 5		
>>>>>TFC 5	(TF4, TF3, TF0, TF0)	(TF4, TF3, TF0)
>>>>>ctfc	22	22
>>>>>>sgainFactorInform	Computed	Computed
ation		
>>>>>>referenceTFCId	0	0
>>>>>TFC 6	(TF5, TF4, TF1,	(TF5, TF4, TF0)
	TF0)	
>>>>>ctfc	59	29
>>>>>>sgainFactorInform	Computed	Computed
ation		
>>>>>>βc (FDD only)		
>>>>>βd		
>>>>>>referenceTFCId	0	0
>>>>>TFC 7	(TF0, TF0, TF0,	(TF0, TF0, TF1)
- 14 -	TF1)	
>>>>>>Ctfc	60 Computed	30 Computed
>>>>>>gainFactorInform ation	Computed	Computed
>>>>>>>referenceTFCId	0	0
>>>>>TFC 8	(TF1, TF0, TF0,	(TF1, TF0, TF1)
	TF1)	(,, ., ., .,
>>>>>ctfc	61	31
>>>>>>gainFactorInform	computed	computed
ation		
>>>>>βc (FDD only)		
>>>>>βd		
>>>>>>referenceTFCId	0	0
>>>>>TFC 9	(TF2, TF1, TF0,	(TF2, TF1, TF1)
	TF1)	
>>>>>ctfc	68	38
>>>>>>sgainFactorInform	computed	computed
ation		
>>>>>>referenceTFCId		
>>>>>TFC 10	(TF3, TF2, TF0, TF1)	(TF3, TF2, TF1)
>>>>>ctfc	75	45
>>>>>gainFactorInform	computed	computed
ation	••••••	
>>>>>βc (FDD only)		
>>>>>βd		
>>>>>>referenceTFCId	0	0
>>>>>TFC 11	(TF4, TF3, TF0,	(TF4, TF3, TF1)
	TF1)	
>>>>>ctfc	82	52
>>>>>gainFactorInform	computed	computed
ation		
>>>>>>referenceTFCId		
>>>>>TFC 12	(TF5, TF4, TF1,	(TF5, TF4, TF1)
	TF1)	50
>>>>>ctfc >>>>>>gainFactorInform	97 signalled	59 signalled
ation	signalled	Signalieu
	11	11
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	15	15
>>>>>βd		
>>>>>>referenceTFCId	0	0
> TFC subset list >>TFC subset 1	(speech rate $10.2)$	(speech rate 7.4)
>>> Allowed transport	(speech rate 10.2) (TFC1, TFC2,	(speech rate 7.4) (TFC1, TFC2,
format combination list	TFC7, TFC8, TFC6,	TFC7, TFC8, TFC6,
	TFC12)	TFC12)
>>TFC subset 2	(speech rate 6.7)	(speech rate 6.7)
		/

Allowed transport				
>>> Allowed transport format combination list	(TFC1, TFC2,	(TFC1, TFC2,		
format combination list	TFC7, TFC8, TFC5,	TFC7, TFC8, TFC5,		
TEO autoratio	TFC11)	TFC11)		
>>TFC subset 3	(speech rate 5.9)	(speech rate 5.9)		
>>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,		
format combination list	TFC7, TFC8, TFC4,	TFC7, TFC8, TFC4,		
	TFC10)	TFC10)		
>>TFC subset 4	(speech rate 4.75)	(speech rate 4.75)		
>>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,		
format combination list	TFC7, TFC8, TFC3,	TFC7, TFC8, TFC3,		
	TFC9)	TFC9)		
dl-CommonTransChInfo				
>tfcs-SignallingMode	Independent	Independent		
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1		
>sharedChannelIndicator	FALSE	FALSE		
(TDD only)				
> tfc-Subset	Absent, not required	Absent, not required		
>dl-TFCS	Normal TFCI	Normal TFCI		
	signalling	signalling		
>>explicitTFCS-	Complete	Complete		
ConfigurationMode				
>>>ctfcSize	Ctfc6Bit	Ctfc6Bit		
>>>>TFCS representation	Addition	Addition		
>>>>TFCS list				
>>>>>TFC 1	(TF0, TF0, TF0,	(TF0, TF0, TF0,		
	TF0, TF0)	TF0)		
>>>>>>ctfc	0	0		
>>>>>TFC 2	(TF1, TF0, TF0,	(TF1, TF0, TF0,		
	TF0, TF0)	TF0)		
>>>>>ctfc	1	1		
>>>>>TFC 3	(TF2, TF1, TF0,	(TF2, TF1, TF0,		
	TF0, TF0)	TF0)		
>>>>>ctfc	8	8		
>>>>>TFC 4	(TF3, TF2, TF0,	(TF3, TF2, TF0,		
_	TF0, TF0)	TF0)		
>>>>>>ctfc	15	15		
>>>>>TFC 5	(TF4, TF3, TF0,	(TF4, TF3, TF0,		
	TF0, TF0)	TF0)		
>>>>>>ctfc	22	22		
>>>>TFC 6	(TF5, TF4, TF1,	(TF5, TF4, TF0,		
	TF0, TF0)	(110, 111, 110, TF0)		
>>>>>ctfc	59	29		
>>>>>TFC 7	(TF0, TF0, TF0,	(TF0, TF0, TF1,		
	TF1, TF0)	(110, 110, 111, TF0)		
>>>>>ctfc	60	30		
>>>>>TFC 8	(TF1, TF0, TF0,	(TF1, TF0, TF1,		
	TF1, TF0)	(TF1, TF0, TF1, TF0)		
>>>>>ctfc	61	31		
>>>>>TFC 9	(TF2, TF1, TF0,	(TF2, TF1, TF1,		
	TF1, TF0)	(1F2, 1F1, 1F1, TF0)		
~~~~~	, ,	37		
>>>>>>Ctfc	68 (TE3 TE2 TE0			
>>>>>TFC 10	(TF3, TF2, TF0,	(TF3, TF2, TF1,		
	TF1, TF0)	TF0)		
>>>>>>ctfc	75	55		
>>>>>TFC 11	(TF4, TF3, TF0,	(TF4, TF3, TF1,		
	TF1, TF0)	TF0)		
>>>>>>ctfc	82	52		
>>>>>TFC 12	(TF5, TF4, TF1,	(TF5, TF4, TF1,		
_	TF1, TF0)	TF0)		
>>>>>>ctfc	119	59		
>>>>>TFC 13	(TF0, TF0, TF0,	(TF0, TF0, TF0,		
	TF0, TF1)	TF1)		
>>>>>>ctfc	120	60		

>>>>TFC 14

>>>>>TFC 15

>>>>>ctfc

>>>>>ctfc

(TF1, TF0, TF0, TF1)
61
(TF2, TF1, TF0, TF1)
68
(TF3, TF2, TF0, TF1)
75
(TF4, TF3, TF0, TF1)
82
(TF5, TF4, TF0, TF1)
89
(TF0, TF0, TF1, TF1)
90
(TF1, TF0, TF1, TF1)
91

>>>>>ctfc	128	68
>>>>>TFC 16	(TF3, TF2, TF0,	(TF3, TF2, TF0,
	TF0, TF1)	TF1)
>>>>>ctfc	135	75
>>>>>TFC 17	(TF4, TF3, TF0,	(TF4, TF3, TF0,
	TF0, TF1)	TF1)
>>>>>ctfc	152	82
>>>>>TFC 18	(TF5, TF4, TF1,	(TF5, TF4, TF0,
	TF0, TF1)	TF1)
>>>>>ctfc	189	89
>>>>>TFC 19	(TF0, TF0, TF0,	(TF0, TF0, TF1,
	TF1, TF1)	(110, 110, 111, TF1)
>>>>>ctfc	180	90
>>>>>TFC 20	(TF1, TF0, TF0,	(TF1, TF0, TF1,
2222211020	TF1, TF1)	(111, 110, 111, TF1)
>>>>>ctfc	181	91
>>>>>TFC 21	(TF2, TF1, TF0,	(TF2, TF1, TF1,
///////////////////////////////////////	TF1, TF1)	(112, 111, 111, TF1)
>>>>>ctfc	188	98
>>>>>>TFC 22		(TF3, TF2, TF1,
>>>>>>	(TF3, TF2, TF0, TF1, TF1)	(1F3, 1F2, 1F1, TF1)
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	195	105
>>>>>>ctfc		
>>>>>TFC 23	(TF4, TF3, TF0,	(TF4, TF3, TF1,
	TF1, TF1)	TF1)
>>>>>ctfc	239	112
>>>>>TFC 24	(TF5, TF4, TF1,	(TF5, TF4, TF1,
	TF1, TF1)	TF1)
>>>>>ctfc	218	119
PhyCH INFORMATION		
FDD		
UL-DPCH-InfoPredef		
>ul-DPCH-		
PowerControlInfo		
>>powerControlAlgorithm	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1
>tfci-Existence	TRUE	TRUE
>puncturingLimit	0.88	0.88
DL-		
CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>spreadingFactor	128	128
>>tfci-Existence	FALSE	FALSE
>>pilotBits	4	4
>>positionFixed	Fixed	Fixed
PhyCH INFORMATION		
3.84 Mcps TDD		
UL-DPCH-InfoPredef		
>ul-DPCH-		
PowerControlInfo		
>>dpch-ConstantValue	<del>-20</del> 0	<u>-200</u>
>commonTimeslotInfo	200	20 <u>0</u>
>>secondInterleavingMode		
	frameRelated	framoDolated
	frameRelated	frameRelated
>>tfci-Coding	16	16
>>tfci-Coding >>puncturingLimit	16 0.60	16 0.60
>>tfci-Coding >>puncturingLimit >>repetitionPeriodAndLeng	16	16
>>tfci-Coding >>puncturingLimit >>repetitionPeriodAndLeng th	16 0.60	16 0.60
>>tfci-Coding >>puncturingLimit >>repetitionPeriodAndLeng th DL-	16 0.60	16 0.60
>>tfci-Coding >>puncturingLimit >>repetitionPeriodAndLeng th	16 0.60	16 0.60

(TF1, TF0, TF0, TF0, TF1)

(TF2, TF1, TF0, TF0, TF1)

121

128

frameRelated	frameRelated
16	16
0.60	0.60
repetitionPeriod1	repetitionPeriod1
frame Related	frame Related
16	16
0.64	0.64
repetitionPeriod1	repetitionPeriod1
frame Related	frame Related
16	16
0.64	0.64
repetitionPeriod1	repetitionPeriod1
·	
	16 0.60 repetitionPeriod1 frame Related 16 0.64 repetitionPeriod1 frame Related 16 0.64

CHANGE REQUEST									CR-Form-v7			
¥		25.331	CR	1540	жre	€v	<b>-</b> #	e	Current vers	^{ion:} 5.1	.0	ж
For <u>HELP</u> or	n us	sing this fo	rm, see	bottom of t	his page	e or loc	ok at	the	pop-up text	over the ¥	syn	nbols.
Proposed chang	ae a	ffects:	UICC a	pps#	ME	E X R	adio	Ac	cess Networ	k Cor	e Ne	twork
, opered ending	,											
<b>-</b> '4	00	O a mag ati a							handlin and in			
Title:	ж	Correctio	n of DF	CH constar	nt value	INTUL	J det	auli	t radio config	urations		
Source:	ж	IPWireles	20									
Source.	00		55									
Work item code:	:Ж	TEI							Date: ೫	25/06/20	02	
Category:	ж	Α							Release: ೫	Rel-5		
		Use <u>one</u> of	the follo	wing categoi	ries:				Use <u>one</u> of			ases:
			rection)							(GSM Phas		
				ds to a correc	tion in ar	n earlie	r relea	ase,	) R96	(Release 19	996)	
				feature),					R97	(Release 19		
				modification o	of feature	e)			R98	(Release 19	,	
				odification)						(Release 19		
		Detailed ex	planatio	ns of the abo	ve categ	ories ca	an			(Release 4)		
		be found in	3GPP <u>1</u>	F <u>R 21.900</u> .					Rel-5	(Release 5)		
									Rel-6	(Release 6)		

Reason for change: #	Currently the DPCH-ConstantValue set in the default radio configurations (used by 3.84Mcps TDD open loop power control) is set to -20. The UL power for DPCH is calculated using the function:
	$P_{DPCH} = \alpha L_{PCCPCH} + (1-\alpha)L_0 + I_{BTS} + SIR_{TARGET} + DPCH \text{ Constant value}$
	So if DPCH-ConstantValue is set to -20 then the SIR at the node B will be 20dB below the SIR target value.
	Note that CR1228 in RAN27 has been accepted and this corrected the range of the constant value for TDD so that 0dB was an allowed value.
Summary of change: #	In section 13.7 the DPCH-ConstantValue is modified to 0 from -20.
Cummary or change.	
Consequences if % not approved:	Uplink power control will not work for 3.84Mcps TDD using the default radio configurations.
	<b>Impact analysis:</b> This CR is considered to have isolated impact since it affects the default radio configurations in 3.84Mcps TDD mode only. If the UE does not implement this CR 3.84Mcps TDD power control will not work when using the default radio configurations.

Clauses affected:	ж	1	3.7			
0.4		Y	N		00	
Other specs affected:	ж		X X X	Other core specifications Test specifications O&M Specifications	Ħ	

## Other comments: #

## How to create CRs using this form:

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

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech + 3.4 kbps signalling	12.2 kbps speech + 3.4 kbps signalling
Ref 34.108	2	3	6	4
Default configuration identity	0	1	2	3
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	Rlc-info	RIc-info	Rlc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5-RB6: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard	RB1: N/A RB2- RB3: NoDiscard RB5- RB6: N/A	RB1: N/A RB2- RB3: NoDiscard RB5- RB7: N/A
>>>maxDat	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15	RB1: N/A RB2- RB3: 15 RB5- RB6: N/A	RB1: N/A RB2- RB3: 15 RB5- RB7: N/A
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128 RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 RB5- RB7: N/A
>>timerRST	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300	RB1: N/A RB2- RB3: 300 RB5- RB6: N/A	RB1: N/A RB2- RB3: 300 RB5- RB7: N/A
>>max-RST	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1 RB5- RB6: N/A	RB1: N/A RB2- RB3: 1 RB5- RB7: N/A
>>pollingInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100

Configuration	3.4 kbps signalling	13.6 kbps	7.95 kbps speech	12.2 kbps speech
		signalling	+ 3.4 kbps signalling	+ 3.4 kbps signalling
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
>dl-RLC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM RB5- RB6: TM	RB1: UM RB2- RB3: AM RB5- RB7: TM
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE	RB1: N/A RB2- RB3: TRUE RB5- RB6: N/A	RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A
>>receivingWindowSize	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128	RB1: N/A RB2- RB3: 128 RB5- RB6: N/A	RB1: N/A RB2- RB3: 128 RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below	RB1: N/A RB2- RB3: as below RB5- RB6: N/A	RB1: N/A RB2- RB3: as below RB5- RB7: N/A
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A	RB1- RB3: N/A RB5- RB6: FALSE	RB1- RB3: N/A RB5- RB7: FALSE
rb-MappingInfo				
>UL- LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel Dch	OneLogicalChannel	OneLogicalChannel
>>ul- TransportChannelType	Dch	Dch	Dch	Dch
>>>transportChannelldentit y	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
>>rlc-SizeList	RB1- RB3: configured	RB1- RB3: configured	RB1- RB3: configured RB5- RB6: N/A	RB1- RB3: configured RB5- RB7: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: 5	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: 5
>DL- logicalChannelMappingList				
>>Mapping option 1 >>>dl- TransportChannelType	One mapping option Dch	One mapping option Dch	One mapping option Dch	One mapping option Dch
>>>>transportChannellden tity	RB1- RB3: 1	RB1- RB3: 1	RB1- RB3: 3 RB5: 1, RB6: 2	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3 RB5- RB6: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH				
UL- AddReconfTransChInfoList				
>Uplink transport channel type	dch	dch	dch	dch
>transportChannelIdentity	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information				

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signaling	- 3.4 kbps signalling	- 3.4 kbps signalling
>>>tf0/ tf0,1	TrCH1: (0x144, 1x144)	TrCH1: (0x144, 1x144)	TrCH1: (0x75) TrCH2: (0x 84 1x84) TrCH3: (0x144, 1x144)	TrCH1: (0x81) TrCH2: (0x 103, 1x103) TrCH3: (0x 60, 1x60) TrCH4: (0x144, 1x144)
>>>rlcSize	BitMode	BitMode	BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 75 TrCH2: type 1: 84 TrCH3: 2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 1: 81 TrCH2: type 1: 103 TrCH3: type 1: 60 TrCH4: 2: type 2, part1= 2, part2= 0 (144)
>>>numberOfTbSizeList	TrCH1: Zero, one	TrCH1: Zero, one	TrCH1: Zero TrCH2-3: Zero, one	TrCH1: Zero TrCH2-4: Zero, one
>>>logicalChannelList	All	All	All	All
>>>tf 1	N/A	N/A	TrCH1: (1x39) TrCH2- TrCH4: N/A	TrCH1: (1x39) TrCH2- TrCH4: N/A
>>>numberOfTransportBl ocks			TrCH1: One	TrCH1: One
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: 1: 39	TrCH1: 1: 39
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList			TrCH1: all	TrCH1: all
>>>tf 2	N/A	N/A	TrCH1: (1x75) TrCH2- TrCH3: N/A	TrCH1: (1x81) TrCH2- TrCH4: N/A
>>>>numberOfTransportBl ocks			TrCH1: Zero	TrCH1: Zero
>>>rlc-Size			TrCH1: BitMode	TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 75	TrCH1: type 1: 81
>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>logicalChannelList >>semistaticTF-Information			TrCH1: all	TrCH1: all
>>>tti	TrCH1: 40	TrCH1: 10	TrCH1- TrCH2: 20 TrCH3: 40	TrCH1- TrCH3: 20 TrCH4: 40
>>>channelCodingType	Convolutional	Convolutional	Convolutional	Convolutional
>>>>codingRate	TrCH1: Third	TrCH1: Third	TrCH1- TrCH2: Third TrCH3: Third	TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 160	TrCH1: 160	TrCH1: 200 TrCH2: 190 TrCH3: 160	TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 12 TrCH2: 0 TrCH3: 16	TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16
DL-				
AddReconfTransChInfoList				
>Downlink transport	dch	dch	dch	dch
channel type >dl- TransportChannelIdentity (should be as for UL)	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>tfs-SignallingMode	SameAsUL	SameAsUL	Explicit <only on="" tf0="" trch1<br="">is different and shown below&gt;</only>	Explicit <only on="" tf0="" trch1<br="">is different and shown below&gt;</only>
>>transportFormatSet			DedicatedTransChT FS	DedicatedTransChT FS
>>>dynamicTF-information				

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech	12.2 kbps speech
		Signaling	3.4 kbps signalling	т 3.4 kbps signalling
>>>>tf0/ tf0,1			TrCH1: (1x0)	TrCH1: (1x0)
>>>>rlcSize			BitMode	bitMode
>>>>sizeType			TrCH1: type 1: 0	TrCH1: type 1: 0
>>>>numberOfTbSizeList			TrCH1: One	TrCH1: One
>>>>logicalChannelList			All	All
>>ULTrCH-Id	TrCH1: 1	TrCH1: 1	TrCH1: 1, TrCH2: 2, TrCH3: 3	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget	2			
>>bler-QualityValue	TrCH1: 5x10 ⁻²	TrCH1: 5x10 ⁻²	TrCH1: 7x10 ⁻³ TrCH2- TrCH3: Absent	TrCH1: 7x10 ⁻³ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON				
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling	Normal TFCI signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete	Complete
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit	Ctfc6Bit
>>>>TFCS representation	Addition	Addition	Addition	Addition
>>>>TFCS list				
>>>>>TFCS 1	(TF0)	(TF0)	(TF0, TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>ctfc	0	0	0	0
>>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>>>referenceTFCId	0	0	0	0
>>>>>TFCS 2	(TF1)	(TF1)	(TF1, TF0, TF0)	(TF1, TF0, TF0, TF0)
>>>>>ctfc	1	1	1	1
>>>>>>gainFactorInform ation	Signalled	Signalled	Computed	Computed
>>>>>>βc (FDD only)	11	11	N/A	N/A
>>>>>βd	15	15	N/A	N/A
>>>>>>>>referenceTFCId	N/A	N/A	0	0
>>>>TFCS 3			(TF2, TF1, TF0)	(TF2, TF1, TF1, TF0)
>>>>>>ctfc	1		5	11
>>>>>>gainFactorInform ation			Computed	Computed
>>>>>>referenceTFCId			0	0
>>>>>TFCS 4			(TF0, TF0, TF1)	(TF0, TF0, TF0, TF1)
>>>>>>ctfc			6	12
>>>>>>sgainFactorInform ation			Computed	Computed
>>>>>βc (FDD only)			N/A	N/A
>>>>>βd			N/A	N/A
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>			0	0
>>>>>TFCS 5			(TF1, TF0, TF1)	(TF1, TF0, TF0, TF1)
>>>>>ctfc			7	13
>>>>>gainFactorInform			Computed	Computed
>>>>>referenceTFCId			0	0
>>>>TFCS 6			(TF2, TF1, TF1)	(TF2, TF1, TF1,
				TF1)

Configuration	3.4 kbps signalling 13.6 kbps	7.95 kbps speech	12.2 kbps speech	
		signalling	+ 3.4 kbps signalling	+ 3.4 kbps signalling
>>>>>ctfc			11	23
>>>>>>gainFactorInform			Signalled	Signalled
ation				
>>>>>βc (FDD only)			11	11
>>>>>βd			15	15
>>>>>>referenceTFCId			0	0
dl-CommonTransChInfo		-		
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION				
FDD UL-DPCH-InfoPredef				
>ul-DPCH-inioPreder				
PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>puncturingLimit	1	1	1	0.88
DL-				
CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>spreadingFactor	256	128	128	128
>>pilotBits	4	4	4	4
>>positionFixed	N/A	N/A	Fixed	Fixed
PhyCH INFORMATION				
3.84 Mcps TDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo	<del>-20</del> 0	<del>-20</del> 0	<del>-20</del> 0	<del>-20</del> 0
>>dpch-ConstantValue >commonTimeslotInfo	<u>-200</u>	<u>-200</u>	<u>-200</u>	<u>-200</u>
>>secondInterleavingMode	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	4	4	16	16
>>puncturingLimit	1	0.92	0.52	0.88
>>repetitionPeriodAndLeng	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
th				
DL-				
CommonInformationPredef				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMod	frameRelated	frameRelated	frameRelated	frameRelated
e				
				16
>>>tfci-Coding	4	4	16	
>>>puncturingLimit	1	0.92	0.52	0.92
>>>puncturingLimit >>>repetitionPeriodAndLe	4 1 repetitionPeriod1		_	
>>>puncturingLimit >>>repetitionPeriodAndLe ngth	1	0.92	0.52	0.92
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION	1	0.92	0.52	0.92
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD	1	0.92	0.52	0.92
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef	1	0.92	0.52	0.92
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef >commonTimeslotInfo	1 repetitionPeriod1	0.92 repetitionPeriod1	0.52 repetitionPeriod1	0.92 repetitionPeriod1
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef >commonTimeslotInfo >>secondInterleavingMode	1	0.92	0.52	0.92
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef >commonTimeslotInfo >>secondInterleavingMode >>tfci-Coding	1 repetitionPeriod1 frameRelated	0.92 repetitionPeriod1 frameRelated	0.52 repetitionPeriod1	0.92 repetitionPeriod1 frameRelated
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef >commonTimeslotInfo >>secondInterleavingMode	1 repetitionPeriod1 frameRelated	0.92 repetitionPeriod1 frameRelated 4	0.52 repetitionPeriod1 frameRelated 16 0.80	0.92 repetitionPeriod1 frameRelated 16
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef >commonTimeslotInfo >>secondInterleavingMode >>tfci-Coding >>puncturingLimit >>repetitionPeriodAndLeng th	1 repetitionPeriod1 frameRelated 4 1	0.92 repetitionPeriod1 frameRelated 4 0.64	0.52 repetitionPeriod1 frameRelated 16	0.92 repetitionPeriod1 frameRelated 16 0.60
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef >commonTimeslotInfo >>secondInterleavingMode >>tfci-Coding >>puncturingLimit >>repetitionPeriodAndLeng th DL-	1 repetitionPeriod1 frameRelated 4 1	0.92 repetitionPeriod1 frameRelated 4 0.64	0.52 repetitionPeriod1 frameRelated 16 0.80	0.92 repetitionPeriod1 frameRelated 16 0.60
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef >commonTimeslotInfo >>secondInterleavingMode >>tfci-Coding >>puncturingLimit >>repetitionPeriodAndLeng th DL- CommonInformationPredef	1 repetitionPeriod1 frameRelated 4 1	0.92 repetitionPeriod1 frameRelated 4 0.64	0.52 repetitionPeriod1 frameRelated 16 0.80	0.92 repetitionPeriod1 frameRelated 16 0.60
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef >commonTimeslotInfo >>secondInterleavingMode >>tfci-Coding >>puncturingLimit >>repetitionPeriodAndLeng th DL- CommonInformationPredef >dI-DPCH-InfoCommon	1 repetitionPeriod1 frameRelated 4 1	0.92 repetitionPeriod1 frameRelated 4 0.64	0.52 repetitionPeriod1 frameRelated 16 0.80	0.92 repetitionPeriod1 frameRelated 16 0.60
>>>puncturingLimit >>>repetitionPeriodAndLe ngth PhyCH INFORMATION 1.28 Mcps TDD UL-DPCH-InfoPredef >commonTimeslotInfo >>secondInterleavingMode >>tfci-Coding >>puncturingLimit >>repetitionPeriodAndLeng th DL- CommonInformationPredef	1 repetitionPeriod1 frameRelated 4 1	0.92 repetitionPeriod1 frameRelated 4 0.64	0.52 repetitionPeriod1 frameRelated 16 0.80	0.92 repetitionPeriod1 frameRelated 16 0.60

Configuration	3.4 kbps signalling	13.6 kbps signalling	7.95 kbps speech + 3.4 kbps signalling	12.2 kbps speech + 3.4 kbps signalling
>>>tfci-Coding	4	4	16	16
>>>puncturingLimit	1	0.64	0.80	0.60
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps conv. CS- data +	32 kbps conv. CS- data +	64kbps conv. CS- data +	14.4 kbps streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data + 3.4 kbps signalling
Ref 34.108	12	14	13	15
Default configuration identity	4	5	6	7
RB INFORMATION				
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5			
rlc-InfoChoice	RIc-info	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM			
>>transmissionRLC- DiscardMode	RB1: N/A RB2- RB3: NoDiscard RB5: N/A			
>>>maxDat	RB1: N/A RB2- RB3: 15 RB5: N/A			
>>transmissionWindowSiz e	RB1: N/A RB2- RB3: 128 RB5: N/A			
>>timerRST	RB1: N/A RB2- RB3: 300 RB5: N/A			
>>max-RST	RB1: N/A RB2- RB3: 1 RB5: N/A			
>>pollingInfo	RB1: N/A RB2- RB3: as below RB5: N/A			
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE			
>dl-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM			
>>inSequenceDelivery	RB1: N/A RB2- RB3: TRUE RB5: N/A			
>>receivingWindowSize	RB1: N/A RB2- RB3: 128 RB5: N/A			
>>dl-RLC-StatusInfo	RB1: N/A RB2- RB3: as below RB5: N/A			
>>>timerStatusProhibit	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100	RB2- RB3: 100

Configuration	28.8 kbps conv.	32 kbps conv. CS-	64kbps conv. CS-	14.4 kbps
	CS- data + 3.4 kbps signalling	data + 3.4 kbps signalling	data + 3.4 kbps signalling	streaming CS- data + 3.4 kbps signalling
>>segmentationIndication	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE	RB1- RB3: N/A RB5: FALSE
rb-MappingInfo				
>UL- LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
>>ul- TransportChannelType	Dch	Dch	Dch	Dch
>>>transportChannelIdenti ty	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1
>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A
>>rlc-SizeList	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A	RB1- RB3: configured RB5: N/A
>>mac- LogicalChannelPriority	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5	RB1: 1, RB2: 2, RB3: 3 RB5: 5
>DL- logicalChannelMappingList				
>>Mapping option 1	One mapping option	One mapping option	One mapping option	One mapping option
>>>dl- TransportChannelType	Dch	Dch	Dch	Dch
>>>>transportChannellden tity	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A
TrCH INFORMATION PER TrCH				
UL- AddReconfTransChInfoLis t				
>Uplink transport channel type	dch	dch	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information				
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576) TrCH2: (0x144, 1x144)	TrCH1: (0x640, 1x640) TrCH2: (0x144, 1x144)	TrCH1: (0x640, 2x640) TrCH2: (0x144, 1x144)	TrCH1: (0x576, 1x576) TrCH2: (0x144, 1x144)
>>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode
>>>>sizeType	TrCH1: type 2, part1= 11, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 11, part2= 2 (640) TrCH2: type 2, part1= 2, part2= 0 (144)	TrCH1: type 2, part1= 9, part2= 2 (576) TrCH2: type 2, part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero,1, 2 (4) TrCH2: Zero, one	TrCH1: Zero, one TrCH2: Zero, one	TrCH1: Zero, 2 (4) TrCH2: Zero, one	TrCH1: Zero, one, TrCH2: Zero, one
>>>logicalChannelList	All	All	All	All
>>semiStaticTF- Information				
>>>tti	TrCH1: 40 TrCH2: 40	TrCH1: 20 TrCH2: 40	TrCH1: 20 TrCH2: 40	TrCH1: 40 TrCH2: 40
>>>channelCodingType	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional	TrCH1: Turbo TrCH2: Convolutional

Configuration	28.8 kbps conv. CS- data +	32 kbps conv. CS- data +	64kbps conv. CS- data +	14.4 kbps streaming CS-
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling	data + 3.4 kbps signalling
>>>codingRate	TrCH1: N/A	TrCH1: N/A	TrCH1: N/A	TrCH1: N/A
	TrCH2: Third	TrCH2: Third	TrCH2: Third	TrCH2: Third
>>>rateMatchingAttribute	TrCH1: 180	TrCH1: 185	TrCH1: 170	TrCH1: 165
	TrCH2: 160	TrCH2: 160	TrCH2: 160	TrCH2: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 16	TrCH1: 16
D	TrCH2: 16	TrCH2: 16	TrCH2: 16	TrCH2: 16
DL- AddReconfTransChInfoLis t				
>Downlink transport channel type	dch	dch	dch	dch
>dl-	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
TransportChannelldentity (should be as for UL)				
>tfs-SignallingMode	SameAsUL	SameAsUL	SameAsUL	SameAsUL
>>transportFormatSet				
>>>dynamicTF-information				
>>>>tf0/ tf0,1				
>>>>rlcSize				
>>>>sizeType				
>>>>numberOfTbSizeList				
>>>logicalChannelList				
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2
>dch-QualityTarget				
>>bler-QualityValue	TrCH1: 2x10 ⁻³	TrCH1: 2x10 ⁻³	TrCH1: 2x10 ⁻³	TrCH1: 1x10 ⁻²
TrCH INFORMATION, COMMON	TrCH2: Absent	TrCH2: Absent	TrCH2: Absent	TrCH2: Absent
ul-CommonTransChInfo				
>tfcs-ID (TDD only)	1	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI	Normal TFCI	Normal TFCI	Normal TFCI
	signalling	signalling	signalling	signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete	Complete
>>>ctfcSize	Ctfc2Bit	Ctfc2Bit	Ctfc2Bit	Ctfc4Bit
>>>>TFCS representation	Addition	Addition	Addition	Addition
>>>>TFCS list				
>>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)	(TF0, TF0)
>>>>>>ctfc	0 Computed	0 Computed	0 Computed	0 Computed
>>>>>>gainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>>>>referenceTFCId	0	0	0	0
>>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)	(TF1, TF0)
>>>>>>>>>ctfc	1	1	1	1
>>>>>sgainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>βc (FDD only)	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A
>>>>>βd >>>>>>referenceTFCId	0	0	0	0
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	(TF2, TF0)	(TF0, TF1)	(TF0, TF1)	(TF0, TF1)
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	2	2	2	2
>>>>>>sainFactorInform ation	Computed	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0	0
>>>>>TFCS 4	(TF0, TF1)	(TF1, TF1)	(TF1, TF1)	(TF1, TF1)
>>>>>>ctfc	3	3	3	3
>>>>>>sgainFactorInform	Computed	Signalled	Signalled	Signalled
	1 · · · · · · · · · · · · · · · · · · ·			

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data +
	N/A	8	8	3.4 kbps signalling
>>>>>βc (FDD only)	N/A N/A	15	15	15
>>>>>βd				
>>>>>>referenceTFCId >>>>>TFCS 5	N/A (TE1_TE1)	N/A	N/A	N/A
	(TF1, TF1)	N/A	N/A	
>>>>>ctfc >>>>>>gainFactorInform	4 Computed			
ation				
>>>>>referenceTFCId	8	N1/A	<b>N</b> 1/A	
>>>>>TFCS 6	(TF2, TF1)	N/A	N/A	
>>>>>>Ctfc	5 Signalled			
>>>>>>gainFactorInform ation	Signalied			
	8			
>>>>>βc (FDD only)	15			
>>>>>βd	-			
>>>>>referenceTFCId >>>>>TFCS 7	N/A			
>>>>>TFCS /				
>>>>>>cttc >>>>>>>gainFactorInform				
ation				
>>>>>>referenceTFCId				
>>>>>TFCS 8				
>>>>>>ctfc				
>>>>>>gainFactorInform ation				
>>>>>>referenceTFCId				
>>>>>TFCS 9				
>>>>>>ctfc				
>>>>>>gainFactorInform ation				
>>>>>referenceTFCld >>>>>TFCS 10				
>>>>>>ctfc				
>>>>>>sgainFactorInform				
ation				
>>>>>βc (FDD only)				
>>>>>βd				
>>>>>>referenceTFCId				
dl-CommonTransChInfo				
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD				
UL-DPCH-InfoPredef				
>ul-DPCH-				
PowerControlInfo				
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE	TRUE
>puncturingLimit	0.92	0.8	0.92	1
DL- CommonInformationPrede f				
>dl-DPCH-InfoCommon				   
>>spreadingFactor	64	64	32	128
>>pilotBits	8	8	8	8
>>positionFixed	Flexible	Flexible	Flexible	Flexible
PhyCH INFORMATION 3.84 Mcps TDD				
UL-DPCH-InfoPredef				

Configuration	28.8 kbps conv. CS- data + 3.4 kbps signalling	32 kbps conv. CS- data + 3.4 kbps signalling	64kbps conv. CS- data + 3.4 kbps signalling	14.4 kbps streaming CS- data + 3.4 kbps signalling
>ul-DPCH-				
PowerControlInfo				
>>dpch-ConstantValue	<del>-20</del> 0	<del>-20</del> 0	<del>-20</del> 0	<del>-20</del> 0
>commonTimeslotInfo				
>>secondInterleavingMod	frameRelated	frameRelated	frameRelated	frameRelated
е				
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.44	0.8	0.56	0.8
>>repetitionPeriodAndLen	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
gth				repetition eneur
DL- CommonInformationPrede f				
- >dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>secondInterleavingMo	frameRelated	frameRelated	frameRelated	frameRelated
de		Tamertelated		Tamercelated
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.44	0.64	0.56	0.8
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD				
UL-DPCH-InfoPredef				
>commonTimeslotInfo				
>>secondInterleavingMod e	frameRelated	frameRelated	frameRelated	frameRelated
>>tfci-Coding	16	8	8	8
>>puncturingLimit	0.64	0.60	0.64	1
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPrede				
>dl-DPCH-InfoCommon				
>>commonTimeslotInfo				
>>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	8	8	8
>>>puncturingLimit	0.64	0.60	0.64	0.88
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode ) + 3.4 kbps signalling
Ref 34.108	16	17	1a
Default configuration identity	8	9	10
RB INFORMATION			
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5	RB1: 1, RB2: 2, RB3: 3, RB5: 5, RB6: 6, RB7: 7
rlc-InfoChoice	RIc-info	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5: TM	RB1: UM RB2- RB3: AM RB5-RB7: TM

streaming CS- data + 3.4 ktps signalling         streaming CS- data + 3.4 ktps signalling         streaming CS- data + 3.4 ktps signalling           >>transmissionRLC- DiscardMode         RB1: IVA RB2: RB3: NoDiscard         RB1: IVA RB2: RB3: NoDiscard         RB1: IVA RB2: RB3: NoDiscard         RB1: IVA RB2: RB3: NoDiscard           >>maxDat         RB1: IVA RB2: RB3: IVA RB3: RVA RB3: RVA RB3: RVA RB3: RVA RB3: RVA RB3: RVA RB4: RB3: IVA RB4: RB3: IVA RB5: RVA RB5: RVA R	Configuration	28.8 kbps	57.6 kbps	12.2 kbps
3.4 kbps signalling         3.4 kbps signalling           >>transmissionRLC- DiscardMode         RB1: N/A RB2: RB3: NoDiscard         RB1: N/A RB2: RB3: NoDiscard         RB1: N/A RB2: RB3: NoDiscard         RB1: N/A RB2: RB3: NoDiscard         RB1: N/A RB2: RB3: NA RB2: RB3: N/A RB2: RB3: ALSE N/A RB2: RB3: ALSE N/A RB2: RB3: ALSE N/A RB2: RB3: ALSE N/A RB2: RB3: ALSE N/A RB2: RB3: ALSE RB2: RB3: AL	<b>J</b>	streaming CS-	streaming CS-	speech(multimode
SyrtransmissionRLC- DiscardMode         R1: N/A RB2: RB3: NoDiscard         RB1: N/A RB2: RB3: NoDiscard         RB1: N/A RB2: RB3: NoDiscard         RB1: N/A RB2: RB3: NA         RB1: N/A RB3: N/A           >>maxDat         RB1: N/A RB2: RB3: 15         RB2: RB3: 15 RB2: RB3: 16 RB2: RB3: 17 RB3: N/A         RB1: N/A RB1: N/A         RB1: N/A RB2: RB3: 15 RB2: RB3: 128         RB2: RB3: 15 RB2: RB3: 128           >>transmissionWindowSiz e         RB1: N/A RB2: RB3: 128         RB2: RB3: 128         RB2: RB3: 128           >>transmissionWindowSiz e         RB1: N/A RB2: RB3: 300         RB2: RB3: 300         RB2: RB3: 300           >>max-RST         RB1: N/A RB1: N/A RB2: RB3: 300         RB2: RB3: 300         RB2: RB3: 300           >>max-RST         RB1: N/A RB1: N/A RB2: RB3: as below RB2: N/A         RB1: N/A RB1: N/A RB2: RB3: as below RB2: N/A         RB1: N/A RB1: N/A RB2: RB3: as below RB2: RB3: as below RB2: RB3: 100         RB2: RB3: ALSE RB2: RB3: 100           >>slastTransmissionPDU- Poll         RB2: RB3: ALSE RB2: RB3: AN RB2: RB3: N/A RB1: RB3: N/A RB2: RB3: AM RB2: RB3: AM RB3: N/A RB1: N/A RB2: RB3: 100 RB2: RB3: 10				,
Discard Mode         RB2- RB3: NODiscard         RB2- RB3: NODiscard         RB2- RB3: NODiscard         RB2- RB3: NODiscard           >>>maxDat         RB1: N/A RB1: N/A RB2- RB3: 15 RB2- RB3: 15 RB2- RB3: 15 RB2- RB3: 16 RB5: N/A         RB1- N/A RB3- RB7. N/A RB3- RB7. N/A         RB1- N/A RB3- RB7. N/A           >>transmissionWindowSiz e         RB1: N/A RB2- RB3: 128 RB2- RB3: 128 RB2- RB3: 128 RB2- RB3: 128 RB2- RB3: 128 RB2- RB3: 128 RB2- RB3: 00 RB5- N/A         RB1- N/A RB3- RB3: 00 RB3- RM3: 00 RB3- RM3, 00 RB3- RM4, RB3- RB3: 1 RB2- RB3: 1 RB3- RM4 RB3- RM3, 00 RB3- RM3, 00 RB3- RM3, 00 RB3- RM4 RB3- RB3- RM4 RB3- RB3- RM3, 00 RB3- RB3- RM4 RB3- RB3- RM4 RB3- RB3- RM4 RB3- RB3- RM3 RB3- RM4 RB3- RB3- RM4 RB3- RB3- RM3 RB3- RM4 RB3- RB3- RM4 RB3- RB3- RM4 RB3- RB3- RM4 RB3- RB3- RM4 RB3- RB3- RM4 RB3- RB3- RM4 RB3- RM4 RB3- RB3- RM4 RB3- R		5.4 Kops signaling	5.4 Kops signaling	5.4 Kbps Signalling
NoDiscard RBs: N/A         NoDiscard RBs: N/A         NoDiscard RBs: N/A         NoDiscard RBs: N/A           >>>maxDat         RB1: N/A RB2: RB3: 15         RB1: N/A RB2: RB3: 16         RB2: RB3: 15         RB2: RB3: 15           >>transmissionWindowSiz e         RB1: N/A RB2: RB3: 128         RB2: RB3: 128         RB2: RB3: 128         RB2: RB3: 128           >>timerRST         RB1: N/A RB5: N/A         RB1: N/A RB5: N/A         RB5: N/A         RB5: N/A           >>timerRST         RB1: N/A RB2: RB3: 300         RB2: RB3: 300         RB2: RB3: 300           RB5: N/A         RB1: N/A RB2: RB3: 300         RB2: RB3: 300         RB2: RB3: 300           RB5: N/A         RB1: N/A RB2: RB3: 300         RB2: RB3: 300         RB2: RB3: 1           >>max-RST         RB1: N/A RB2: RB3: 100         RB2: RB3: 600         RB2: RB3: 612           RB2: RB3: S0         RB2: RB3: 612         RB2: RB3: 612         RB2: RB3: 612           >>>lastTransmissionPDU         RB2: RB3: RLSE         RB2: RB3: 100         RB2: RB3: 100           >>>segmentationIndication         RB1: RM2         RB1: RM3         RB1: RM3         RB1: RM3           >>lastCrassisterProde         RB1: N/A         RB1: RM3         RB1: RM3         RB2: RB3: 100           >>>lastGrassisterProdic         RB2: RB3: 100         RB2: RB3: 100				
RB5: NA         RB5: NA         RB5: NA         RB5: RA         RB5: RA           >>>transDat         RB1: NA         RB1: NA         RB1: NA         RB2: RB3: 15         RB2- RB3: 16         RB2- RB3: 17         RB5- RB7: NA           >>transmissionWindowSiz         RB1: NA         RB2: RB3: 300         RB2- RB3: 100	DiscardMode	-		
>>>maxDat         RB1: N/A RB2+ RB3: 15 RB5: N/A         RB1: N/A RB2+ RB3: 128 RB5: N/A         RB1: N/A RB1: N/A RB2+ RB3: 128 RB5: N/A         RB1: N/A RB2+ RB3: 200 RB5: N/A         RB1: N/A RB2+ RB3: 300 RB5: N/A         RB1: N/A RB2+ RB3: 300 RB5- RB7: N/A           >>max-RST         RB1: N/A RB1: N/A         RB1: N/A RB2+ RB3: 10 RB5: N/A         RB1: N/A RB2+ RB3: 10 RB2+ RB3: 10 RB2+ RB3: 11 RB2+ RB3: 10 RB2+ RB3: 80 below RB5: N/A         RB1: N/A RB5+ RA7- N/A           >>pollingInfo         RB1: N/A RB1: N/A RB2+ RB3: as below RB5: N/A         RB1- N/A RB2+ RB3: as below RB2+ RB3: Ab LB2         RB2+ RB3: Ab LB2 RB2+ RB3: Ab LB2           >>lastRetransmissionPDU- RB2+ RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: N/A RB5: FALSE         RB2- RB3: N/A RB2+ RB3: N/A RB5: FALSE         RB2- RB3: N/A RB2+ RB3: N/A RB5: RA1         RB2+ RB3: N/A RB2+ RB3: N/A RB2+ RB3: N/A RB5: RA1         RB1: N/A RB2+ RB3: RM2 RB2+ RB3: RM3 RB2+ RB3: RM3 RB2+ RB3: RM2 RB2+ RB3: RM3 RB2+ RB3: RM2 RB2+ RB3: RM3 RB2+ RB3: RM3 RB3+ RB2+ RB3: RM2 RB2+ RB3: RM2 RB2+ RB3: RM2 RB2+ RB3: RM2				
RBS: NA         RBS: RAS: RBS: RAS: RBS: RAS: RBS: RBS: RAS	>>>maxDat			
>>transmission/VindowSiz         RB1: N/A         RB1: N/A         RB1: N/A         RB2: RB3: 128         RB2- RB3: 128         RB2- RB3: 128         RB2- RB3: 128           >>timerRST         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB2- RB3: 300           >>max-RST         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           >>max-RST         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB2: RB3: S1         RB2- RB3: 300         RB2- RB3: 300         RB2- RB3: 300         RB2- RB3: 1           >>pollingInfo         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB2: RB3: S1         RB2- RB3: S1         RB2- RB3: S1         RB2- RB3: S1         RB2- RB3: S1           >>pollingInfo         RB2: RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: S1           Poll         SatRetransmissionPDU         RB2- RB3: 100         RB2- RB3: N/A         RB1: RB3: N/A         RB1: RB3: N/A           >>satimerPollPeriodic         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: N/A         RB2- RB3: N/A           >>dl-RLC-Mode         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/				
e         RB2- RB3: 128 RB5: N/A         RB2- RB3: 128 RB5: N/A         RB2- RB3: N/A RB5- RB7: N/A           >>timerRST         RB1: N/A RB2: RB3: 300 RB2: RB3: 300 RB2: RB3: 300 RB2: RB3: 300 RB5: N/A         RB1: N/A RB5: N/A         RB1: N/A RB5: N/A         RB1: N/A RB5: N/A         RB1: N/A RB5: N/A           >>max-RST         RB1: N/A RB2: RB3: 1 RB5: N/A         RB1: N/A RB2: RB3: 1 RB2: RB3: 1 RB5: N/A         RB1: N/A RB2: RB3: 1 RB2: RB3: as below RB5: N/A         RB1: N/A RB2: RB3: as below RB5: N/A         RB1: N/A RB1: N/A           >>pollingInfo         RB1: N/A RB2: RB3: RB2: RB3: as below RB5: N/A         RB2: RB3: as below RB5: N/A         RB2: RB3: as below RB5: RA2: RB3: as below RB5: RA2: RB3: RALSE         RB2- RB3: ALSE           >>lastRetransmissionPDU- Poll         RB2: RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE           >>limerPollPeriodic         RB2: RB3: N/A RB5: FALSE         RB2- RB3: N/A RB5: FALSE         RB2- RB3: N/A RB5: RA3         RB1- RB3: N/A RB1: RB3: N/A RB5: RA3         RB1: RB3: N/A RB1: RB3: N/A RB5: RA3         RB1: RB3: N/A RB5: RB7: TM           >>inSequenceDelivery RB1: N/A RB2: RB3: TM2 RB2: RB3: TA2 RB2: RB3: TA2 RB2: RB3: TA2 RB2: RB3: TA2 RB2: RB3: TA3         RB1: N/A RB2: RB3: RB2: RB3: TA4 RB2: RB3: RB2: RB3: TA4 RB2: RB3: RB2: RB3: RB2: RB3: TA4 RB5: N/A         RB1: N/A RB5: RB7: N/A           >>inSequenceDelivery RB1: N/A RB2: RB3: TA2 RB2: RB3: TA4 RB2: RB3: RB2: RB3: TA4 RB2: RB3: RB2: RB3: TA4 RB2: RB3: RB2: RB3: RB2: RB3: RB2: RB3: RB4 RB2: RB3: RB4 RB2: RB3: RB4 RB2: RB3: RB4 RB2: R	· · transmission/MindowCiz			
RB5: N/A         RB5: N/A         RB5: N/A         RB5: RA7           >>timerRST         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB2: RB3: 300         RB5: RA7         RB1: N/A         RB1: N/A         RB1: N/A           RB2: RB3: 1         RB5: N/A         RB5: N/A         RB5: RB7: N/A           >>max-RST         RB1: N/A         RB1: N/A         RB1: N/A           RB5: N/A         RB5: N/A         RB5: N/A         RB5: RB7: N/A           >>pollingInfo         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB2: RB3: as below         RB2: RB3: as below         RB2: RB3: as below         RB2: RB3: RALSE           Poll         RB2: RB3: GALSE         RB2: RB3: GALSE         RB2: RB3: GALSE         RB2: RB3: IO           >>>lastRetransmissionPDU         RB2: RB3: 100         RB2: RB3: IO         RB2: RB3: IO         RB2: RB3: IO           >>stimerPolIPeriodic         RB2: RB3: MA         RB1: RB3: N/A         RB1: RB3: N/A         RB1: RB3: N/A         RB1: RB3: N/A           RB1: RB2: RB3: RALSE         RB2: RB3: AM         RB2: RB3: RAM         RB2: RB3: RAM         RB2: RB3: RAM           >>inSequenceDelivery         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A				-
RB2         RB3: 300         RB2         RB3: 300         RB2         RB3: 300           >>max-RST         RB1: IN/A         RB1: IN/A         RB1: IN/A         RB2         RB3: 1           >>pollingInfo         RB5: IN/A         RB5: N/A         RB2         RB3: 1           >>pollingInfo         RB1: IN/A         RB1: IN/A         RB1: IN/A         RB2         RB3: RJA           >>pollingInfo         RB1: IN/A         RB1: IN/A         RB2         RB3: SAL         RB2         RB3: SAL           >>slastTransmissionPDU         RB2         RB3: FALSE         RB2         RB2         RB3: FALSE         RB2         RB3: FALSE         RB2         RB3: SALSE         RB2         RB3: IALSE         RB4         RB4         RB3: IALSE         RB4 <td>-</td> <td></td> <td></td> <td></td>	-			
RB5: N/A         RB5: N/A         RB5: N/A         RB5: N/A         RB5: N/A         RB1: N/A         RB2: RB3: as below         RB2: RB3: RALSE         RB2: RB3: RALSE         RB2: RB3: RALSE         RB2: RB3: CALSE         RB3: CALS	>>timerRST			-
>>max-RST         RB1: N/A RB2- RB3: 1 RB5: N/A           >>pollingInfo         RB1: N/A RB2- RB3: as below RB5: N/A           >>>lastTransmissionPDU Poll         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE           >>>lastRetransmissionPD         RB2- RB3: N/A RB5: FALSE         RB2- RB3: 100         RB2- RB3: N/A RB5: FALSE           >>>logegmentationIndication         RB1- RB3: N/A RB5: FALSE         RB5: FALSE         RB5: RAISE           >dl-RLC-Mode         RB1: N/A RB1: RM3         RB1: N/A RB5: TM         RB1: N/A RB5: RM         RB1: N/A RB2- RB3: AM           >>inSequenceDelivery         RB1: N/A RB2: RB3: TAR         RB1: N/A RB2: RB3: TAR         RB1: N/A RB2: RB3: TRUE RB5: N/A         RB1: N/A RB5: RM2         RB1: N/A RB5: RM2           >>receivingWindowSize         RB1: N/A RB2: RB3: 128         RB2: RB3: 120 RB5: N/A         RB1: N/A RB2: RB3: 120         RB2: RB3: 120           >>stimerStatusProhibit         RB2: RB3: 100         RB2: RB3: 100         RB2: RB3: 100         RB2: RB3: 100           >>>timerStatusProhibit         RB2: RB3: N/A RB5: N/A         RB1: RB3: N/A RB5: N/A         RB1: RB3: 100         RB2: RB3: 100				
RB2         RB3: 1         RB2         RB3: 1         RB2         RB3: 1           >>pollingInfo         RB1: IV/A         RB1: IV/A         RB1: IV/A         RB2         RB2         RB3: as below           >>>lastTransmissionPDU- Poll         RB2         RB3: FALSE         RB2         RB2         RB3: FALSE         RB2         RB2         RB3: FALSE         RB2         RB3: FALSE         RB2         RB2         RB3: FALSE         RB2         RB3: FALSE         RB2         RB3: FALSE         RB2         RB3: FALSE         RB2         RB3: TALSE         RB3: TAL         RB3: TALSE	>>max-RST			
>>pollingInfo         RB1: N/A RB2: RB3: as below RB5: N/A         RB1: N/A RB2: RB3: as below RB5: N/A         RB1: N/A RB2: RB3: as below RB5: N/A           >>>lastTransmissionPDU- Poll         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE           >>>lastRetransmissionPD         RB2- RB3: FALSE         RB2- RB3: TALSE         RB2- RB3: TALSE         RB2- RB3: TALSE           U-Poll         RB2- RB3: TALSE         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>>segmentationIndication         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           >>dI-RLC-Mode         RB1: IVM         RB1: IVM         RB1: IVM         RB1: N/A         RB1: N/A           RB2: RB3: RM         RB2: RB3: RM         RB2- RB3: AM         RB2- RB3: AM         RB2- RB3: AM           RB2: RB3: RM         RB2: RB3: RM         RB1: N/A         RB1: N/A         RB1: N/A           RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB2: RB3: RMA         RB2- RB3: RM         RB2- RB3: RM         RB2- RB3: RM         RB2- RB3: RM           >>inSequenceDelivery         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB1: RM3         RB2- RB3: RMA <t< td=""><td></td><td>-</td><td></td><td>-</td></t<>		-		-
RB2- RB3: as below RB5: N/A         RB2- RB3: as below RB5: N/A         RB2- RB3: as below RB5- RB7: N/A           >>>lastTransmissionPDU- Poll         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE           >>>lastRetransmissionPD         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>segmentationIndication         RB1- RB3: N/A RB1- RB3: N/A           >         RB1         RB1         RB3         RB3         RB3           >=         RB1: UM RB2- RB3: AM RB2- RB3: TM         RB2- RB3: AM RB2- RB3: AM RB2- RB3: TM         RB1: N/A RB2- RB3: TM         RB1: N/A RB2- RB3: TM           >=         RB2- RB3: TRUE RB5: N/A         RB1: N/A RB2- RB3: TRUE RB5: N/A         RB1: N/A RB5: RD7: N/A           >=         RB1: N/A RB2- RB3: 128         RB2: RB3: 128         RB2: RB3: 128           RB2: N/A         RB1: N/A RB5: N/A         RB1: N/A RB5: N/A         RB1: N/A RB5: N/A           >=         RB2: RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>         RB2: RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>         RB1: N/A RB5: N/A         RB1: N/A RB5: N/A         RB1: N/A RB5: N/A           >> <td></td> <td></td> <td></td> <td></td>				
RBS: N/A         RBS: N/A         RBS: N/A         RBS: RB7: N/A           >>>lastTransmissionPDU- Poll         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE           >>>timerPollPeriodic         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>segmentationIndication         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           >dl-RLC-Mode         RB1: UM         RB1: UM         RB1: UM         RB1: UM         RB1: UM           >>dl-RLC-Mode         RB1: N/A         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           >>inSequenceDelivery         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB2- RB3: TMUE         RB2- RB3: TRUE         RB2- RB3: TRUE         RB2- RB3: N/A           RB2- RB3: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB2- RB3: N/A         RB2- RB3: 128         RB2- RB3: 128         RB2- RB3: 128         RB2- RB3: 128         RB2- RB3: 100         RB2- RB3: 100           >>dl-RLC-StatusInfo         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB1: RB3: N/A         <	>>pollingInfo			
Poll         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE           >>>timerPollPeriodic         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>segmentationIndication         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           >>dl-RLC-Mode         RB1: UM         RB1: UM         RB1: UM         RB1: UM           RB2- RB3: AM         RB2- RB3: AM         RB2- RB3: AM         RB2- RB3: AM           >>dl-RLC-Mode         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB5: TM         RB5: TM         RB5- RB7: TM           >>inSequenceDelivery         RB1: N/A         RB1: N/A         RB1: N/A           RB5: N/A         RB5: N/A         RB5- RB7: N/A           RB5: N/A         RB5- RB7: N/A         RB5- RB7: N/A           >>tmerStatusProhibit         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>sesegmentationIndicator				
U-Poll				RB2- RB3: FALSE
>>segmentationIndication         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           >>dl-RLC-Mode         RB1: UM         RB1: UM         RB1: UM         RB1: UM           RB2- RB3: AM           >>inSequenceDelivery         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB5: N/A         RB2- RB3: TRUE         RB2- RB3: TRUE         RB2- RB3: TRUE         RB2- RB3: TRUE           >>receivingWindowSize         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB5: N/A         RB2- RB3: 128         RB2- RB3: 128         RB2- RB3: 128           >>dl-RLC-StatusInfo         RB1: N/A         RB1: N/A         RB1: N/A           RB5: N/A         RB2- RB3: as below         RB2- RB3: as below         RB2- RB3: as below           RB2- RB3: as below         RB2- RB3: RALSE         RB2- RB3: 100         RB2- RB3: 100           >>>timerStatusProhibit         RB2- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           >>tmerStatusProhibit         RB2- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           RB1	U-Poll			
RB5: FALSE         RB5: FALSE         RB5: RAS: FALSE         RB7: FALSE           >dl-RLC-Mode         RB1: UM         RB1: UM         RB1: UM         RB1: UM         RB1: UM           RB5: TM         RB5: TM         RB5: TM         RB5: RB7: AM         RB5- RB7: TM           >>inSequenceDelivery         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A         RB2- RB3: TRUE         RB5: N/A         RB5: RAS: RB7: N/A           >>stimerStatusProhibit         RB2- RB3: 100         RB2- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A         RB5: FALSE         RB5- RB7: N/A         RB5- RB7: R				
RB2- RB3: AM RB5: TM         RB2- RB3: AM RB5: TM         RB2- RB3: TM RB5: TM         RB2- RB3: TM RB5: RB7: TM           >>inSequenceDelivery         RB1: N/A RB2- RB3: TRUE RB5: N/A         RB1: N/A RB2- RB3: TRUE RB2- RB3: TRUE RB5: N/A         RB1: N/A RB2- RB3: TRUE RB5: N/A         RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A           >>receivingWindowSize         RB1: N/A RB2- RB3: 128 RB5: N/A         RB1: N/A RB2- RB3: 128 RB2- RB3: 128 RB5- N/A         RB1: N/A RB2- RB3: 128 RB5- RB7: N/A           >>dI-RLC-StatusInfo         RB1: N/A RB1: N/A RB2- RB3: as below RB5- N/A         RB1: N/A RB5- RB7: N/A         RB1: N/A RB5- RB7: N/A           >>dI-RLC-StatusInfo         RB1: N/A RB2- RB3: as below RB5- RA7         RB1: N/A RB5- RB7: N/A         RB1- NA RB5- RB7: N/A           >>stimerStatusProhibit         RB2- RB3: 100         RB2- RB3: as below RB5- RA1SE         RB2- RB3: 100           >>>timerStatusPeriodic         RB2- RB3: N/A RB5: FALSE         RB1- RB3: N/A RB1- RB3: N/A         RB1- RB3: N/A RB1- RB3: N/A           >>segmentationIndication         RB1- RB3: N/A RB5: FALSE         RB1- RB3: N/A RB5- RB7: FALSE         RB1- RB3: N/A RB5- RB7: FALSE           rb-MappingInfo         -         -         -         -           >>uL-         OneLogicalChannel         OneLogicalChannel         OneLogicalChannel           LogicalChannelIdentity         RB1- RB3: 2 RB5: N/A         RB1- RB3: 2 RB3: 3 RB3: 3 RB5: N/A <t< td=""><td>&gt;&gt;segmentationIndication</td><td></td><td></td><td></td></t<>	>>segmentationIndication			
RB5: TM         RB5: TM         RB5: RB7: TM           >>inSequenceDelivery         RB1: N/A         RB1: N/A         RB2: RB3: TRUE         RB2: RB3: RUE         RB3: N/A         RB3: N/A         RB3: N/A         RB3: N/A         RB3: N/A         RB3: RUA	>dl-RLC-Mode		-	-
>>inSequenceDelivery         RB1: N/A RB2- RB3: TRUE RB5: N/A         RB1: N/A RB2- RB3: TRUE RB5: N/A         RB1: N/A RB2- RB3: TRUE RB5: N/A         RB1: N/A RB2- RB3: TRUE RB5- RB7: N/A           >>receivingWindowSize         RB1: N/A RB1: N/A         RB1: N/A RB2- RB3: 128 RB5: N/A         RB1: N/A RB5- RB7: N/A           >>dI-RLC-StatusInfo         RB1: N/A RB1: N/A         RB1: N/A RB2- RB3: as below RB5: N/A         RB1: N/A RB2- RB3: as below RB5- RB7: N/A         RB1: N/A RB1: N/A         RB1: N/A RB1: N/A           >>timerStatusProhibit         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>=timerStatusProhibit         RB2- RB3: N/A RB1- RB3: N/A         RB1- RB3: N/A RB1- RB3: N/A         RB1- RB3: N/A           >>segmentationIndication         RB1- RB3: N/A RB1- RB3: N/A           >>uL-         OneLogicalChannel         OneLogicalChannel         OneLogicalChannel         OneLogicalChannel           >>ul-         Dch         Dch         Dch         Dch         RB1: 1, RB2: 2, RB3: 3         RB1: 1, RB2: 2, RB3: 3         RB1: RB3: 3         RB1: RB3: 3         RB1: RB3: 3           >>logicialChannelIdentity         RB1: RB3: RB1: RB3:				-
RB5: N/A         RB5: N/A         RB5: N/A         RB5: RB7: N/A           >>receivingWindowSize         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB2- RB3: 128         RB2- RB3: 128         RB2- RB3: 128         RB2- RB3: 128         RB5: N/A           >>dl-RLC-StatusInfo         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB5: N/A         RB5: N/A         RB5: N/A         RB5: RB7: N/A           >>dl-RLC-StatusInfo         RB1: N/A         RB1: N/A         RB1: N/A           RB5: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB5: N/A         RB2- RB3: as below         RB2- RB3: as below         RB2- RB3: as below           >>timerStatusProhibit         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>seignentationIndication         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           RB5: FALSE         RB5: FALSE         RB5- RB7: FALSE         RB5- RB7: FALSE           rb-MappingInfo         OneLogicalChannel         OneLogicalChannel         OneLogicalChannel           >ul-         One         OneLogicalChannel         OneLogicalChannel         OneLogicalChannel           vul-         Dch         Dch         RB5: 1, RB3: 2	>>inSequenceDelivery	RB1: N/A		RB1: N/A
>>receivingWindowSize         RB1: N/A RB2- RB3: 128 RB5: N/A           >>dl-RLC-StatusInfo         RB1: N/A RB1: N/A RB2- RB3: as below RB5: N/A         RB1: N/A RB1: N/A RB2- RB3: as below RB5: N/A         RB1: N/A RB1: N/A RB1: N/A         RB1: N/A RB1: N/A           >>>timerStatusProhibit         RB2- RB3: as below RB5: N/A         RB2- RB3: as below RB5: RALSE         RB2- RB3: as below RB5- RB7: N/A           >>>timerStatusProhibit         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>segmentationIndication         RB1- RB3: N/A RB5: FALSE         RB1- RB3: N/A RB5: FALSE         RB1- RB3: N/A RB5: FALSE           vul- LogicalChannelMappings         OneLogicalChannel         OneLogicalChannel         OneLogicalChannel           >>ul- transportChannelIdentity         Dch         Dch         Dch         RB5: 1, RB6: 2, RB5: 1           >>logicalChannelIdentity         RB1: 1, RB2: 2, RB3: 3           >>rlc-SizeList         RB1- RB3: Configured RB5: N/A         RB1- RB3: RB1- RB3: RB1: 1, RB2: 2, RB3: 3         RB1: 1, RB2: 2, RB3: 3         RB1: 1, RB2: 2, RB3: 3           >>mac- LogicalChannelPriority         RB1: 1, RB2: 2, RB3: 3         RB1: 1, RB2: 2, RB3: 3				
RB2- RB3: 128 RB5: N/A         RB2- RB3: 128 RB5: N/A         RB2- RB3: 128 RB5: N/A         RB2- RB3: 128 RB5- RB7: N/A           >>dl-RLC-StatusInfo         RB1: N/A         RB1: N/A         RB1: N/A         RB1: N/A           RB2- RB3: as below RB5: N/A         RB2- RB3: as below RB5: N/A         RB2- RB3: as below RB5- RB7: N/A         RB1: N/A           >>>timerStatusProhibit         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>>missingPDU-Indicator         RB2- RB3: N/A         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>>timerStatusPeriodic         RB2- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           RB5: FALSE         RB5: FALSE         RB5- RB7: FALSE         RB5- RB7: FALSE           rb-MappingInfo         -         -         -           >UL-         OneLogicalChannel         OneLogicalChannel         OneLogicalChannel           LogicalChannelMappings         Dch         Dch         Dch         -           >>logicalChannelIdentity         RB1: RB3: 2         RB1: RB3: 2         RB1: RB3: 4         RB5: 1, RB6: 2, RB7: 3           >>logicalChannelIdentity         RB1: 1, RB2: 2, RB3: 3         RB3: 3         RB3: 3         RB3: 3           RB5: N/A         RB5: N/A	>>receivingWindowSize			
>>dl-RLC-StatusInfo         RB1: N/A RB2- RB3: as below RB5: N/A         RB1: N/A RB2- RB3: as below RB5: N/A         RB1: N/A RB2- RB3: as below RB5: N/A         RB1: N/A RB2- RB3: as below RB5- RB7: N/A           >>>timerStatusProhibit         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>>missingPDU-Indicator         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: 100           >>>timerStatusPeriodic         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>segmentationIndication         RB1- RB3: N/A RB5: FALSE         RB1- RB3: N/A RB5: FALSE         RB1- RB3: N/A RB5: FALSE         RB1- RB3: N/A RB5: RB7: FALSE           vul- transportChannelMappings         OneLogicalChannel         OneLogicalChannel         OneLogicalChannel           >>ul- transportChannelIdentit ty         RB1- RB3: 2 RB5: 1         RB1- RB3: 2 RB5: 1         RB1: RB3: 4 RB5: 1, RB6: 2, RB7: 3           >>logicalChannelIdentit ty         RB1: 1, RB2: 2, RB3: 3           >>logicalChannelIdentity         RB1- RB3: Configured RB5: N/A         RB1- RB3: Configured RB5: N/A         RB1- RB3: Configured RB5: N/A         RB1- RB3: Configured RB5: N/A         RB1- RB3: RB1- RB3: Configured RB5: N/A         RB1- RB3: RB1: 1, RB2: 2, RB3: 3         RB1: 1,				-
RB2- RB3: as below RB5: N/A         RB2- RB3: as below RB5: N/A         RB2- RB3: as below RB5- RB7: N/A           >>>timerStatusProhibit         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>>missingPDU-Indicator         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: 100           >>>timerStatusPeriodic         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>segmentationIndication         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           RB5: FALSE         RB5: FALSE         RB5- RB7: FALSE           rb-MappingInfo				RB5- RB7: N/A
RB5: N/A         RB5: N/A         RB5- RB7: N/A           >>>timerStatusProhibit         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>>missingPDU-Indicator         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE           >>>timerStatusPeriodic         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>segmentationIndication         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           RB5: FALSE         RB5: FALSE         RB5- RB7: FALSE           rb-MappingInfo              >UL-         OneLogicalChannel         OneLogicalChannel         OneLogicalChannel           LogicalChannelMappings         Dch         Dch         Dch         Dch           >>ul-         Dch         Dch         RB5: 1, RB3: 2, RB7: 3         RB7: 3           >>logicalChannelIdentit ty         RB1- RB3: 2, RB3: 3, RB3: N/A         RB1- RB3: configured configured configured RB5: N/A         RB1- RB3: configured RB5: N/A           >>rlc-SizeList         RB1- RB3:         RB1: 1, RB2: 2, RB1: 1, R	>>dl-RLC-StatusInfo			
>>>timerStatusProhibit         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>>missingPDU-Indicator         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: FALSE           >>>timerStatusPeriodic         RB2- RB3: 100         RB2- RB3: 100         RB2- RB3: 100           >>segmentationIndication         RB1- RB3: N/A         RB1- RB3: N/A         RB1- RB3: N/A           RB5: FALSE         RB5: FALSE         RB5- RB7: FALSE           rb-MappingInfo				
>>>missingPDU-Indicator         RB2- RB3: FALSE         RB2- RB3: FALSE         RB2- RB3: 100         RB2- RB3: 100           >>>segmentationIndication         RB1- RB3: N/A           >>MappingInfo         RB5: FALSE         RB5: FALSE         RB5- RB7: FALSE           >>UL-         OneLogicalChannel         OneLogicalChannel         OneLogicalChannel           LogicalChannelType         Dch         Dch         Dch           >>ul-         TransportChannelIdenti         RB1- RB3: 2         RB1- RB3: 2           ry         RB1- RB3: 2         RB1- RB3: 2         RB1- RB3: 4           >>logicalChannelIdenti         RB1- RB3: 2         RB1- RB3: 2         RB5: 1, RB6: 2, RB7: 3           >>logicalChannelIdentity         RB1: 1, RB2: 2, RB3: 3         RB5: N/A         RB5: 1, RB2: 2, RB3: 3           >>logicalChannelIdentity         RB1- RB3:         RB1- RB3: 3         RB5: 3           >>rlc-SizeList         RB1- RB3:         RB1- RB3: configured         RB1- RB3: configured           configured         RB5: N/A         RB5- RB7: N/A         RB5- RB7: N/A           >>rlc-SizeList         RB1: 1, RB2: 2, RB1: 1, RB2: 2, RB3: 3         RB1- RB3: configured         Configured           RB5: N/A	>>>timerStatusProhibit			
>>segmentationIndicationRB1- RB3: N/A RB5: FALSERB1- RB3: N/A RB5: FALSERB1- RB3: N/A RB5- RB7: FALSErb-MappingInfo			RB2- RB3: FALSE	
RB5: FALSERB5: FALSERB5- RB7: FALSErb-MappingInfoOneLogicalChannelOneLogicalChannelOneLogicalChannel>UL- LogicalChannelMappingsOneLogicalChannelOneLogicalChannelOneLogicalChannel>>ul- TransportChannelTypeDchDchDch>>>transportChannelIdenti tyRB1- RB3: 2 RB5: 1RB1- RB3: 2 RB5: 1RB1- RB3: 4 RB5: 1 RB5: 1RB1- RB3: 4 RB5: 1 RB5: 1RB1- RB3: 2 RB5: 1 RB5: 1RB1- RB3: 4 RB5: 1, RB6: 2, RB5: 1, RB6: 2, RB7: 3>>logicalChannelIdentityRB1: 1, RB2: 2, RB3: 3 RB5: N/ARB1: 1, RB2: 2, RB3: 3 RB5: N/ARB1: 1, RB2: 2, RB3: 3 RB1- RB3: configured configured configured RB5: N/ARB1- RB3: RB1- RB3: configured configured configured RB5: N/ARB1- RB3: RB1- RB3: configured configured RB5: N/A>>mac- LogicalChannelPriorityRB1: 1, RB2: 2, RB3: 3 RB3: 3 RB5: 5RB1: 1, RB2: 2, RB3: 3 RB3: 3 <b< td=""><td></td><td></td><td></td><td></td></b<>				
rb-MappingInfoImage: Constraint of the systemImage: Constraint of the systemImage: Constraint of the systemImage: Constraint of the system>>ul- TransportChannelTypeDchDchDchDch>>>transportChannelIdenti tyRB1- RB3: 2RB1- RB3: 2RB1- RB3: 4>>logicalChannelIdenti tyRB1: 1, RB2: 2, RB5: 1RB1: 1, RB2: 2, RB5: 1RB1: 1, RB2: 2, RB3: 3RB1: 1, RB2: 2, RB3: 3RB1: 1, RB2: 2, RB3: 3>>logicalChannelIdentityRB1: 1, RB2: 2, RB3: 3RB1: 1, RB2: 2, RB3: 3RB1: 1, RB2: 2, RB3: 3RB1: 1, RB2: 2, RB3: 3>>logicalChannelIdentityRB1- RB3: RB1- RB3: configured RB5: N/ARB1- RB3: RB1- RB3: configured RB5: N/ARB1- RB3: RB1- RB3: configured configured RB5: N/ARB1- RB3: RB1- RB3: configured RB5: N/A>>mac- LogicalChannelPriorityRB1: 1, RB2: 2, RB3: 3 RB5: 5RB1: 1, RB2: 2, RB3: 3 RB3: 3RB1: 1, RB2: 2, RB3: 3 RB3: 3 RB3: 3 RB5: 5RB1: 1, RB2: 2, RB3: 3 RB3:	>>segmentationIndication			
>UL- LogicalChannelMappingsOneLogicalChannel OneLogicalChannelOneLogicalChannel OneLogicalChannel>>ul- TransportChannelTypeDchDch>>>transportChannelIdenti tyRB1- RB3: 2 RB5: 1RB1- RB3: 2 RB5: 1RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3>>logicalChannelIdentityRB1: 1, RB2: 2, RB3: 3 RB5: N/ARB1: 1, RB2: 2, RB3: 3 RB1- RB3: configured configured RB1- RB3: configured RB1: 1, RB2: 2, RB1: 1, RB2: 2, RB3: 3 RB3:	rb-MappingInfo	RDJ. FALSE	KDD. FALGE	KDJ- KD7. FALSE
>>ul- TransportChannelType         Dch         Dch         Dch           >>>transportChannelIdenti ty         RB1- RB3: 2 RB5: 1         RB1- RB3: 2 RB5: 1         RB1- RB3: 2 RB5: 1         RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3           >>logicalChannelIdentity         RB1: 1, RB2: 2, RB3: 3         RB1- RB3: configured RB5: N/A         RB1- RB3: Configured RB5: N/A         RB1- RB3: RB5- RB7: N/A         RB1- RB3: RB5- RB7: N/A           >>mac- LogicalChannelPriority         RB1: 1, RB2: 2, RB3: 3         RB3:		OneLogicalChannel	OneLogicalChannel	OneLogicalChannel
TransportChannelType         RB1- RB3: 2         RB1- RB3: 2         RB1- RB3: 2         RB1- RB3: 4           ty         RB5: 1         RB5: 1         RB5: 1         RB5: 1         RB5: 1, RB6: 2, RB7: 3           >>logicalChannelIdentity         RB1: 1, RB2: 2, RB3: 3         RB1: 1, RB2: 2, RB3: 3         RB3: 3         RB3: 3           >>logicalChannelIdentity         RB1: 1, RB2: 2, RB3: 3         RB3: 3         RB3: 3         RB3: 3           >>logicalChannelIdentity         RB1: RB3: RB3: 3         RB3: 3         RB3: 3         RB3: 3           >>logicalChannelIdentity         RB1: RB3: RB3: 3         RB3: 3         RB3: 3         RB3: 3           >>rlc-SizeList         RB1- RB3: configured         configured         configured         configured           >>mac-         RB1: 1, RB2: 2, RB3: 3         RB3: 3         RB3: 3         RB3: 3           >>mac-         RB3: 3         RB3: 3         RB3: 3         RB3: 3           RB3: 3         RB3: 3         RB3: 3         RB3: 3         RB3: 3           RB3: 3         RB3: 3         RB3: 3         RB3: 3         RB3: 3           >>mac-         RB3: 3         RB3: 3         RB3: 3         RB3: 3         RB3: 3           LogicalChannelPriority         RB3: 3         RB3: 3<		-	-	-
>>>transportChannelldenti ty         RB1- RB3: 2 RB5: 1         RB1- RB3: 2 RB5: 1         RB1- RB3: 2 RB5: 1         RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3           >>logicalChannelldentity         RB1: 1, RB2: 2, RB3: 3           >>rlc-SizeList         RB1- RB3: Configured RB5: N/A         RB1- RB3: RB1- RB3: Configured RB5: N/A         RB1- RB3: RB1- RB3: RB1- RB3: Configured RB5: N/A         RB1- RB3: RB1- RB3: RB1- RB3: Configured RB5: N/A         RB1- RB3: RB1- RB3: RB1- RB3: Configured RB3: 3 RB3: 3         RB1: 1, RB2: 2, RB1: 1, RB2: 2, RB1: 1, RB2: 2, RB3: 3         RB1: 1, RB2: 2, RB3: 3           >>mac- LogicalChannelPriority         RB3: 3 RB3: 3         RB3: 3 RB3: 3         RB3: 3 RB3: 3           >DL-		Dch	Dch	Dch
ty       RB5: 1       RB5: 1       RB5: 1, RB6: 2, RB7: 3         >>logicalChannelIdentity       RB1: 1, RB2: 2, RB3: 3       RB1: 1, RB2: 2, RB3: 3       RB3: 3         RB5: N/A       RB5: N/A       RB5: N/A       RB5: RB7: N/A         >>rlc-SizeList       RB1: RB3:       RB1: RB3:       RB1: RB3:         RB5: N/A       RB5: N/A       RB5: RB7: N/A         >>rac-       RB1: 1, RB2: 2, RB3: 3       RB3: 3         LogicalChannelPriority       RB3: 3       RB3: 3         RB5: S       RB5: S       RB5: S         >DL-		RB1- RB3 ⁻ 2	RB1- RB3 ⁻ 2	RB1- RB3 ⁻ 4
RB3: 3 RB5: N/A         RB3: 3 RB5: N/A         RB3: 3 RB5: N/A         RB3: 3 RB5- RB7: N/A           >>rlc-SizeList         RB1- RB3: configured RB5: N/A         RB1- RB3: configured RB5: N/A         RB1- RB3: configured RB5: N/A         RB1- RB3: configured RB5: N/A           >>mac- LogicalChannelPriority         RB1: 1, RB2: 2, RB3: 3 RB5: 5         RB1: 1, RB2: 2, RB3: 3         RB3: 3 RB5: 5           >DL-	•			RB5: 1, RB6: 2,
RB5: N/A         RB5: N/A         RB5- RB7: N/A           >>rlc-SizeList         RB1- RB3: configured         RB1- RB3: configured         RB1- RB3: configured         RB1- RB3: configured           >>mac- LogicalChannelPriority         RB1: 1, RB2: 2, RB3: 3 RB5: 5         RB1: 1, RB2: 2, RB5: 5         RB1: 1, RB2: 2, RB5: 5         RB5: S	>>logicalChannelIdentity			RB1: 1, RB2: 2,
>>rlc-SizeList         RB1- RB3: configured RB5: N/A         RB1- RB3: configured RB5: N/A         RB1- RB3: configured RB5: N/A         RB1- RB3: configured RB5- RB7: N/A           >>mac- LogicalChannelPriority         RB1: 1, RB2: 2, RB3: 3 RB5: 5         RB1: 1, RB2: 2, RB3: 3         RB1: 1, RB2: 2, RB3: 3         RB1: 1, RB2: 2, RB3: 3         RB3: 3 RB5: 5           >DL-				
RB5: N/A         RB5: N/A         RB5- RB7: N/A           >>mac-         RB1: 1, RB2: 2, LogicalChannelPriority         RB1: 1, RB2: 2, RB3: 3         RB3: 3           >DL-	>>rlc-SizeList	RB1- RB3:	RB1- RB3:	RB1- RB3:
>>mac- LogicalChannelPriority         RB1: 1, RB2: 2, RB3: 3 RB5: 5           >DL-         RB1: 1, RB2: 2, RB3: 3         RB1: 1, RB2: 2, RB3: 3         RB1: 1, RB2: 2, RB3: 3				
LogicalChannelPriority         RB3: 3 RB5: 5         RB3: 3 RB5: 5         RB3: 3 RB5: 5         RB3: 3 RB5- RB7: 5           >DL-	>>mac-			
>DL-		RB3: 3	RB3: 3	RB3: 3

Configuration	28.8 kbps streaming CS-	57.6 kbps streaming CS-	12.2 kbps speech(multimode
	data +	data +	) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>Mapping option 1	One mapping option	One mapping option	One mapping option
>>>dl- TransportChannelType	Dch	Dch	Dch
>>>transportChannellden tity	RB1- RB3: 2 RB5: 1	RB1- RB3: 2 RB5: 1	RB1- RB3: 4 RB5: 1, RB6: 2, RB7: 3
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5: N/A	RB1: 1, RB2: 2, RB3: 3 RB5- RB7: N/A
TrCH INFORMATION PER TrCH			
UL- AddReconfTransChInfoLis t			
>Uplink transport channel type	dch	dch	dch
>transportChannelIdentity	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>transportFormatSet	DedicatedTransChT FS	DedicatedTransChT FS	DedicatedTransChT FS
>>dynamicTF-information			
>>>tf0/ tf0,1	TrCH1: (0x576, 1x576, 2x576)	TrCH1: (0x576, 1x576, 2x576,	TrCH1: (0x81) TrCH2: (0x 103
	TrCH2: (0x144, 1x144)	3x576, 4x576) TrCH2: (0x144, 1x144)	TrCH3: (0x 60) TrCH4: (0x144)
>>>rlcSize	TrCH1: OctetMode TrCH2:BitMode	TrCH1: OctetMode TrCH2:BitMode	BitMode
>>>>sizeType	TrCH1: type 2, part1= 9,	TrCH1: type 2, part1= 9,	TrCH1: type 1: 81 TrCH2: type 1: 103
	part2= 2 (576) TrCH2: type 2,	part2= 2 (576) TrCH2: type 2,	TrCH3: type 1: 60 TrCH4: 2: type 2,
	part1= 2, part2= 0 (144)	part1= 2, part2= 0 (144)	part1= 2, part2= 0 (144)
>>>>numberOfTbSizeList	TrCH1: Zero, one, 2	TrCH1: Zero, one,	TrCH1-4: Zero
	TrCH2: Zero, one	2, 3, 4 TrCH2: Zero, one	
>>>>logicalChannelList	All	All	All
>>>tf 1			TrCH1: (1x39)
			TrCH2: (1x53) TrCH3: (1x60) TrCH4: (1x144)
>>>numberOfTransportBl ocks			TrCH4: (1x144) TrCH1-3: One
>>>rlc-Size			TrCH1-3: BitMode
>>>>sizeType			TrCH1: 1: 39
			TrCH2: 1: 53 TrCH3: 1: 60
>>>>numberOfTbSizeList			TrCH1-3: One
>>>>logicalChannelList			TrCH1-3: all
>>>tf 2			TrCH1: (1x42) TrCH2: (1x63) TrCH3- TrCH4: N/A
>>>>numberOfTransportBl ocks			TrCH1-2: One
>>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 42 TrCH2: type 1: 63
>>>>numberOfTbSizeList			TrCH1-2: One
>>>logicalChannelList			TrCH1: all

Configuration	28.8 kbps	57.6 kbps	12.2 kbps
	streaming CS- data +	streaming CS- data +	speech(multimode ) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>tf 3			TrCH1: (1x55)
			TrCH2: (1x84)
			TrCH3- TrCH4: N/A
>>>>numberOfTransportBl ocks			TrCH1-2: Zero
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 55
Contraction of the Simol int			TrCH2: type 1: 84 TrCH1-2: One
>>>>numberOfTbSizeList >>>>logicalChannelList			TrCH1: all
>>>tf 4			TrCH1: (1x75)
			TrCH2: (1x103)
			TrCH3- TrCH4: N/A
>>>numberOfTransportBl			TrCH1-2: One
ocks			T OLIVE DYNA I
>>>>rlc-Size >>>>sizeType			TrCH1: BitMode TrCH1: type 1: 75
>>>>size i ype			TrCH1: type 1: 75 TrCH2: type 1: 103
>>>numberOfTbSizeList			TrCH1-2: One
>>>logicalChannelList			TrCH1: all
>>>tf 5			TrCH1: (1x81)
			TrCH2- TrCH4: N/A
>>>>numberOfTransportBl ocks			TrCH1: One
>>>rlc-Size			TrCH1: BitMode
>>>>sizeType			TrCH1: type 1: 81
>>>>numberOfTbSizeList			TrCH1: One
>>>logicalChannelList			TrCH1: all
>>semiStaticTF- Information			
>>>tti	TrCH1: 40	TrCH1: 40	TrCH1- TrCH3: 20
	TrCH2: 40	TrCH2: 40	TrCH4: 40
>>>channelCodingType	TrCH1: Turbo	TrCH1: Turbo	Convolutional
	TrCH2: Convolutional	TrCH2: Convolutional	
>>>codingRate	TrCH1: N/A	TrCH1: N/A	TrCH1- TrCH2:
	TrCH2: Third	TrCH2: Third	Third
			TrCH3: Half
			TrCH4: Third
>>>rateMatchingAttribute	TrCH1: 155	TrCH1: 145	TrCH1: 200
	TrCH2: 160	TrCH2: 160	TrCH2: 190 TrCH3: 235
			TrCH4: 160
>>>crc-Size	TrCH1: 16	TrCH1: 16	TrCH1: 12
	TrCH2: 16	TrCH2: 16	TrCH2- TrCH3: 0
			TrCH4: 16
DL- AddReconfTransChInfoLis			
t Downlink transport	dab	dab	dah
>Downlink transport channel type	dch	dch	dch
>dl-	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2,
TransportChannelldentity (should be as for UL)			TrCH3: 3, TrCH4: 4
>tfs-SignallingMode	SameAsUL	SameAsUL	Independent
			<only on="" td="" tf0="" trch1<=""></only>
			is different and
· · · tropoportEorm - +0 - +			shown below>
>>transportFormatSet			DedicatedTransChT FS
>>>dynamicTF-information			

Configuration	28.8 kbps streaming CS- data +	57.6 kbps streaming CS- data +	12.2 kbps speech(multimode ) +
	3.4 kbps signalling	3.4 kbps signalling	3.4 kbps signalling
>>>>tf0/ tf0,1			TrCH1: (1x0)
>>>rlcSize			bitMode
>>>>sizeType			TrCH1: type 1: 0
>>>>numberOfTbSizeList			TrCH1: One
>>>>logicalChannelList			All
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2	TrCH1: 1, TrCH2: 2, TrCH3: 3, TrCH4: 4
>dch-QualityTarget	=		
>>bler-QualityValue	TrCH1: 1x10 ⁻² TrCH2: Absent	TrCH1: 1x10 ⁻² TrCH2: Absent	TrCH1: 7x10 ⁻³ TrCH2- TrCH4: Absent
TrCH INFORMATION, COMMON			
ul-CommonTransChInfo			
>tfcs-ID (TDD only)	1	1	1
>sharedChannelIndicator (TDD only)	FALSE	FALSE	FALSE
>tfc-Subset	Absent, not required	Absent, not required	Absent, not required
>ul-TFCS	Normal TFCI	Normal TFCI	Normal TFCI
	signalling	signalling	signalling
>>explicitTFCS- ConfigurationMode	Complete	Complete	Complete
>>>ctfcSize	Ctfc4Bit	Ctfc4Bit	Ctfc8Bit
>>>>TFCS representation	Addition	Addition	Addition
>>>>TFCS list			
>>>>>TFCS 1	(TF0, TF0)	(TF0, TF0)	(TF0, TF0, TF0, TF0)
>>>>>>ctfc	0	0	0
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>>referenceTFCId	0	0	0
>>>>>TFCS 2	(TF1, TF0)	(TF1, TF0)	(TF1, TF0, TF0, TF0)
>>>>>>ctfc	1	1	1
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>>referenceTFCId	0	0	0
>>>>>TFCS 3	(TF2, TF0)	(TF2, TF0)	(TF2, TF1, TF0, TF0)
>>>>>>ctfc	2	2	8
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0
>>>>>TFCS 4	(TF0, TF1)	(TF3, TF0)	(TF3, TF2, TF0, TF0)
>>>>>ctfc	3	3	15
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>βc (FDD only)	N/A	N/A	N/A
>>>>>βd	N/A	N/A	N/A
>>>>>>referenceTFCId	0	0	0
>>>>>TFCS 5	(TF1, TF1)	(TF4, TF0)	(TF4, TF3, TF0, TF0)
>>>>>ctfc	4	4	22
>>>>>>gainFactorInform ation	Computed	Computed	Computed
>>>>>>referenceTFCId	0	0	0

Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode ) + 3.4 kbps signalling
>>>>>TFCS 6	(TF2, TF1)	(TF0, TF1)	(TF5, TF4, TF1,
	5	5	TF0) 59
>>>>>>ctfc >>>>>>gainFactorInform	5 Signalled	5 Computed	Computed
ation	Signalieu	Computed	Computed
>>>>>βc (FDD only)	8	N/A	N/A
>>>>>βd	15	N/A	N/A
>>>>>>referenceTFCId	N/A	0	0
>>>>>TFCS 7		(TF1, TF1)	(TF0,TF0,TF0,TF1)
>>>>>>ctfc		6	60
>>>>>>gainFactorInform		Computed	Computed
ation			
>>>>>>referenceTFCld		0 (TF2, TF1)	
>>>>>TFCS 8 >>>>>ctfc		(TF2, TF1) 7	(TF1,TF0,TF0,TF1) 61
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		Computed	Computed
ation		Joinpaloa	Jonipaloa
>>>>>>referenceTFCId		0	0
>>>>>TFCS 9		(TF3, TF1)	(TF2,TF1,TF0,TF1)
>>>>>ctfc		8	68
>>>>>>gainFactorInform ation		Computed	Computed
>>>>>>referenceTFCId		0	0
>>>>>TFCS 10		(TF4, TF1)	(TF3,TF2,TF0,TF1)
>>>>>ctfc		9	75
>>>>>>gainFactorInform ation		Signalled	Computed
>>>>>βc (FDD only)		8	N/A
>>>>>βd		15	N/A
>>>>>>referenceTFCId		0	0
>>>>>TFCS 11			(TF4,TF3,TF0,TF1)
>>>>>>ctfc			82
>>>>>>sgainFactorInform			Computed
ation			0
>>>>>>referenceTFCId			0 (TF5,TF4,TF1,TF1)
>>>>>TFCS 12			(1F5,1F4,1F1,1F1) 119
>>>>>>sgainFactorInform			Signalled
ation			olghanou
>>>>>βc (FDD only)			11
>>>>>βd			15
>>>>>>>referenceTFCId			0
dl-CommonTransChInfo			
>tfcs-SignallingMode	Same as UL	Same as UL	Same as UL
PhyCH INFORMATION FDD			
UL-DPCH-InfoPredef			
>ul-DPCH-			
PowerControlInfo			
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	Algorithm 1
>>>tpcStepSize	1	1	1
>tfci-Existence	TRUE	TRUE	TRUE
		1	0.88
>puncturingLimit	1	1	0.00
DL- CommonInformationPrede	1		
DL- CommonInformationPrede f	1		
DL- CommonInformationPrede	64	32	128

Configuration	28.8 kbps streaming CS- data + 3.4 kbps signalling	57.6 kbps streaming CS- data + 3.4 kbps signalling	12.2 kbps speech(multimode ) + 3.4 kbps signalling
>>positionFixed	Flexible	Flexible	Fixed
PhyCH INFORMATION			
3.84 Mcps TDD			
UL-DPCH-InfoPredef			
>ul-DPCH-			
PowerControlInfo			
>>dpch-ConstantValue	<del>-20</del> 0	<del>-20</del> 0	<del>-20</del> 0
>commonTimeslotInfo	-	—	—
>>secondInterleavingMod	frameRelated	frameRelated	frameRelated
e			10
>>tfci-Coding	16	16	16
>>puncturingLimit	0.44	0.48	0.88
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
DL- CommonInformationPrede f			
>dl-DPCH-InfoCommon			
>>commonTimeslotInfo			
>>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	16	16
>>>puncturingLimit	0.44	0.48	0.92
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1
PhyCH INFORMATION 1.28 Mcps TDD			
UL-DPCH-InfoPredef			
>commonTimeslotInfo			
>>secondInterleavingMod e	frameRelated	frameRelated	
>>tfci-Coding	16	16	
>>puncturingLimit	0.64	0.72	
>>repetitionPeriodAndLen gth	repetitionPeriod1	repetitionPeriod1	
DL- CommonInformationPrede f			
>dl-DPCH-InfoCommon			
>>commonTimeslotInfo			
>>>secondInterleavingMo de	frameRelated	frameRelated	frameRelated
>>>tfci-Coding	16	16	16
>>>puncturingLimit	0.64	0.72	0.92
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1	repetitionPeriod1

Configuration	10.2/6.7/5.9/4.75	7.4/6.7/5.9/4.75
	kbps speech + 3.4 kbps signalling	kbps speech + 3.4 kbps signalling
Ref 34.108	N/A	N/A
Default configuration	11	12
identity		
RB INFORMATION		
rb-Identity	RB1: 1, RB2: 2, RB3: 3, RB5: 5,	RB1: 1, RB2: 2, RB3: 3, RB5: 5,
	RB6: 6, RB7: 7	RB6: 6
rlc-InfoChoice	RIc-info	RIc-info
>ul-RLC-Mode	RB1: UM	RB1: UM
	RB2- RB3: AM	RB2- RB3: AM
>>transmissionRLC-	RB5-RB7: TM RB1: N/A	RB5-RB6: TM RB1: N/A
DiscardMode	RB1: N/A RB2- RB3:	RB1: N/A RB2- RB3:
Discardinioue	NoDiscard	NoDiscard
	RB5- RB7: N/A	RB5- RB6: N/A
>>>maxDat	RB1: N/A	RB1: N/A
	RB2- RB3: 15	RB2- RB3: 15
>>transmissionWindowSiz	RB5- RB7: N/A RB1: N/A	RB5- RB6: N/A RB1: N/A
e	RB2- RB3: 128	RB2- RB3: 128
0	RB5- RB7: N/A	RB5- RB6: N/A
>>timerRST	RB1: N/A	RB1: N/A
	RB2- RB3: 300	RB2- RB3: 300
5.07	RB5- RB7: N/A	RB5- RB6: N/A
>>max-RST	RB1: N/A RB2- RB3: 1	RB1: N/A RB2- RB3: 1
	RB5- RB7: N/A	RB5- RB6: N/A
>>pollingInfo	RB1: N/A	RB1: N/A
	RB2- RB3: as below RB5- RB7: N/A	RB2- RB3: as below RB5- RB6: N/A
>>>lastTransmissionPDU- Poll	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>lastRetransmissionPD U-Poll	RB2- RB3: FALSE	RB2- RB3: FALSE
>>>timerPollPeriodic	RB2- RB3: 100	RB2- RB3: 100
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A
>dl-RLC-Mode	RB5- RB7: FALSE	RB5- RB6: FALSE
>u-REC-Mode	RB1: UM RB2- RB3: AM	RB1: UM RB2- RB3: AM
	RB5- RB7: TM	RB5- RB6: TM
	RB8: TM	RB7: TM
>>inSequenceDelivery	RB1: N/A	RB1: N/A
	RB2- RB3: TRUE	RB2- RB3: TRUE
>>receivingWindowSize	RB5- RB8: N/A RB1: N/A	RB5- RB7: N/A RB1: N/A
	RB2- RB3: 128	RB2- RB3: 128
	RB5- RB8: N/A	RB5- RB7: N/A
>>dl-RLC-StatusInfo	RB1: N/A	RB1: N/A
	RB2- RB3: as below	RB2- RB3: as below
>>>timerStatusProhibit	RB5- RB7: N/A RB2- RB3: 100	RB5- RB6: N/A RB2- RB3: 100
>>>missingPDU-Indicator	RB2- RB3: FALSE	RB2- RB3: T00 RB2- RB3: FALSE
>>>timerStatusPeriodic	RB2- RB3: 100	RB2- RB3: 100
>>segmentationIndication	RB1- RB3: N/A	RB1- RB3: N/A
	RB5- RB7: FALSE	RB5- RB6: FALSE
rb-MappingInfo	Onal aginalObarray	Onal acias Observat
>UL- LogicalChannelMappings	OneLogicalChannel	OneLogicalChannel
>>ul- TransportChannelType	Dch	Dch

>>>tf 2

ocks

>>>rlc-Size

>>>>sizeType

>>>numberOfTbSizeList

>>>>numberOfTransportBl

>>>>logicalChannelList

>>>transportChannelldentit	RB1- RB3: 4	RB1- RB3: 3
y	RB5: 1, RB6: 2,	RB5: 1, RB6: 2
<i>y</i>	RB7: 3,	11201 1, 11201 2
>>logicalChannelIdentity	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
5	RB3: 3	RB3: 3
	RB5- RB7: N/A	RB5- RB6: N/A
>>rlc-SizeList	RB1- RB3:	RB1- RB3:
	configured	configured
	RB5- RB7: N/A	RB5- RB6: N/A
>>mac-	RB1: 1, RB2: 2,	RB1: 1, RB2: 2,
LogicalChannelPriority	RB3: 3	RB3: 3
	RB5- RB7: 5	RB5- RB6: 5
>DL-		
logicalChannelMappingList		
>>Mapping option 1	One mapping option	One mapping option
>>>dl-	Dch	Dch
TransportChannelType		
>>>>transportChannellden	RB1- RB3: 4	RB1- RB3: 3
tity	RB5: 1, RB6: 2,	RB5: 1, RB6: 2,
>>> logicalChannell-landity	RB7: 3, RB8: 5	RB7:4
>>>logicalChannelIdentity	RB1: 1, RB2: 2, RB3: 3	RB1: 1, RB2: 2, RB3: 3
	RB5- RB8: N/A	RB5- RB7: N/A
TrCH INFORMATION PER	NDJ- NDO. N/A	
TrCH		
UL-		
AddReconfTransChInfoList		
>Uplink transport channel	dch	dch
type		
>transportChannelldentity	TrCH1: 1, TrCH2: 2,	TrCH1: 1, TrCH2: 2,
	TrCH3: 3, TrCH4: 4	TrCH3: 3
>transportFormatSet	DedicatedTransChT	DedicatedTransChT
- dynamiaTE information	FS	FS
>>dynamicTF-information		
>>>tf0/ tf0,1	TrCH1: (0x65)	TrCH1: (0x61)
	TrCH2: (0x 99)	TrCH2: (0x 87)
	TrCH3: (0x 40, 1x40)	TrCH3: (0x 144, 1x144)
	TrCH4: (0x144,	1/144
	1x144)	
>>>rlcSize	BitMode	BitMode
>>>>sizeType	TrCH1: type 1: 65	TrCH1: type 1: 61
	TrCH2: type 1: 99	TrCH2: type 1: 87
	TrCH3: type 1: 40	TrCH3: 2: type 2,
	TrCH4: 2: type 2,	part1 = 2, part2 = 0
	part1 = 2, part2 = 0	(144)
	(144)	
>>>>numberOfTbSizeList	TrCH1-2: Zero	TrCH1-2: Zero
	TrCH3-4: Zero, one	TrCH3: Zero, one
>>>>logicalChannelList	All	All
>>>tf 1	TrCH1: (1x39)	TrCH1: (1x39)
	TrCH2: (1x 53)	TrCH2: (1x53)
	TrCH3- TrCH4: N/A	TrCH3: N/A
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One
ocks	TrCH2: One	TrCH2: One
>>>>rlc-Size	TrCH1-2: BitMode	TrCH1-2: BitMode
>>>>sizeTvpe		$T_r \cap \Box 1 \cdot 1 \cdot 20$

TrCH1: 1: 39

TrCH2: 1: 53

TrCH1: all

TrCH1-2: One

TrCH1: (1x42)

TrCH2: (1x63)

TrCH1: One

TrCh2: One

TrCH1: BitMode

TrCH3- TrCH4: N/A

TrCH1: BitMode

TrCH1: 1: 39

TrCH1: 1: 53

TrCH1: all

TrCH1-2: One

TrCH1: (1x42)

TrCH2: (1x63)

TrCH3: N/A

TrCH1: One

TrCh2: One

	1		
>>>>sizeType	TrCH1: type 1: 42	TrCH1: type 1: 42	
	TrCH2: type 1: 63	TrCH2: type 1: 63	
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One	
	TrCH2: One TrCH1: all	TrCH2: One	
>>>>logicalChannelList	TrCH1: all	TrCH1: all TrCH2: all	
>>>tf 3	TrCH1: (1x55)	TrCH1: (1x55)	
>>>(1 3			
	TrCH2: (1x76) TrCH3- TrCH4: N/A	TrCH2: (1x76) TrCH3: N/A	
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One	
ocks	TrCh2: One	TrCh2: One	
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode	
>>>>sizeType	TrCH1: type 1: 55	TrCH1: type 1: 55	
	TrCH2: type 1: 76	TrCH2: type 1: 76	
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One	
	TrCH2: One	TrCH2: One	
>>>logicalChannelList	TrCH1: all	TrCH1: all	
	TrCH2: all	TrCH2: all	
>>>tf 4	TrCH1: (1x58)	TrCH1: (1x58)	
	TrCH2: (1x99)	TrCH2: (1x87)	
	TrCH3- TrCH4: N/A	TrCH3: N/A	
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One	
ocks	TrCh2: One	TrCh2: One	
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode	
>>>>sizeType	TrCH1: type 1: 58	TrCH1: type 1: 58	
<i>.</i>	TrCH2: type 1: 99	TrCH2: type 1: 87	
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One	
	TrCH2: One	TrCH2: One	
>>>logicalChannelList	TrCH1: all	TrCH1: all	
C C	TrCH2: all	TrCH2: all	
>>>tf 5	TrCH1: (1x65)	TrCH1: (1x61)	
	TrCH2- TrCH4: N/A	TrCH2- TrCH4: N/A	
>>>>numberOfTransportBl	TrCH1: One	TrCH1: One	
ocks			
>>>rlc-Size	TrCH1: BitMode	TrCH1: BitMode	
>>>>sizeType	TrCH1: type 1: 42	TrCH1: type 1: 42	
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One	
>>>>logicalChannelList	TrCH1: all	TrCH1: all	
>>semistaticTF-Information			
>>>tti	TrCH1- TrCH3: 20	TrCH1- TrCH2: 20	
	TrCH4: 40	TrCH3: 40	
>>>channelCodingType			
>>>>codingPoto	Convolutional	Convolutional	
>>>>codingRate	Convolutional TrCH1- TrCH2:	TrCH1- TrCH2:	
	Convolutional TrCH1- TrCH2: Third	TrCH1- TrCH2: Third	
	Convolutional TrCH1- TrCH2: Third TrCH3: Half	TrCH1- TrCH2:	
	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third	TrCH1- TrCH2: Third TrCH3: Third	
>>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200	
	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190	
	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH1: 200 TrCH2: 190 TrCH3: 235	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200	
>>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160	
	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12	
>>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0	
>>>rateMatchingAttribute	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12	
>>>rateMatchingAttribute >>>crc-Size DL-	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0	
>>>rateMatchingAttribute >>>crc-Size DL- AddReconfTransChInfoList	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH1: 12 TrCH2: 0	
>>>rateMatchingAttribute >>>crc-Size DL- AddReconfTransChInfoList >Downlink transport	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16	
>>>rateMatchingAttribute >>>crc-Size DL- AddReconfTransChInfoList	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16	
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dI-</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16	
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16 dch	TrCH1- TrCH2:           Third           TrCH3: Third           TrCH1: 200           TrCH2: 190           TrCH3: 160           TrCH1: 12           TrCH2: 0           TrCH3: 16           dch	
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dI-</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16 dch	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16 dch	
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16 dch	TrCH1- TrCH2:           Third           TrCH3: Third           TrCH1: 200           TrCH2: 190           TrCH3: 160           TrCH1: 12           TrCH2: 0           TrCH3: 16           dch	
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16 dch Independent <only on="" td="" tf0="" trch1<=""><td>TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16 dch Independent <only on="" td="" tf0="" trch1<=""></only></td></only>	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16 dch Independent <only on="" td="" tf0="" trch1<=""></only>	
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre>	Convolutional           TrCH1- TrCH2:           Third           TrCH3: Half           TrCH4: Third           TrCH1: 200           TrCH2: 190           TrCH3: 235           TrCH4: 160           TrCH2- TrCH3: 0           TrCH4: 16           dch           Independent           <0nly tf0 on TrCH1	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16 dch Independent <only on="" tf0="" trch1<br="">and tf0/tf1 on</only>	
<pre>&gt;&gt;rateMatchingAttribute &gt;&gt;&gt;crc-Size DL- AddReconfTransChInfoList &gt;Downlink transport channel type &gt;dl- TransportChannelIdentity</pre>	Convolutional TrCH1- TrCH2: Third TrCH3: Half TrCH4: Third TrCH1: 200 TrCH2: 190 TrCH3: 235 TrCH4: 160 TrCH1: 12 TrCH2- TrCH3: 0 TrCH4: 16 dch Independent <only on="" tf0="" trch1<br="">and tf0/tf1 on TrCH5 are different</only>	TrCH1- TrCH2: Third TrCH3: Third TrCH1: 200 TrCH2: 190 TrCH3: 160 TrCH1: 12 TrCH2: 0 TrCH3: 16 dch Independent <only on="" tf0="" trch1<br="">and tf0/tf1 on TrCH4 are different</only>	

>>>>tf0/ tf0,1	TrCH1: (1x0)	TrCH1: (1x0)	
	TrCH5: (0x7, 1x7)	TrCH4: (0x7, 1x7)	
>>>rlcSize	BitMode	bitMode	
>>>>sizeType	TrCH1: type 1: 0	TrCH1: type 1: 0	
	TrCH5: type 1: 7	TrCH4: type 1: 7	
>>>>numberOfTbSizeList	TrCH1: One	TrCH1: One	
	TrCH5: Zero, one	TrCH4: Zero, one	
>>>>logicalChannelList	All	All	
>>>semistaticTF-	same as UL except	same as DL except	
Information	for TrCH5	for TrCH4	
>>>>tti	TrCH5: 20	TrCH4: 20	
>>>>channelCodingType	Convolutional	Convolutional	
>>>>codingRate	TrCH5: Third	TrCH4: Third	
>>>rateMatchingAttribute	TrCH5: 200	TrCH4: 200	
>>>>crc-Size	TrCH5: 12	TrCH4: 12	
>>ULTrCH-Id	TrCH1: 1, TrCH2: 2,	TrCH1: 1, TrCH2: 2,	
	TrCH3: 3, TrCH4: 4,	TrCH3: 3	
>dch-QualityTarget	-3		
>>bler-QualityValue	TrCH1: 7x10 ⁻³	TrCH1: 7x10 ⁻³	
	TrCH2- TrCH5:	TrCH2- TrCH4:	
	Absent	Absent	
TrCH INFORMATION,			
COMMON			
ul-CommonTransChInfo			
>tfcs-ID (TDD only)	1	1	
>sharedChannelIndicator	FALSE	FALSE	
(TDD only)			
> tfc-Subset	Absent, not required	Absent, not required	
>ul-TFCS	Normal TFCI	Normal TFCI	
	signalling	signalling	
>>explicitTFCS-	Complete	Complete	
ConfigurationMode			
>>>ctfcSize	Ctfc6Bit	Ctfc6Bit	
>>>>TFCS representation	Addition	Addition	
>>>>TFC list			
>>>>>TFC 1	(TF0, TF0, TF0,	(TF0, TF0, TF0)	
	TF0)		
>>>>>ctfc	TF0) 0	0	
		0 Computed	
>>>>>ctfc >>>>>gainFactorInform ation	0	•	
>>>>>gainFactorInform	0	•	
>>>>>>gainFactorInform ation	0 Computed	Computed	
>>>>>gainFactorInform ation >>>>>referenceTFCId	0 Computed 0	Computed 0	
>>>>>gainFactorInform ation >>>>>referenceTFCId	0 Computed 0 (TF1, TF0, TF0,	Computed 0	
>>>>>sgainFactorInform ation >>>>>referenceTFCId >>>>>TFC 2	0 Computed 0 (TF1, TF0, TF0, TF0)	Computed 0 (TF1, TF0, TF0)	
>>>>>sgainFactorInform ation >>>>>referenceTFCId >>>>>TFC 2 >>>>>ctfc	0 Computed 0 (TF1, TF0, TF0, TF0) 1	Computed 0 (TF1, TF0, TF0) 1	
>>>>>sgainFactorInform ation >>>>>referenceTFCId >>>>>TFC 2 >>>>>ctfc >>>>>sgainFactorInform ation	0 Computed 0 (TF1, TF0, TF0, TF0) 1	Computed 0 (TF1, TF0, TF0) 1	
>>>>>sgainFactorInform ation >>>>>referenceTFCId >>>>>TFC 2 >>>>>>ctfc >>>>>sgainFactorInform ation >>>>>βc (FDD only)	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A	Computed 0 (TF1, TF0, TF0) 1 Computed N/A	
>>>>>sgainFactorInform ation >>>>>referenceTFCId >>>>>TFC 2 >>>>>>ctfc >>>>>sgainFactorInform ation >>>>>βc (FDD only) >>>>>>βd	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A	Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A	
>>>>>sgainFactorInform ation >>>>>referenceTFCId >>>>>TFC 2 >>>>>sctfc >>>>>sgainFactorInform ation >>>>>βc (FDD only) >>>>>βd >>>>>referenceTFCId	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0	Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0	
>>>>>sgainFactorInform ation >>>>>referenceTFCId >>>>>TFC 2 >>>>>>ctfc >>>>>sgainFactorInform ation >>>>>βc (FDD only) >>>>>>βd	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0,	Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A	
>>>>>sgainFactorInform ation >>>>>referenceTFCId >>>>>TFC 2 >>>>>sgainFactorInform ation >>>>>>βc (FDD only) >>>>>βd >>>>>FeferenceTFCId >>>>>TFC 3	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0)	Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0)	
>>>>>sgainFactorInform ation >>>>>referenceTFCId >>>>>TFC 2 >>>>>sgainFactorInform ation >>>>>>βc (FDD only) >>>>>βd >>>>>FeferenceTFCId >>>>>TFC 3 >>>>>ctfc	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8	Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           N/A           0           (TF2, TF1, TF0)           8	
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0)	Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0)	
>>>>>>gainFactorInform         ation         >>>>>referenceTFCId         >>>>>TFC 2         >>>>>sgainFactorInform         ation         >>>>>sgainFactorInform         ation         >>>>>sp6c (FDD only)         >>>>>>βd         >>>>>>FfC 3         >>>>>>tfc         >>>>>stfc         >>>>>ctfc         >>>>>>sctfc         >>>>>>sctfc         >>>>>>sqainFactorInform         ation	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed	Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed	
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0	Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed 0	
>>>>>>gainFactorInform         ation         >>>>>referenceTFCId         >>>>>TFC 2         >>>>>sgainFactorInform         ation         >>>>>sgainFactorInform         ation         >>>>>sp6c (FDD only)         >>>>>>βd         >>>>>>FfC 3         >>>>>>tfc         >>>>>stfc         >>>>>ctfc         >>>>>>sctfc         >>>>>>sctfc         >>>>>>sqainFactorInform         ation	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0,	Computed 0 (TF1, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0) 8 Computed	
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0, TF0)	Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)	
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0) 15	Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15	
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0, TF0)	Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)	
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0) 15	Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15	
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0) 15	Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15	
$\begin{array}{l} >>>>>> gainFactorInform \\ ation \\ >>>>>TFC 2 \\ \\ >>>>>TFC 2 \\ \\ >>>>>>gainFactorInform \\ ation \\ \\ >>>>>>\betac (FDD only) \\ \\ >>>>>>\betad \\ \\ >>>>>>\betad \\ \\ >>>>>TFC 3 \\ \\ \\ >>>>>>tfc 3 \\ \\ \\ >>>>>tfc 4 \\ \\ \\ >>>>>>tfc 4 \\ \\ \\ >>>>>>TFC 4 \\ \\ \\ \\ >>>>>TFC 4 \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0) 15	Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15	
$>>>>>sgainFactorInform ation \\ >>>>>referenceTFCId \\ >>>>>TFC 2 \\ >>>>>stfc 2 \\ >>>>>stfc 2 \\ >>>>>sgainFactorInform ation \\ >>>>>>bc (FDD only) \\ >>>>>bfd \\ >>>>>bfd \\ >>>>>stfc 3 \\ >>>>>tfc 3 \\ >>>>>tfc 4 \\ >>>>>tfc 4 \\ >>>>>tfc 4 \\ >>>>>stfc 4 \\ >>>>>bfc (FDD only) \\ >>>>>tfc 4 \\ >>>>>bfc (FDD only) \\ >>>>>tfc 4 \\ >>>>>bfc (FDD only) \\ >>>>>tfc 4 \\ >>>>>tfc 4 \\ >>>>>bfc (FDD only) \\ >>>>>bfc (FDD only) \\ >>>>>tfc 4 \\ >>>>>>>>>>tfc 4 \\ >>>>>>bfc (FDD only) \\ >>>>>bfc (FDD only) \\ >>>>>>>>bfc (FDD only) \\ >>>>>bfc (FDD only) \\ >>>>>bfc (FDD only) \\ $	0 Computed 0 (TF1, TF0, TF0, TF0) 1 Computed N/A N/A 0 (TF2, TF1, TF0, TF0) 8 Computed 0 (TF3, TF2, TF0, TF0) 15	Computed           0           (TF1, TF0, TF0)           1           Computed           N/A           0           (TF2, TF1, TF0)           8           Computed           0           (TF3, TF2, TF0)           15	

>>>>>TFC 5	(TF4, TF3, TF0, TF0)	(TF4, TF3, TF0)	
>>>>>ctfc	22	22	
>>>>>>sgainFactorInform	Computed	Computed	
ation	F		
>>>>>>referenceTFCId	0	0	
>>>>>TFC 6	(TF5, TF4, TF1,	(TF5, TF4, TF0)	
	TF0)		
>>>>>ctfc	59	29	
>>>>>>gainFactorInform	Computed	Computed	
ation			
>>>>>>βc (FDD only)			
>>>>>βd			
>>>>>>referenceTFCId	0	0	
>>>>>TFC 7	(TF0, TF0, TF0,	(TF0, TF0, TF1)	
	TF1)		
>>>>>>ctfc	60 October 1	30 Oceano de la	
>>>>>>sgainFactorInform	Computed	Computed	
ation >>>>>>referenceTFCId	0		
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	•	0 (TE1 TE0 TE1)	
>>>>>>	(TF1, TF0, TF0, TF1)	(TF1, TF0, TF1)	
>>>>>ctfc	61	31	
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	computed	computed	
ation	computed	compared	
>>>>>βc (FDD only)			
>>>>>βd			
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	0	0	
>>>>>TFC 9	(TF2, TF1, TF0,	0 (TF2, TF1, TF1)	
	TF1)	(11 2, 11 1, 11 1)	
>>>>>ctfc	68	38	
>>>>>>gainFactorInform	computed	computed	
ation	•		
>>>>>>referenceTFCId			
>>>>>TFC 10	(TF3, TF2, TF0,	(TF3, TF2, TF1)	
	TF1)		
>>>>>>ctfc	75	45	
>>>>>>sgainFactorInform	computed	computed	
ation			
>>>>>βc (FDD only)			
>>>>>βd			
>>>>>>referenceTFCId	0		
>>>>>TFC 11	(TF4, TF3, TF0,	(TF4, TF3, TF1)	
· · · · · · · · otto	TF1)	50	
>>>>>>ctfc >>>>>>gainFactorInform	82 computed	52 computed	
ation	computed	computed	
>>>>>>>referenceTFCId			
>>>>>TFC 12	(TF5, TF4, TF1,	(TF5, TF4, TF1)	
	TF1)	(	
>>>>>ctfc	97	59	
>>>>>>gainFactorInform	signalled	signalled	
ation		-	
>>>>>>βc (FDD only)	11	11	
>>>>>βd	15	15	
>>>>>>referenceTFCId			
> TFC subset list		<u> </u>	
>>TFC subset 1	(speech rate 10.2)	(speech rate 7.4)	
>>TFC subset 1 >>> Allowed transport	(speech rate 10.2) (TFC1, TFC2,	(speech rate 7.4) (TFC1, TFC2,	
>>TFC subset 1 >>> Allowed transport format combination list	(TFC1, TFC2,	(TFC1, TFC2,	
>>> Allowed transport			

Allowed transport			
>>> Allowed transport format combination list	(TFC1, TFC2,	(TFC1, TFC2,	
format combination list	TFC7, TFC8, TFC5,	TFC7, TFC8, TFC5,	
TEO autoratio	TFC11)	TFC11)	
>>TFC subset 3	(speech rate 5.9)	(speech rate 5.9)	
>>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,	
format combination list	TFC7, TFC8, TFC4,	TFC7, TFC8, TFC4,	
	TFC10)	TFC10)	
>>TFC subset 4	(speech rate 4.75)	(speech rate 4.75)	
>>> Allowed transport	(TFC1, TFC2,	(TFC1, TFC2,	
format combination list	TFC7, TFC8, TFC3,	TFC7, TFC8, TFC3,	
	TFC9)	TFC9)	
dl-CommonTransChInfo			
>tfcs-SignallingMode	Independent	Independent	
ul-CommonTransChInfo			
>tfcs-ID (TDD only)	1	1	
>sharedChannelIndicator	FALSE	FALSE	
(TDD only)			
> tfc-Subset	Absent, not required	Absent, not required	
>dl-TFCS	Normal TFCI	Normal TFCI	
	signalling	signalling	
>>explicitTFCS-	Complete	Complete	
ConfigurationMode			
>>>ctfcSize	Ctfc6Bit	Ctfc6Bit	
>>>>TFCS representation	Addition	Addition	
>>>>TFCS list			
>>>>>TFC 1	(TF0, TF0, TF0,	(TF0, TF0, TF0,	
	TF0, TF0)	TF0)	
>>>>>>ctfc	0	0	
>>>>>TFC 2	(TF1, TF0, TF0,	(TF1, TF0, TF0,	
	TF0, TF0)	TF0)	
>>>>>>ctfc	1	1	
>>>>>TFC 3	(TF2, TF1, TF0,	(TF2, TF1, TF0,	
	TF0, TF0)	TF0)	
>>>>>ctfc	8	8	
>>>>>TFC 4	(TF3, TF2, TF0,	(TF3, TF2, TF0,	
_	TF0, TF0)	TF0)	
>>>>>>ctfc	15	15	
>>>>>TFC 5	(TF4, TF3, TF0,	(TF4, TF3, TF0,	
	TF0, TF0)	TF0)	
>>>>>>ctfc	22	22	
>>>>TFC 6	(TF5, TF4, TF1,	(TF5, TF4, TF0,	
	TF0, TF0)	(110, 111, 110, TF0)	
>>>>>ctfc	59	29	
>>>>>TFC 7	(TF0, TF0, TF0,	(TF0, TF0, TF1,	
	TF1, TF0)	(110, 110, 111, TF0)	
>>>>>ctfc	60	30	
>>>>>TFC 8	(TF1, TF0, TF0,	(TF1, TF0, TF1,	
	TF1, TF0)	(TF1, TF0, TF1, TF0)	
>>>>>ctfc	61	31	
>>>>>TFC 9	(TF2, TF1, TF0,	(TF2, TF1, TF1,	
	TF1, TF0)	(1F2, 1F1, 1F1, TF0)	
~~~~~	, ,	37	
>>>>>>Ctfc	68 (TE3 TE2 TE0		
>>>>>TFC 10	(TF3, TF2, TF0,	(TF3, TF2, TF1,	
	TF1, TF0)	TF0)	
>>>>>>ctfc	75	55	
>>>>>TFC 11	(TF4, TF3, TF0,	(TF4, TF3, TF1,	
	TF1, TF0)	TF0)	
>>>>>>ctfc	82	52	
>>>>>TFC 12	(TF5, TF4, TF1,	(TF5, TF4, TF1,	
_	TF1, TF0)	TF0)	
>>>>>>ctfc	119	59	
>>>>>TFC 13	(TF0, TF0, TF0,	(TF0, TF0, TF0,	
	TF0, TF1)	TF1)	
>>>>>>ctfc	120	60	

>>>>TFC 14

>>>>>ctfc

(TF1, TF0, TF0,
TF1)
61
(TF2, TF1, TF0,
TF1)
68
(TF3, TF2, TF0,
TF1)
75
(TF4, TF3, TF0,
TF1)
82
82 (TF5, TF4, TF0,

>>>>>>ctfc	121	61	
>>>>>TFC 15	(TF2, TF1, TF0,	(TF2, TF1, TF0,	
	TF0, TF1)	TF1)	
>>>>>ctfc	128	68	
>>>>>TFC 16	(TF3, TF2, TF0,	(TF3, TF2, TF0,	
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>		• • • • •	
-	TF0, TF1)	TF1)	
>>>>>>ctfc	135	75	
>>>>>TFC 17	(TF4, TF3, TF0,	(TF4, TF3, TF0,	
	TF0, TF1)	TF1)	
>>>>>ctfc	152	82	
>>>>>TFC 18	-	_	
>>>>>	(TF5, TF4, TF1,	(TF5, TF4, TF0,	
	TF0, TF1)	TF1)	
>>>>>>ctfc	189	89	
>>>>>TFC 19	(TF0, TF0, TF0,	(TF0, TF0, TF1,	
	TF1, TF1)	TF1)	
>>>>>ctfc	180	90	
>>>>>TFC 20	(TF1, TF0, TF0,	(TF1, TF0, TF1,	
	TF1, TF1)	TF1)	
>>>>>ctfc	181	91	
>>>>>TFC 21	(TF2, TF1, TF0,	(TF2, TF1, TF1,	
	TF1, TF1)	(112, 111, 111, TF1)	
		/	
>>>>>>ctfc	188	98	
>>>>>TFC 22	(TF3, TF2, TF0,	(TF3, TF2, TF1,	
	TF1, TF1)	TF1)	
>>>>>ctfc	195	105	
>>>>>TFC 23	(TF4, TF3, TF0,	(TF4, TF3, TF1,	
>>>>>1FG 23			
	TF1, TF1)	TF1)	
>>>>>>ctfc	239	112	
>>>>>TFC 24	(TF5, TF4, TF1,	(TF5, TF4, TF1,	
	TF1, TF1)	TF1)	
>>>>>ctfc	218	119	
	210	115	
PhyCH INFORMATION			
FDD			
UL-DPCH-InfoPredef			
>ul-DPCH-			
PowerControlInfo			
>>powerControlAlgorithm	Algorithm 1	Algorithm 1	
>>>tpcStepSize	1	1	
>tfci-Existence	TRUE	TRUE	
>puncturingLimit	0.88	0.88	
DL-			
CommonInformationPredef			
>dl-DPCH-InfoCommon			
>>spreadingFactor	128	128	
>>pilotBits	4	4	
>>positionFixed	Fixed	Fixed	
	T IXEU	T IXEU	
PhyCH INFORMATION			
3.84 Mcps TDD			
UL-DPCH-InfoPredef		1	
>ul-DPCH-			
PowerControlInfo			
>>dpch-ConstantValue	<u>-200</u>	<u>-200</u>	
>commonTimeslotInfo			
>>secondInterleavingMode	frameRelated	frameRelated	
>>tfci-Coding	16	16	
>>puncturingLimit	0.60	0.60	
>>repetitionPeriodAndLeng	repetitionPeriod1	repetitionPeriod1	
th		·	
DL-			
DL- CommonInformationPredef			
DL-			

(TF1, TF0, TF0, TF0, TF1)

121

>>>secondInterleavingMod	frameRelated	frameRelated
е		
>>>tfci-Coding	16	16
>>>puncturingLimit	0.60	0.60
>>>repetitionPeriodAndLe	repetitionPeriod1	repetitionPeriod1
ngth		
PhyCH INFORMATION		
1.28 Mcps TDD		
UL-DPCH-InfoPredef		
>commonTimeslotInfo		
>>secondInterleavingMode	frame Related	frame Related
>>tfci-Coding	16	16
>>puncturingLimit	0.64	0.64
>>repetitionPeriodAndLeng	repetitionPeriod1	repetitionPeriod1
th		
DL-		
CommonInformationPredef		
>dl-DPCH-InfoCommon		
>>commonTimeslotInfo		
>>>secondInterleavingMod	frame Related	frame Related
e		
>>>tfci-Coding	16	16
>>>puncturingLimit	0.64	0.64
>>>repetitionPeriodAndLe ngth	repetitionPeriod1	repetitionPeriod1

CR-Form-vi				
¥	25.331 CR 1541 # rev - ^{# Current version:} 3.11.0 [#]			
For <u>HELP</u> on L	using this form, see bottom of this page or look at the pop-up text over the # symbols.			
Proposed change	affects: UICC apps# ME X Radio Access Network X Core Network			
Title: #	Handling of UE internal measurement information in broadcast			
Source: #	TSG-RAN WG2			
Work item code: भ्र	TEI Date: # 24/06/2002			
Category: ¥	Use one of the following categories: Ise one of the following releases: F (correction) 2 (GSM Phase 2) A (corresponds to a correction in an earlier release) R96 (Release 1996) B (addition of feature), R97 (Release 1997) C (functional modification of feature) R98 (Release 1998) D (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) e: # The handling of the "UE internal measurement system information" IE which the UE may receive in SIB11/SIB12 is currently unclear in the specifications.			
Consequences if not approved:	# Handling of UE internal measurement system information received by the UE in SIB11/12 will remain unclear.			
Clauses affected:	# 10.3.7.47;10.3.7.81; 11.3			
Other specs affected:	Y N X Other core specifications % X Test specifications % X O&M Specifications %			
Other comments:	ж			

How to create CRs using this form:

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

Information element/Group name	Need	Multi	Type and reference	Semantics description
Use of HCS	MP		Enumerated (Not used, used)	Indicates if the serving cell belongs to a HCS structure
Cell selection and reselection quality measure	MP		Enumerated (CPICH Ec/N0, CPICH RSCP)	Choice of measurement (CPICH Ec/N0 or CPICH RSCP) to use as quality measure Q.
Intra-frequency measurement system information	OP		Intra- frequency measuremen t system information 10.3.7.40	
Inter-frequency measurement system information	OP		Inter- frequency measuremen t system information 10.3.7.20	
Inter-RAT measurement system information	OP		Inter-RAT measuremen t system information 10.3.7.31	
Traffic volume measurement system information	OP		Traffic volume measuremen t system information 10.3.7.73	
UE Internal measurement system information	OP		UE Internal measuremen t system information 10.3.7.81	

10.3.7.47 Measurement control system information

10.3.7.81 UE internal measurement system information Void

Information Element/Group name	Need	Multi	Type and reference	Semantics description
UE internal measurement identity	MÐ		Measuremen t-identity 10.3.7.48	The UE internal measurement identity has default value 5.
UE internal measurement quantity	MP		UE internal measuremen t quantity 10.3.7.79	

11.3 Information element definitions

// some parts are ommitted.

}

MeasurementControlSysInfo ::= SEOUENCE { CHOICE { use-of-HCS SEQUENCE hcs-not-used { cellSelectQualityMeasure CHOICE { SEQUENCE cpich-RSCP { intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-RSCP OPTIONAL, interFreqMeasurementSysInfo InterFreqMeasurementSysInfo-RSCP OPTIONAL }, cpich-Ec-N0 SEQUENCE { intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-ECN0 OPTIONAL, OPTIONAL interFreqMeasurementSysInfo InterFreqMeasurementSysInfo-ECN0 } }, interRATMeasurementSysInfo InterRATMeasurementSysInfo-B OPTIONAL }, hcs-used SEQUENCE { CHOICE { cellSelectQualityMeasure cpich-RSCP SEQUENCE { intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-HCS-RSCP OPTIONAL, interFreqMeasurementSysInfo InterFreqMeasurementSysInfo-HCS-RSCP OPTIONAL }, cpich-Ec-N0 SEQUENCE { intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-HCS-ECN0 OPTIONAL. ${\tt interFreqMeasurementSysInfo}$ InterFreqMeasurementSysInfo-HCS-ECN0 OPTIONAL } }, interRATMeasurementSysInfo InterRATMeasurementSysInfo OPTIONAL } }, OPTIONAL, trafficVolumeMeasSysInfo TrafficVolumeMeasSysInfo -- dummy is not used in this version of specification and it shall be ignored by the UE. dummy ue-InternalMeasurementSysInfo UE-InternalMeasurementSysInfo OPTIONAL

CR-Form-vi				
¥	25.331 CR 1542 # rev - # Current version: 4.5.0 #			
For <u>HELP</u> on u	sing this form, see bottom of this page or look at the pop-up text over the $#$ symbols.			
Proposed change	affects: UICC apps# ME X Radio Access Network X Core Network			
Title: #	Handling of UE internal measurement information in broadcast			
Source: ೫	TSG-RAN WG2			
Work item code: ೫	TEI Date: # 24/06/2002			
Category: भ्र Reason for change Summary of chang	Use one of the following categories: Ise one of the following releases: F (correction) 2 (GSM Phase 2) A (corresponds to a correction in an earlier release) R96 (Release 1996) B (addition of feature), R97 (Release 1997) C (functional modification of feature) R98 (Release 1998) D (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) e: X The handling of the "UE internal measurement system information" IE which the UE may receive in SIB11/SIB12 is currently unclear in the specifications.			
Consequences if not approved:	Handling of UE internal measurement system information received by the UE in SIB11/12 will remain unclear.			
Clauses affected:	# 10.3.7.47;10.3.7.81; 11.3			
Other specs affected:	Y N % X Other core specifications % X Test specifications X O&M Specifications			
Other comments:	x			

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Information element/Group name	Need	Multi	Type and reference	Semantics description
Use of HCS	MP		Enumerated (Not used, used)	Indicates if the serving cell belongs to a HCS structure
Cell selection and reselection quality measure	MP		Enumerated (CPICH Ec/N0, CPICH RSCP)	Choice of measurement (CPICH Ec/N0 or CPICH RSCP) to use as quality measure Q.
Intra-frequency measurement system information	OP		Intra- frequency measuremen t system information 10.3.7.40	
Inter-frequency measurement system information	OP		Inter- frequency measuremen t system information 10.3.7.20	
Inter-RAT measurement system information	OP		Inter-RAT measuremen t system information 10.3.7.31	
Traffic volume measurement system information	OP		Traffic volume measuremen t system information 10.3.7.73	
UE Internal measurement system information	OP		UE Internal measuremen t system information 10.3.7.81	

10.3.7.47 Measurement control system information

10.3.7.81 UE internal measurement system information Void

Information Element/Group name	Need	Multi	Type and reference	Semantics description
UE internal measurement identity	MÐ		Measuremen t-identity 10.3.7.48	The UE internal measurement identity has default value 5.
UE internal measurement quantity	MP		UE internal measuremen t quantity 10.3.7.79	

11.3 Information element definitions

// some parts are ommitted.

}

MeasurementControlSysInfo ::= SEOUENCE { CHOICE { use-of-HCS SEQUENCE hcs-not-used { cellSelectQualityMeasure CHOICE { SEQUENCE cpich-RSCP { intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-RSCP OPTIONAL, interFreqMeasurementSysInfo InterFreqMeasurementSysInfo-RSCP OPTIONAL }, cpich-Ec-N0 SEQUENCE { intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-ECN0 OPTIONAL, OPTIONAL interFreqMeasurementSysInfo InterFreqMeasurementSysInfo-ECN0 } }, interRATMeasurementSysInfo InterRATMeasurementSysInfo-B OPTIONAL }, hcs-used SEQUENCE { CHOICE { cellSelectQualityMeasure cpich-RSCP SEQUENCE { intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-HCS-RSCP OPTIONAL, interFreqMeasurementSysInfo InterFreqMeasurementSysInfo-HCS-RSCP OPTIONAL }, cpich-Ec-N0 SEQUENCE { intraFreqMeasurementSysInfo IntraFreqMeasurementSysInfo-HCS-ECN0 OPTIONAL. ${\tt interFreqMeasurementSysInfo}$ InterFreqMeasurementSysInfo-HCS-ECN0 OPTIONAL } }, interRATMeasurementSysInfo InterRATMeasurementSysInfo OPTIONAL } }, OPTIONAL, trafficVolumeMeasSysInfo TrafficVolumeMeasSysInfo -- dummy is not used in this version of specification and it shall be ignored by the UE. dummy ue-InternalMeasurementSysInfo UE-InternalMeasurementSysInfo OPTIONAL

¥	25.331 CR 1543 # rev - # Current version: 5.1.0 #						
For <u>HELP</u> on u	sing this form, see bottom of this page or look at the pop-up text over the $#$ symbols.						
Proposed change	affects: UICC apps# ME X Radio Access Network X Core Network						
Title: #	Handling of UE internal measurement information in broadcast						
Source: ೫	TSG-RAN WG2						
Work item code: ೫	TEI Date: # 24/06/2002						
Category: अ Reason for change Summary of chang	Use one of the following categories: Use one of the following releases: F (correction) 2 (GSM Phase 2) A (corresponds to a correction in an earlier release) R96 (Release 1996) B (addition of feature), R97 (Release 1997) C (functional modification of feature) R98 (Release 1998) D (editorial modification) R99 (Release 1999) Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6) Rel-6 (Release 6)						
Consequences if not approved:	Handling of UE internal measurement system information received by the UE in SIB11/12 will remain unclear.						
Clauses affected:	# 10.3.7.47;10.3.7.81; 11.3						
Other specs affected:	Y N % X Other core specifications % X Test specifications X O&M Specifications						
Other comments:	¥						

How to create CRs using this form:

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