

**3GPP TSG-T (Terminals) Meeting #19**  
**Birmingham, UK**  
**12 - 14 March, 2003**

**TP-030013**

**3GPP TSG-T WG1#18**  
**San Antonio, US, 10- 14 February 2003**

**T1-030232**

**Title:** Response LS on proposed RAB configuration used for RLC testing  
**Response to:** 1. LS on applicability of the RAB configuration used for RLC testing (T1-030022/R2-023287, to T1 from RAN2); and  
2. Verification of the L1 parameters of the RAB configuration used for RLC testing (T1-030132/R1-030199, to T1 from RAN1)

**Release:** R99

**Source:** T1  
**To:** RAN1, RAN2  
**Cc:** T

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**Attachments:** T1-030227 CR to 34.108 R99  
T1-030228 CR to 34.108 Rel-4

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## 1. Overall Description:

T1 thanks RAN1 and RAN2 for their liaison statements regarding proposal for RAB configuration for RLC testing. At the T1#18 meeting in San Antonio 10-14 February 2003 T1 discussed the two configuration options proposed by RAN2 in the LS in T1-030022/R2-023287. To minimise the impact on the RLC test cases, which are currently under verification and validation, T1 have decided to adopt configuration#2.

### **Configuration #2**

*Configuration for RLC test for 7 bits LI:*

*The configurations are based on the Interactive or background / UL:8 DL 8 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH. However, the RLC PDU size for AM RLC testing has been set to 128, (i.e. the same as for AM SRBs), so that no change on the window size was required in order to fit into 10 kbytes.*

*Configuration for RLC test for 15 bits LI:*

*The configurations haven't been changed. They are still based on the Interactive or background / UL:64 DL 64 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see TS 34.108 clause 6.10.2.4.1.26). As the window sizes have not been changed, the configuration for RLC-AM (and therefore the corresponding tests) is only applicable to 128 kbps UE class or higher (which have a RLC Buffer size of 50 kbytes at least).*

Attached are the R99 and Rel-4 CRs to 34.108 including the changes as proposed by RAN1 and RAN2 for configuration#2. These CRs also includes the update of the rate matching attribute in clause 6.11.3 (to 135 - 175) as proposed by RAN1 in the LS in T1-030132/R1-030199.

## 2. Actions:

None

**3. Date of Next T1 Meetings:**

T1#19	12 – 16 May 2003	Seoul, Korea
T1#20	28 July – 1 August 2003	Munich, Germany

## CHANGE REQUEST

# **34.108 CR CRNum** # rev - # Current version: **3.10.0** #

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

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

<b>Title:</b>	# CR to 34.108 R99; Update of default configurations to enable testing of low end UEs		
<b>Source:</b>	# Ericsson		
<b>Work item code:</b>	# TEI	<b>Date:</b>	# 14/02/2003
<b>Category:</b>	# <b>F</b>	<b>Release:</b>	# R99
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)		2 (GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)	R96 (Release 1996)	
	<b>B</b> (addition of feature),	R97 (Release 1997)	
	<b>C</b> (functional modification of feature)	R98 (Release 1998)	
	<b>D</b> (editorial modification)	R99 (Release 1999)	
	Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Rel-4 (Release 4)	
		Rel-5 (Release 5)	
		Rel-6 (Release 6)	

**Reason for change:** # The current configurations in 34.108 and 34.123-1 do not allow testing of all UE classes. This contribution proposes a modified configuration to allow testing of UEs with limited capabilities (10 kbyte UE memory and no TC support).

**Summary of change:** # The following changes are proposed:

1. The default RLC window size for SRB2,3,4 is changed from 128 to 32.
2. The Common Radio Bearer configurations used for RLC tests is modified:
  - The TFS for the UM tests with 7 bit Length indicators no longer includes more than 1 TB, thus remaining below the UE capability on 'Maximum sum of number of bits of all transport blocks being received at an arbitrary time instant' of the 32kbps UE class (640 bits). In addition the TTI is updated to 40ms in order to align to the existing UL/DL 8/8kbps RAB.
  - The PDU size for AM tests with 7bit Length indicators is changed from 320 to 128. This allows the current RLC window sizes to be used which limits the impact on the existing L2 test cases.
  - The RLC PDU size as well as the RLC window size for testing of 15 bit length indicators are unchanged. This implies that only UEs with >50 kbyte RLC buffer memory can be tested with 15 bit length indicators. If this is unacceptable, the RLC window size could potentially be decreased for RLC tests with 15 bit LIs.
  - The L1 parameters are modified since the current values seem incorrect. The values have been confirmed by RAN1 (in LS in T1-030132/R1-

	030199).
<b>Consequences if not approved:</b>	⌘ L2 testing can not be performed on lower UE classes

<b>Clauses affected:</b>	⌘ 6.11 and 9.1.1								
<b>Other specs affected:</b>	<table border="1"> <thead> <tr> <th>Y</th> <th>N</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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<input checked="" type="checkbox"/>	<input type="checkbox"/>								
<b>Other comments:</b>	⌘								

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

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

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

<Start of modified section>

## 6.11 Common Radio Bearer configurations for other test purposes

The common radio bearer configurations are used for functional testing of various UE functions. Only common configurations that are used by multiple test cases and are not covered by the reference radio bearer configurations in clause 6.10 are specified in the present clause. Radio bearer configurations only used by a single test case are specified in the actual test case itself.

NOTE: If not specifically specified then the mid-value of the RM attribute value range as specified by the actual reference radio bearer configuration shall be applied for testing.

### 6.11.1 Unacknowledged Mode Radio Bearer configuration (7 bit Length Indicator)

This configuration is based on the Interactive or background / UL:864 DL 864 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see TS 34.108 clause 6.10.2.4.1.23a6) with the transport channels parameters of the RAB and TFCS defined as followsed:

**Transport channel parameters for the Uplink RAB**

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	UM	
	Payload sizes, bit	328	
	Max data rate, bps	<del>8200</del> 65600	
	UMD PDU header, bit	8	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	336	
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		<del>TF2, bits</del>	<del>2x336</del> (note)
		<del>TF3, bits</del>	<del>3x336</del> (note)
		<del>TF4, bits</del>	<del>4x336</del> (note)
	TTI, ms	<del>20</del> 40	
	Coding type	<del>TCC</del> 1/3	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	<del>1080</del> 4236	
	Uplink: Max number of bits/radio frame before rate matching	<del>270</del> 2148	
RM attribute	<del>135-175</del> 130-170		
<b>NOTE:— This TFI is not applied to TFS for RLC test cases.</b>			

### TFCS

TFCS size	4
TFCS	( <del>64</del> 8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

## Transport channel parameters for the Downlink RAB

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	UM	
	Payload sizes, bit	328	
	Max data rate, bps	<del>8200</del> 65600	
	UMD PDU header, bit	8	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	336	
	TFS	TF0, bits	0x336
		TF1, bits	1x336
		<del>TF2, bits</del>	<del>2x336 (note)</del>
		<del>TF3, bits</del>	<del>3x336 (note)</del>
		<del>TF4, bits</del>	<del>4x336 (note)</del>
	TTI, ms	<del>2040</del>	
	Coding type	<del>CC 1/3TC</del>	
	CRC, bit	16	
Max number of bits/TTI after channel coding	<del>1080</del> 4236		
RM attribute	<del>135-175</del> 130-170		

NOTE: — This TFI is not applied to TFS for RLC test cases.

## TFCS

TFCS size	4
TFCS	( <del>64</del> 8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

## 6.11.2 Unacknowledged Mode Radio Bearer configuration (15 bit Length Indicator)

This configuration is based on the Interactive or background / UL:64 DL 64 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see TS 34.108 clause 6.10.2.4.1.26) with the transport channels parameters of the RAB defined as followed:

## Transport channel parameters for the Uplink RAB

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	UM	
	Payload sizes, bit	1336	
	Max data rate, bps	66800	
	UMD PDU header, bit	8	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4092 <del>4236</del>	
	Uplink: Max number of bits/radio frame before rate matching	2046 <del>2118</del>	
	RM attribute	130-170	

## Transport channel parameters for the Downlink RAB

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	UM	
	Payload sizes, bit	1336	
	Max data rate, bps	66800	
	UMD PDU header, bit	8	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4092 <del>4236</del>	
	RM attribute	130-170	

## 6.11.3 Acknowledged Mode Radio Bearer configuration (7 bit Length Indicator)

~~Transport channel parameters for the Uplink RAB~~

See clause 6.10.2.4.1.24.1. Note that TF2, TF3, and TF4 are not applied to the TFS for RLC tests, so the TFCS is defined as follows:

**TFCS**

TFCS-size	4
TFCS	(64 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

Transport channel parameters for the Downlink RAB

See clause 6.10.2.4.1.25.2. Note that TF2, TF3, and TF4 are not applied to the TFS for RLC tests, so TFCS is defined as follows:

**TFCS**

<u>TFCS size</u>	4
<u>TFCS</u>	(64 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

Transport channel parameters for the Uplink RAB

<u>Higher layer</u>	<u>RAB/Signalling RB</u>	<u>RAB</u>	
<u>RLC</u>	<u>Logical channel type</u>	<u>DTCH</u>	
	<u>RLC mode</u>	<u>AM</u>	
	<u>Payload sizes, bit</u>	<u>128</u>	
	<u>Max data rate, bps</u>	<u>6400</u>	
	<u>UMD PDU header, bit</u>	<u>16</u>	
<u>MAC</u>	<u>MAC header, bit</u>	<u>0</u>	
	<u>MAC multiplexing</u>	<u>N/A</u>	
<u>Layer 1</u>	<u>TrCH type</u>	<u>DCH</u>	
	<u>TB sizes, bit</u>	<u>144</u>	
	<u>TFS</u>	<u>0x144</u>	<u>0x144</u>
		<u>1x144</u>	<u>1x144</u>
	<u>TTI, ms</u>	<u>20</u>	
	<u>Coding type</u>	<u>CC 1/3</u>	
	<u>CRC, bit</u>	<u>16</u>	
	<u>Max number of bits/TTI after channel coding</u>	<u>504</u>	
	<u>Uplink: Max number of bits/radio frame before rate matching</u>	<u>252</u>	
	<u>RM attribute</u>	<u>135-175</u>	

**TFCS**

<u>TFCS size</u>	4
<u>TFCS</u>	(RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)



**Transport channel parameters for the Downlink RAB**

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	AM	
	Payload sizes, bit	128	
	Max data rate, bps	6400	
	UMD PDU header, bit	16	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	144	
	TFS	0x144	0x144
		1x144	1x144
	TTI, ms	20	
	Coding type	CC 1/3	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	504	
	RM attribute	135-175	

**TFCS**

TFCS size	4
TFCS	(RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

**6.11.4 Acknowledged Mode Radio Bearer configuration (15 bit Length Indicator)**

This configuration is based on the Interactive or background / UL:64 DL 64 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see TS 34.108 clause 6.10.2.4.1.26) with the transport channels parameters of the RAB defined as followed.

**Transport channel parameters for the Uplink RAB**

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	AM	
	Payload sizes, bit	1328	
	Max data rate, bps	66400	
	AMD PDU header, bit	16	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4092 <del>4236</del>	
	Uplink: Max number of bits/radio frame before rate matching	2046 <del>2118</del>	
RM attribute	130-170		

## Transport channel parameters for the Downlink RAB

Higher layer	RAB/Signalling RB		RAB
RLC	Logical channel type		DTCH
	RLC mode		AM
	Payload sizes, bit		1328
	Max data rate, bps		66400
	AMD PDU header, bit		16
MAC	MAC header, bit		0
	MAC multiplexing		N/A
Layer 1	TrCH type		DCH
	TB sizes, bit		1344
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms		20
	Coding type		TC
	CRC, bit		16
	Max number of bits/TTI after channel coding		<del>4092</del> 4236
RM attribute		130-170	

&lt;End of modified section&gt;

&lt;Start of next modified section&gt;

### 9.1.1 Default RRC Message Contents (FDD)

&lt;Skip until first modified default message&gt;

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL\_DCH)

Information Element	Value/remark
Message Type	
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST" message
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Activation time	Not Present(Now)
New U-RNTI	
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
New C-RNTI	Not present
RRC State Indicator	CELL_DCH
UTRAN DRX cycle length coefficient	9
Capability update requirement	
- UE radio access FDD capability update requirement	TRUE
- UE radio access TDD capability update requirement	FALSE
- System specific capability update requirement list	Gsm
Signalling RB information to setup	(UM DCCH for RRC)
- RB identity	Not present
- CHOICE RLC info type	
- RLC info	
- CHOICE Uplink RLC mode	UM RLC
- Transmission RLC discard	Not present
- CHOICE Downlink RLC mode	UM RLC
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	1
- CHOICE RLC size list	Configured
- MAC logical channel priority	1
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	1
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	1
- CHOICE RLC size list	Explicit List
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	1
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	1
Signalling RB information to setup	(AM DCCH for RRC)
- RB identity	Not Present
- CHOICE RLC info type	

Information Element	Value/remark
- RLC info	
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	No discard
- MAX_DAT	15
- Transmission window size	42832
- Timer_RST	500
- Max_RST	1
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Window	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	42832
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	2
- CHOICE RLC size list	Configured
- MAC logical channel priority	2
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	2
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	2
- CHOICE RLC size list	Explicit List
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	2
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	2
Signalling RB information to setup	(AM DCCH for NAS_DT High priority)
- RB identity	Not Present
- CHOICE RLC info type	
- RLC info	
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	No discard
- MAX_DAT	15
- Transmission window size	42832
- Timer_RST	500
- Max_RST	1
- Polling info	

Information Element	Value/remark
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Window	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	<del>428</del> 32
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	3
- CHOICE RLC size list	Configured
- MAC logical channel priority	3
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	3
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	3
- CHOICE RLC size list	Explicit List
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	3
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	3
Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)
- RB identity	Not present
- CHOICE RLC info type	
- RLC info	
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	No discard
- MAX_DAT	15
- Transmission window size	<del>428</del> 32
- Timer_RST	500
- Max_RST	1
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Window	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC

Information Element	Value/remark
- In-sequence delivery	TRUE
- Receiving window size	<del>428</del> 32
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not Present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	4
- CHOICE RLC size list	Configured
- MAC logical channel priority	4
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	4
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	4
- CHOICE RLC size list	Explicit List
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	4
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	4
UL Transport channel information for all transport channels	
- PRACH TFCS	Not Present
- CHOICE Mode	FDD
- TFC subset	Not Present
- UL DCH TFCS	
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Addition
- TFCS complete reconfigure	
- CHOICE CTFC Size	2bit CTFC
- CTFC information	This IE is repeated for TFC numbers according to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- CTFC	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Power offset information	
- CHOICE Gain Factors	Computed Gain Factors (The last TFC is set to Signalled Gain Factors)
- Gain factor $\beta_c$	11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the above is set to Computed Gain Factors)
- Gain factor $\beta_d$	15 (Not Present if the above is set to Computed Gain Factors)
- Reference TFC ID	0
- CHOICE mode	FDD
- Power offset Pp-m	Not Present
Added or Reconfigured UL TrCH information	
- Uplink transport channel type	DCH
- UL Transport channel identity	5

Information Element	Value/remark
- TFS	
- CHOICE Transport channel type	Dedicated transport channels
- Dynamic Transport format information	
- RLC size	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Number of TBs and TTI lists	(This IE is repeated for TFI number)
- Transmission Time Interval	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Number of Transport blocks	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- CHOICE Logical channel list	All
- Semi-static Transport Format information	
- Transmission time interval	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Type of channel coding	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Coding Rate	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Rate matching attribute	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- CRC size	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
DL Transport channel information common for all transport channel	
- SCCPCH TFCS	Not Present
- CHOICE mode	FDD
- CHOICE DL parameters	Same as UL
Added or Reconfigured DL TrCH information	
- Downlink transport channel type	DCH
- DL Transport channel identity	10
- CHOICE DL parameters	Same as UL
- Uplink transport channel type	DCH
- UL TrCH Identity	5
- DCH quality target	
- BLER Quality value	-2.0
Frequency info	Not Present
Maximum allowed UL TX power	Not Present
Uplink DPCH info	
- Uplink DPCH power control info	
- DPCCH power offset	-6dB
- PC Preamble	1 frame
- SRB delay	7 frames
- Power Control Algorithm	Algorithm1
- TPC step size	1dB
- Scrambling code type	Long
- Scrambling code number	0 (0 to 16777215)
- Number of DPDCH	Not Present(1)
- Spreading factor	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- TFCI existence	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Number of FBI bit	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Puncturing Limit	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
Downlink information common for all radio links	
- Downlink DPCH info common for all RL	
- Timing Indication	Initialise
- CFN-targetSFN frame offset	Not Present
- CHOICE mode	FDD
- Downlink DPCH power control information	
- DPC mode	0 (single)
- Power offset $P_{\text{Pilot-DPDCH}}$	0
- DL rate matching restriction information	Not Present
- Spreading factor	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Fixed or Flexible Position	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)

Information Element	Value/remark
- TFCI existence	kbps signalling radio bearer)
- CHOICE SF	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- DPCH compressed mode info	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- TX Diversity mode	Not Present
- SSDT information	None
- Default DPCH Offset Value	Not Present
Downlink information for each radio links list	Arbitrary set to value 0..306688 by step of 512
- Downlink information for each radio links	
- CHOICE mode	FDD
- Primary CPICH info	
- Primary scrambling code	Reference to clause 6.1 "Default settings (FDD)"
- PDSCH with SHO DCH info	Not Present
- PDSCH code mapping	Not Present
- Downlink DPCH info for each RL	
- Primary CPICH usage for channel estimation	Primary CPICH may be used
- DPCH frame offset	Set to value: Default DPCH Offset Value mod 38400
- Secondary CPICH info	Not Present
- DL channelisation code	
- Secondary scrambling code	1
- Spreading factor	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Code number	0
- Scrambling code change	Not Present
- TPC combination index	0
- SSDT Cell Identity	Not Present
- Closed loop timing adjustment mode	Not Present
- SCCPCH information for FACH	Not Present

## Contents of RRC CONNECTION SETUP message: UM (Transition to CELL\_FACH)

Information Element	Value/remark
Message Type	
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST message
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Activation time	Not Present (Now)
New U-RNTI	
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
New C-RNTI	0000 0000 0000 0001B
RRC state indicator	CELL_FACH
UTRAN DRX cycle length coefficient	9
Capability update requirement	Not Present
Signalling RB information to setup	(UM DCCH for RRC)
- RB identity	Not present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	UM RLC
- Transmission RLC discard	Not present
- SDU discard mode	Not present
- CHOICE Downlink RLC mode	UM RLC
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	1
- CHOICE RLC size list	Configured
- MAC logical channel priority	1
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH



Information Element	Value/remark
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	1
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	1
- CHOICE RLC size list	Explicit list
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	1
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	1
Signalling RB information to setup	(AM DCCH for RRC)
- RB identity	Not Present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	No Discard
- MAX_DAT	15
- Transmission window size	<del>428</del> 32
- Timer_RST	500
- Max_RST	1
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not Present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Windows	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	<del>428</del> 32
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not Present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	2
- CHOICE RLC size list	Configured
- MAC logical channel priority	2
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	2
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	2

Information Element	Value/remark
- CHOICE RLC size list	Explicit list
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	2
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	2
Signalling RB information to setup	(AM DCCH for NAS_DT High priority)
- RB identity	Not present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	No Discard
- MAX_DAT	15
- Transmission window size	<del>128</del> 32
- Timer_RST	500
- Max_RST	1
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not Present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Windows	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	<del>128</del> 32
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not Present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	3
- CHOICE RLC size list	Configured
- MAC logical channel priority	3
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	3
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	RACH
- UL DCH Transport channel identity	Not Present
- Logical channel identity	3
- CHOICE RLC size list	Explicit list
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	3
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	3

Information Element	Value/remark
Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)
- RB identity	Not Present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	No Discard
- MAX_DAT	15
- Transmission window size	<del>128</del> 32
- Timer_RST	500
- Max_RST	1
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not Present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Windows	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	<del>128</del> 32
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not Present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	4
- CHOICE RLC size list	Configured
- MAC logical channel priority	4
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	4
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	4
- CHOICE RLC size list	Explicit list
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	4
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	4
UL Transport channel information for all transport channels	
- PRACH TFCS	Not Present
- CHOICE Mode	FDD
- TFC subset	Not Present
- UL DCH TFCS	
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Addition
- TFCS complete reconfigure	

Information Element	Value/remark
<ul style="list-style-type: none"> <li>- CHOICE CTFC Size</li> <li>- CTFC information</li>   <li>- CTFC</li>   <li>- Power offset information</li> <li>- CHOICE Gain Factors</li>   <li>- Gain factor <math>\beta_c</math></li>   <li>- Gain factor <math>\beta_d</math></li>   <li>- Reference TFC ID</li> <li>- CHOICE mode</li> <li>- Power offset Pp-m</li> </ul>	2bit CTFC This IE is repeated for TFC numbers according to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer) According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)  Computed Gain Factors (The last TFC is set to Signalled Gain Factors) 11 (below 64 kbps) 9 (higher than 64 kbps) (Not Present if the above is set to Computed Gain Factors) 15 (Not Present if the above is set to Computed Gain Factors) 0 FDD Not Present
Added or Reconfigured TrCH information list	TS 25.331 specifies that "Although this IE is not required when the IE "RRC state indicator" is set to "CELL_FACH", need is MP to align with ASN.1"
<ul style="list-style-type: none"> <li>- Added or Reconfigured UL TrCH information               <ul style="list-style-type: none"> <li>- Uplink transport channel type</li> <li>- UL Transport channel identity</li> <li>- TFS</li> <li>- CHOICE Transport channel type</li> <li>- Dynamic Transport format information</li> <li>- RLC Size</li> </ul> </li>   <li>- Number of TBs and TTI List</li> <li>- Transmission Time Interval</li> <li>- Number of Transport blocks</li> <li>- CHOICE Logical Channel List</li> <li>- Semi-static Transport Format information               <ul style="list-style-type: none"> <li>- Transmission time interval</li> <li>- Type of channel coding</li> <li>- Coding Rate</li> <li>- Rate matching attribute</li> <li>- CRC size</li> </ul> </li> </ul>	DCH 5  Delicated transport channels  Value 16 results in an RLC size of 144 bits; OctetModeType1 ((8*sizeType1)+16). List with single entry Not Present 0 ALL  40 ms Convolutional 1/3 160 16
DL Transport channel information common for all transport channel	
<ul style="list-style-type: none"> <li>- SCCPCH TFCS</li> <li>- CHOICE mode</li> <li>- CHOICE DL parameters</li> </ul>	Not Present FDD Same as UL
Added or Reconfigured TrCH information list	TS 25.331 specifies that "Although this IE is not required when the IE "RRC state indicator" is set to "CELL_FACH", need is MP to align with ASN.1"
<ul style="list-style-type: none"> <li>- Added or Reconfigured DL TrCH information               <ul style="list-style-type: none"> <li>- Downlink transport channel type</li> <li>- DL Transport channel identity</li> <li>- CHOICE DL parameters</li> <li>- Uplink Transport channel type</li> <li>- UL TrCH identity</li> <li>- DCH quality target</li> </ul> </li> </ul>	DCH 10 Same as UL DCH 5 Not Present
Frequency info	Not present
Maximum allowed UL TX power	Not present
CHOICE channel requirement	Not Present
Downlink information common for all radio links	Not Present
Downlink information for each radio link list	Not present

## CHANGE REQUEST

# **34.108 CR CRNum** # rev - # Current version: **4.5.0** #

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

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

<b>Title:</b>	# CR to 34.108 R4; Update of default configurations to enable testing of low end UEs		
<b>Source:</b>	# Ericsson		
<b>Work item code:</b>	# TEI	<b>Date:</b>	# 14/02/2003
<b>Category:</b>	# <b>A</b>	<b>Release:</b>	# Rel-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)		2 (GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)	R96 (Release 1996)	
	<b>B</b> (addition of feature),	R97 (Release 1997)	
	<b>C</b> (functional modification of feature)	R98 (Release 1998)	
	<b>D</b> (editorial modification)	R99 (Release 1999)	
	Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .	Rel-4 (Release 4)	
		Rel-5 (Release 5)	
		Rel-6 (Release 6)	

<b>Reason for change:</b>	# The current configurations in 34.108 and 34.123-1 do not allow testing of all UE classes. This contribution proposes a modified configuration to allow testing of UEs with limited capabilities (10 kbyte UE memory and no TC support).
<b>Summary of change:</b>	# The following changes are proposed: <ol style="list-style-type: none"> <li>1. The default RLC window size for SRB 2,3,4 is changed from 128 to 32.</li> <li>2. The Common Radio Bearer configurations used for RLC tests is modified:                     <ul style="list-style-type: none"> <li>- The TFS for the UM tests with 7 bit Length indicators no longer includes more than 1 TB, thus remaining below the UE capability on 'Maximum sum of number of bits of all transport blocks being received at an arbitrary time instant' of the 32kbps UE class (640 bits). In addition the TTI is updated to 40ms in order to align to the existing UL/DL 8/8kbps RAB.</li> <li>- The PDU size for AM tests with 7bit Length indicators is changed from 320 to 128. This allows the current RLC window sizes to be used which limits the impact on the existing L2 test cases.</li> <li>- The RLC PDU size as well as the RLC window size for testing of 15 bit length indicators are unchanged. This implies that only UEs with &gt;50 kbyte RLC buffer memory can be tested with 15 bit length indicators. If this is unacceptable, the RLC window size could potentially be decreased for RLC tests with 15 bit LIs.</li> <li>- The L1 parameters are modified since the current values seem incorrect. The values have been confirmed by RAN1 (in LS in T1-030132/R1-</li> </ul> </li> </ol>

	030199).
<b>Consequences if not approved:</b>	⌘ L2 testing can not be performed on lower UE classes

<b>Clauses affected:</b>	⌘ 6.11 and 9.1.1																
<b>Other specs affected:</b>	<table border="1"> <thead> <tr> <th>Y</th> <th>N</th> <th></th> <th>⌘</th> </tr> </thead> <tbody> <tr> <td></td> <td>X</td> <td>Other core specifications</td> <td></td> </tr> <tr> <td></td> <td>X</td> <td>Test specifications</td> <td></td> </tr> <tr> <td></td> <td>X</td> <td>O&amp;M Specifications</td> <td></td> </tr> </tbody> </table>	Y	N		⌘		X	Other core specifications			X	Test specifications			X	O&M Specifications	
Y	N		⌘														
	X	Other core specifications															
	X	Test specifications															
	X	O&M Specifications															
<b>Other comments:</b>	⌘																

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

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

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

<Start of modified section>

## 6.11 Common Radio Bearer configurations for other test purposes

The common radio bearer configurations are used for functional testing of various UE functions. Only common configurations that are used by multiple test cases and are not covered by the reference radio bearer configurations in clause 6.10 are specified in the present clause. Radio bearer configurations only used by a single test case are specified in the actual test case itself.

NOTE If not specifically specified then the mid-value of the RM attribute value range as specified by the actual reference radio bearer configuration shall be applied for testing.

### 6.11.1 Unacknowledged Mode Radio Bearer configuration (7 bit Length Indicator)

This configuration is based on the Interactive or background / UL:864 DL 864 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see TS 34.108 clause 6.10.2.4.1.23a6) with the transport channels parameters of the RAB and TFCS defined as follows:

Transport channel parameters for the Uplink RAB

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	UM	
	Payload sizes, bit	328	
	Max data rate, bps	8200 <del>65600</del>	
	UMD PDU header, bit	8	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	336	
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms	2040	
	Coding type	<del>TC</del> CC 1/3	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4236 <del>1080</del>	
	Uplink: Max number of bits/radio frame before rate matching	2118 <del>270</del>	
RM attribute	135-175 <del>130-170</del>		

NOTE: This TFI is not applied to TFS for RLC test cases.

### TFCS

TFCS size	4
TFCS	( <del>64-8</del> kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

**Transport channel parameters for the Downlink RAB**

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	UM	
	Payload sizes, bit	328	
	Max data rate, bps	<del>8200</del> 65600	
	UMD PDU header, bit	8	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	336	
	TFS	TF0, bits	0x336
		TF1, bits	1x336
	TTI, ms	<del>20</del> 40	
	Coding type	<del>TC</del> CC 1/3	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	<del>1080</del> 4236	
	RM attribute	<del>135-175</del> 130-170	
<b>NOTE: — This TFI is not applied to TFS for RLC test cases.</b>			

**TFCS**

TFCS size	4
TFCS	( <del>64</del> 8 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

**6.11.2 Unacknowledged Mode Radio Bearer configuration (15 bit Length Indicator)**

This configuration is based on the Interactive or background / UL:64 DL 64 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see TS 34.108 clause 6.10.2.4.1.26) with the transport channels parameters of the RAB defined as followed:

**Transport channel parameters for the Uplink RAB**

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	UM	
	Payload sizes, bit	1336	
	Max data rate, bps	66800	
	UMD PDU header, bit	8	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	<del>4092</del> 4236	
	Uplink: Max number of bits/radio frame before rate matching	<del>2046</del> 2118	
RM attribute	130-170		



**Transport channel parameters for the Downlink RAB**

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	UM	
	Payload sizes, bit	1336	
	Max data rate, bps	66800	
	UMD PDU header, bit	8	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4092 <del>4236</del>	
	RM attribute	130-170	

**6.11.3 Acknowledged Mode Radio Bearer configuration (7 bit Length Indicator)**

~~Transport channel parameters for the Uplink RAB~~

~~See clause 6.10.2.4.1.24.1. Note that TF2, TF3, and TF4 are not applied to the TFS for RLC tests, so the TFCS is defined as follows:~~

**TFCS**

<del>TFCS size</del>	<del>4</del>
<del>TFCS</del>	<del>{(64 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)}</del>

~~Transport channel parameters for the Downlink RAB~~

~~See clause 6.10.2.4.1.25.2. Note that TF2, TF3, and TF4 are not applied to the TFS for RLC tests, so TFCS is defined as follows.~~

**TFCS**

<b>TFCS size</b>	4
<b>TFCS</b>	(64 kbps RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

**Transport channel parameters for the Uplink RAB**

<b>Higher layer</b>	<b>RAB/Signalling RB</b>	<b>RAB</b>	
<b>RLC</b>	Logical channel type	<b>DTCH</b>	
	RLC mode	<b>AM</b>	
	Payload sizes, bit	<b>128</b>	
	Max data rate, bps	<b>6400</b>	
	UMD PDU header, bit	<b>16</b>	
<b>MAC</b>	MAC header, bit	<b>0</b>	
	MAC multiplexing	<b>N/A</b>	
<b>Layer 1</b>	TrCH type	<b>DCH</b>	
	TB sizes, bit	<b>144</b>	
	<b>TFS</b>	0x144	<b>0x144</b>
		1x144	<b>1x144</b>
	TTI, ms	<b>20</b>	
	Coding type	<b>CC 1/3</b>	
	CRC, bit	<b>16</b>	
	Max number of bits/TTI after channel coding	<b>504</b>	
	Uplink: Max number of bits/radio frame before rate matching	<b>252</b>	
	RM attribute	<b>135-175</b>	

**TFCS**

<b>TFCS size</b>	4
<b>TFCS</b>	(RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

**Transport channel parameters for the Downlink RAB**

<b>Higher layer</b>	<b>RAB/Signalling RB</b>	<b>RAB</b>	
<b>RLC</b>	Logical channel type	<b>DTCH</b>	
	RLC mode	<b>AM</b>	
	Payload sizes, bit	<b>128</b>	
	Max data rate, bps	<b>6400</b>	
	UMD PDU header, bit	<b>16</b>	
<b>MAC</b>	MAC header, bit	<b>0</b>	
	MAC multiplexing	<b>N/A</b>	
<b>Layer 1</b>	TrCH type	<b>DCH</b>	
	TB sizes, bit	<b>144</b>	
	<b>TFS</b>	0x144	<b>0x144</b>
		1x144	<b>1x144</b>
	TTI, ms	<b>20</b>	
	Coding type	<b>CC 1/3</b>	
	CRC, bit	<b>16</b>	
	Max number of bits/TTI after channel coding	<b>504</b>	
	RM attribute	<b>135-175</b>	

TFCS

TFCS size	4
TFCS	(RAB, DCCH)= (TF0, TF0), (TF1, TF0), (TF0, TF1), (TF1, TF1)

### 6.11.4 Acknowledged Mode Radio Bearer configuration (15 bit Length Indicator)

This configuration is based on the Interactive or background / UL:64 DL 64 kbps / PS RAB + UL:3.4 DL 3.4 kbps SRBs for DCCH (see TS 34.108 clause 6.10.2.4.1.26) with the transport channels parameters of the RAB defined as followed.

#### Transport channel parameters for the Uplink RAB

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	AM	
	Payload sizes, bit	1328	
	Max data rate, bps	66400	
	AMD PDU header, bit	16	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4092 <del>4236</del>	
	Uplink: Max number of bits/radio frame before rate matching	2046 <del>2118</del>	
	RM attribute	130-170	

#### Transport channel parameters for the Downlink RAB

Higher layer	RAB/Signalling RB	RAB	
RLC	Logical channel type	DTCH	
	RLC mode	AM	
	Payload sizes, bit	1328	
	Max data rate, bps	66400	
	AMD PDU header, bit	16	
MAC	MAC header, bit	0	
	MAC multiplexing	N/A	
Layer 1	TrCH type	DCH	
	TB sizes, bit	1344	
	TFS	TF0, bits	0x1344
		TF1, bits	1x1344
	TTI, ms	20	
	Coding type	TC	
	CRC, bit	16	
	Max number of bits/TTI after channel coding	4092 <del>4236</del>	
	RM attribute	130-170	

<End of modified section>

<Start of next modified section>

### 9.1.1 Default RRC Message Contents (FDD)

<Skip until first modified default message>

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL\_DCH)

Information Element	Value/remark
Message Type	
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST" message
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Activation time	Not Present(Now)
New U-RNTI	
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
New C-RNTI	Not present
RRC State Indicator	CELL_DCH
UTRAN DRX cycle length coefficient	9
Capability update requirement	
- UE radio access FDD capability update requirement	TRUE
- UE radio access TDD capability update requirement	FALSE
- System specific capability update requirement list	Gsm
Signalling RB information to setup	(UM DCCH for RRC)
- RB identity	Not Present
- CHOICE RLC info type	
- RLC info	
- CHOICE Uplink RLC mode	UM RLC
- Transmission RLC discard	Not Present
- CHOICE Downlink RLC mode	UM RLC
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	1
- CHOICE RLC size list	Configured
- MAC logical channel priority	1
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	1
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	1
- CHOICE RLC size list	Explicit List
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	1
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	1
Signalling RB information to setup	(AM DCCH for RRC)
- RB identity	Not Present
- CHOICE RLC info type	

Information Element	Value/remark
- RLC info	AM RLC
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	No discard
- SDU discard mode	15
- MAX_DAT	12832
- Transmission window size	500
- Timer_RST	1
- Max_RST	1
- Polling info	200
- Timer_poll_prohibit	200
- Timer_poll	Not Present
- Poll_PDU	1
- Poll_SDU	TRUE
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	99
- Poll_Window	Not Present
- Timer_poll_periodic	AM RLC
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	12832
- Downlink RLC status info	200
- Timer_status_prohibit	Not Present
- Timer_EPC	TRUE
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	2 RBmuxOptions
- Information for each multiplexing option	Not Present
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	2
- CHOICE RLC size list	Configure
- MAC logical channel priority	2
- Downlink RLC logical channel info	1
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	2
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	2
- CHOICE RLC size list	Explicit List
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	2
- Downlink RLC logical channel info	1
- Number of RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	2
Signalling RB information to setup	(AM DCCH for NAS_DT High priority)
- RB identity	Not Present
- CHOICE RLC info type	AM RLC
- RLC info	AM RLC
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	No discard
- SDU discard mode	15
- MAX_DAT	12832
- Transmission window size	500
- Timer_RST	1
- Max_RST	1
- Polling info	200

Information Element	Value/remark
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Window	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	42832
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	3
- CHOICE RLC size list	Configured
- MAC logical channel priority	3
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	3
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	3
- CHOICE RLC size list	Explicit List
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	3
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	3
Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)
- RB identity	Not Present
- CHOICE RLC info type	
- RLC info	
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	No discard
- MAX_DAT	15
- Transmission window size	42832
- Timer_RST	500
- Max_RST	1
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Window	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC

Information Element	Value/remark
- In-sequence delivery	TRUE
- Receiving window size	42832
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not Present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	4
- CHOICE RLC size list	Configured
- MAC logical channel priority	4
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	4
- RLC logical channel mapping indicator	Not Present
- Number of RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	4
- CHOICE RLC size list	Explicit List
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	4
- Downlink RLC logical channel info	
- Number of RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	4
UL Transport channel information for all transport channels	
- PRACH TFCS	Not Present
- CHOICE Mode	FDD
- TFC subset	Nor Present
- UL DCH TFCS	
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Addition
- TFCS complete reconfigure	
- CHOICE CTFC Size	2bit CTFC
- CTFC information	This IE is repeated for TFC numbers according to TS 34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- CTFC	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Power offset information	
- CHOICE Gain Factors	Computed Gain Factors(The last TFC is set to Signalled Gain Factors)
- Gain factor βc	11 (below 64 kbps)
- Gain factor βd	9 (higher than 64 kbps)
- Reference TFC ID	(Not Present if the above is set to Computed Gain Factors)
- CHOICE mode	15
- Power offset Pp-m	(Not Present if the above is set to Computed Gain Factors)
- Power offset Pp-m	0
- CHOICE mode	FDD
- Power offset Pp-m	Not Present
Added or Reconfigured UL TrCH information	
- Uplink transport channel type	DCH
- UL Transport channel identity	5



Information Element	Value/remark
<ul style="list-style-type: none"> <li>- TFS</li> <li>- CHOICE Transport channel type</li> <li>- Dynamic Transport format information</li> <li>- RLC size</li> <li>- Number of TBs and TTI lists</li> <li>- Transmission Time Interval</li> <li>- Number of Transport blocks</li> <li>- CHOICE Logical channel list</li> <li>- Semi-static Transport Format information</li> <li>- Transmission time interval</li> <li>- Type of channel coding</li> <li>- Coding Rate</li> <li>- Rate matching attribute</li> <li>- CRC size</li> </ul>	<p>Dedicated transport channels</p> <p>According to TS 34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer) (This IE is repeated for TFI number)</p> <p>According to TS 34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p> <p>According to TS 34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p> <p>All</p> <p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p> <p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p> <p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p> <p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p> <p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p>
<p>DL Transport channel information common for all transport channel</p>	
<ul style="list-style-type: none"> <li>- SCCPCH TFCS</li> <li>- CHOICE mode</li> <li>- CHOICE DL parameters</li> </ul>	<p>Not Present</p> <p>FDD</p> <p>Same as UL</p>
<p>Added or Reconfigured DL TrCH information</p>	
<ul style="list-style-type: none"> <li>- Downlink transport channel type</li> <li>- DL Transport channel identity</li> <li>- CHOICE DL parameters</li> <li>- Uplink transport channel type</li> <li>- UL TrCH Identity</li> <li>- DCH quality target</li> <li>- BLER Quality value</li> </ul>	<p>DCH</p> <p>10</p> <p>Same as UL</p> <p>DCH</p> <p>5</p> <p>-2.0</p>
<p>Frequency info</p>	<p>Not Present</p>
<p>Maximum allowed UL TX power</p>	<p>Not Present</p>
<p>Uplink DPCH info</p>	
<ul style="list-style-type: none"> <li>- Uplink DPCH power control info</li> <li>- DPCCH power offset</li> <li>- PC Preamble</li> <li>- SRB delay</li> <li>- Power Control Algorithm</li> <li>- TPC step size</li> <li>- Scrambling code type</li> <li>- Scrambling code number</li> <li>- Number of DPDCH</li> <li>- Spreading factor</li> </ul>	<p>-6dB</p> <p>1 frame</p> <p>7 frames</p> <p>Algorithm1</p> <p>1dB</p> <p>Long</p> <p>0 (0 to 16777215)</p> <p>Not Present(1)</p> <p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p>
<ul style="list-style-type: none"> <li>- TFCI existence</li> </ul>	<p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p>
<ul style="list-style-type: none"> <li>- Number of FBI bit</li> </ul>	<p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p>
<ul style="list-style-type: none"> <li>- Puncturing Limit</li> </ul>	<p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p>
<p>Downlink information common for all radio links</p>	
<ul style="list-style-type: none"> <li>- Downlink DPCH info common for all RL</li> </ul>	<p>Initialise</p>
<ul style="list-style-type: none"> <li>- Timing Indication</li> </ul>	<p>Not Present</p>
<ul style="list-style-type: none"> <li>- CFN-targetSFN frame offset</li> </ul>	<p>FDD</p>
<ul style="list-style-type: none"> <li>- CHOICE mode</li> </ul>	<p>FDD</p>
<ul style="list-style-type: none"> <li>- Downlink DPCH power control information</li> </ul>	<p>0 (single)</p>
<ul style="list-style-type: none"> <li>- DPC mode</li> </ul>	<p>0</p>
<ul style="list-style-type: none"> <li>- Power offset <math>P_{Pilot-DPCH}</math></li> </ul>	<p>0</p>
<ul style="list-style-type: none"> <li>- DL rate matching restriction information</li> </ul>	<p>Not Present</p>
<ul style="list-style-type: none"> <li>- Spreading factor</li> </ul>	<p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p>
<ul style="list-style-type: none"> <li>- Fixed or Flexible Position</li> </ul>	<p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p>

Information Element	Value/remark
- TFCI existence	kbps signalling radio bearer)
- CHOICE SF	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- DPCH compressed mode info	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- TX Diversity mode	Not Present
- SSDT information	None
- Default DPCH Offset Value	Not Present
Downlink information for each radio links list	Arbitrary set to value 0..306688 by step of 512
- Downlink information for each radio links	
- CHOICE mode	FDD
- Primary CPICH info	
- Primary scrambling code	Reference to clause 6.1 "Default settings (FDD)"
- PDSCH with SHO DCH info	Not Present
- PDSCH code mapping	Not Present
- Downlink DPCH info for each RL	
- Primary CPICH usage for channel estimation	Primary CPICH may be used
- DPCH frame offset	Set to value: Default DPCH Offset Value mod 38400
- Secondary CPICH info	Not Present
- DL channelisation code	
- Secondary scrambling code	1
- Spreading factor	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- Code number	0
- Scrambling code change	Not Present
- TPC combination index	0
- SSDT Cell Identity	Not Present
- Closed loop timing adjustment mode	Not Present
- SCCPCH information for FACH	Not Present

Contents of RRC CONNECTION SETUP message: UM (Transition to CELL\_FACH)

Information Element	Value/remark
Message Type	
Initial UE identity	Select the same identity as in the IE "Initial UE Identity" in received RRC CONNECTION REQUEST message
RRC transaction identifier	Arbitrarily selects an integer between 0 and 3
Activation time	Not Present (Now)
New U-RNTI	
- SRNC identity	0000 0000 0001B
- S-RNTI	0000 0000 0000 0000 0001B
New C-RNTI	0000 0000 0000 0001B
RRC state indicator	CELL_FACH
UTRAN DRX cycle length coefficient	9
Capability update requirement	Not Present
Signalling RB information to setup	(UM DCCH for RRC)
- RB identity	Not present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	UM RLC
- Transmission RLC discard	Not present
- SDU discard mode	Not present
- CHOICE Downlink RLC mode	UM RLC
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	1
- CHOICE RLC size list	Configured
- MAC logical channel priority	1
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH

Information Element	Value/remark
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	1
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	1
- CHOICE RLC size list	Explicit list
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	1
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	1
Signalling RB information to setup	(AM DCCH for RRC)
- RB identity	Not Present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	No Discard
- MAX_DAT	15
- Transmission window size	<del>428</del> 32
- Timer_RST	500
- Max_RST	1
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not Present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Windows	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	<del>428</del> 32
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not Present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	2
- CHOICE RLC size list	Configured
- MAC logical channel priority	2
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	2
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	2

Information Element	Value/remark
<ul style="list-style-type: none"> <li>- CHOICE RLC size list</li> <li>- RLC size index</li> </ul>	Explicit list According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
<ul style="list-style-type: none"> <li>- MAC logical channel priority</li> </ul>	2
<ul style="list-style-type: none"> <li>- Downlink RLC logical channel info</li> </ul>	1
<ul style="list-style-type: none"> <li>- Number of downlink RLC logical channels</li> </ul>	FACH
<ul style="list-style-type: none"> <li>- Downlink transport channel type</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- DL DCH Transport channel identity</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- DL DSCH Transport channel identity</li> </ul>	2
<ul style="list-style-type: none"> <li>- Logical channel identity</li> </ul>	(AM DCCH for NAS_DT High priority)
Signalling RB information to setup	Not present
<ul style="list-style-type: none"> <li>- RB identity</li> </ul>	RLC info
<ul style="list-style-type: none"> <li>- CHOICE RLC info type</li> </ul>	AM RLC
<ul style="list-style-type: none"> <li>- CHOICE Uplink RLC mode</li> </ul>	No Discard
<ul style="list-style-type: none"> <li>- Transmission RLC discard</li> </ul>	15
<ul style="list-style-type: none"> <li>- SDU discard mode</li> </ul>	<del>128</del> 32
<ul style="list-style-type: none"> <li>- MAX_DAT</li> </ul>	500
<ul style="list-style-type: none"> <li>- Transmission window size</li> </ul>	1
<ul style="list-style-type: none"> <li>- Timer_RST</li> </ul>	200
<ul style="list-style-type: none"> <li>- Max_RST</li> </ul>	200
<ul style="list-style-type: none"> <li>- Polling info</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- Timer_poll_prohibit</li> </ul>	1
<ul style="list-style-type: none"> <li>- Timer_poll</li> </ul>	TRUE
<ul style="list-style-type: none"> <li>- Poll_PDU</li> </ul>	TRUE
<ul style="list-style-type: none"> <li>- Poll_SDU</li> </ul>	99
<ul style="list-style-type: none"> <li>- Last transmission PDU poll</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- Last retransmission PDU poll</li> </ul>	AM RLC
<ul style="list-style-type: none"> <li>- Poll_Windows</li> </ul>	TRUE
<ul style="list-style-type: none"> <li>- Timer_poll_periodic</li> </ul>	<del>128</del> 32
<ul style="list-style-type: none"> <li>- CHOICE Downlink RLC mode</li> </ul>	200
<ul style="list-style-type: none"> <li>- In-sequence delivery</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- Receiving window size</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- Downlink RLC status info</li> </ul>	TRUE
<ul style="list-style-type: none"> <li>- Timer_status_prohibit</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- Timer_EPC</li> </ul>	TRUE
<ul style="list-style-type: none"> <li>- Missing PDU indicator</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- Timer_STATUS_periodic</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- RB mapping info</li> </ul>	2 RBMuxOptions
<ul style="list-style-type: none"> <li>- Information for each multiplexing option</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- RLC logical channel mapping indicator</li> </ul>	1
<ul style="list-style-type: none"> <li>- Number of uplink RLC logical channels</li> </ul>	DCH
<ul style="list-style-type: none"> <li>- Uplink transport channel type</li> </ul>	5
<ul style="list-style-type: none"> <li>- UL Transport channel identity</li> </ul>	3
<ul style="list-style-type: none"> <li>- Logical channel identity</li> </ul>	Configured
<ul style="list-style-type: none"> <li>- CHOICE RLC size list</li> </ul>	3
<ul style="list-style-type: none"> <li>- MAC logical channel priority</li> </ul>	3
<ul style="list-style-type: none"> <li>- Downlink RLC logical channel info</li> </ul>	1
<ul style="list-style-type: none"> <li>- Number of downlink RLC logical channels</li> </ul>	DCH
<ul style="list-style-type: none"> <li>- Downlink transport channel type</li> </ul>	10
<ul style="list-style-type: none"> <li>- DL DCH Transport channel identity</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- DL DSCH Transport channel identity</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- Logical channel identity</li> </ul>	3
<ul style="list-style-type: none"> <li>- RLC logical channel mapping indicator</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- Number of uplink RLC logical channels</li> </ul>	1
<ul style="list-style-type: none"> <li>- Uplink transport channel type</li> </ul>	RACH
<ul style="list-style-type: none"> <li>- UL DCH Transport channel identity</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- Logical channel identity</li> </ul>	3
<ul style="list-style-type: none"> <li>- CHOICE RLC size list</li> </ul>	Explicit list
<ul style="list-style-type: none"> <li>- RLC size index</li> </ul>	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
<ul style="list-style-type: none"> <li>- MAC logical channel priority</li> </ul>	3
<ul style="list-style-type: none"> <li>- Downlink RLC logical channel info</li> </ul>	1
<ul style="list-style-type: none"> <li>- Number of downlink RLC logical channels</li> </ul>	FACH
<ul style="list-style-type: none"> <li>- Downlink transport channel type</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- DL DCH Transport channel identity</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- DL DSCH Transport channel identity</li> </ul>	Not Present
<ul style="list-style-type: none"> <li>- Logical channel identity</li> </ul>	3

Information Element	Value/remark
Signalling RB information to setup	(AM DCCH for NAS_DT Low priority)
- RB identity	Not Present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- SDU discard mode	No Discard
- MAX_DAT	15
- Transmission window size	<del>428</del> 32
- Timer_RST	500
- Max_RST	1
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not Present
- Poll_SDU	1
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Windows	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	<del>428</del> 32
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not Present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	5
- Logical channel identity	4
- CHOICE RLC size list	Configured
- MAC logical channel priority	4
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	10
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	4
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	4
- CHOICE RLC size list	Explicit list
- RLC size index	According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)
- MAC logical channel priority	4
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	FACH
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	4
UL Transport channel information for all transport channels	
- PRACH TFCS	Not Present
- CHOICE Mode	FDD
- TFC subset	Not Present
- UL DCH TFCS	
- CHOICE TFCI signalling	Normal
- TFCI Field 1 information	
- CHOICE TFCS representation	Addition
- TFCS complete reconfigure	

Information Element	Value/remark
<ul style="list-style-type: none"> <li>- CHOICE CTFC Size</li> <li>- CTFC information</li>   <li>- CTFC</li>   <li>- Power offset information</li> <li>- CHOICE Gain Factors</li>   <li>- Gain factor <math>\beta_c</math></li>   <li>- Gain factor <math>\beta_d</math></li>   <li>- Reference TFC ID</li> <li>- CHOICE mode</li> <li>- Power offset Pp-m</li> </ul>	<p>2bit CTFC</p> <p>This IE is repeated for TFC numbers according to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p> <p>According to TS34.108 clause 6.10.2.4.1.3 (standalone 13.6 kbps signalling radio bearer)</p> <p>Computed Gain Factors (The last TFC is set to Signalled Gain Factors)</p> <p>11 (below 64 kbps)</p> <p>9 (higher than 64 kbps)</p> <p>(Not Present if the above is set to Computed Gain Factors)</p> <p>15</p> <p>(Not Present if the above is set to Computed Gain Factors)</p> <p>0</p> <p>FDD</p> <p>Not Present</p>
<p>Added or Reconfigured TrCH information list</p>	<p>TS 25.331 specifies that "Although this IE is not required when the IE "RRC state indicator" is set to "CELL_FACH", need is MP to align with ASN.1"</p>
<ul style="list-style-type: none"> <li>- Added or Reconfigured UL TrCH information</li> <li>- Uplink transport channel type</li> <li>- UL Transport channel identity</li> <li>- TFS</li> <li>- CHOICE Transport channel type</li> <li>- Dynamic Transport format information</li> <li>- RLC Size</li>   <li>- Number of TBs and TTI List</li> <li>- Transmission Time Interval</li> <li>- Number of Transport blocks</li> <li>- CHOICE Logical Channel List</li> <li>- Semi-static Transport Format information</li> <li>- Transmission time interval</li> <li>- Type of channel coding</li> <li>- Coding Rate</li> <li>- Rate matching attribute</li> <li>- CRC size</li> </ul>	<p>DCH</p> <p>5</p> <p>Delicated transport channels</p> <p>Value 16 results in an RLC size of 144 bits; OctetModeType1 ((8*sizeType1)+16).</p> <p>List with single entry</p> <p>Not Present</p> <p>0</p> <p>ALL</p> <p>40 ms</p> <p>Convolutional</p> <p>1/3</p> <p>160</p> <p>16</p>
<p>DL Transport channel information common for all transport channel</p>	<p>Not Present</p>
<ul style="list-style-type: none"> <li>- SCCPCH TFCS</li> <li>- CHOICE mode</li> <li>- CHOICE DL parameters</li> </ul>	<p>FDD</p> <p>Same as UL</p>
<p>Added or Reconfigured TrCH information list</p>	<p>TS 25.331 specifies that "Although this IE is not required when the IE "RRC state indicator" is set to "CELL_FACH", need is MP to align with ASN.1"</p>
<ul style="list-style-type: none"> <li>- Added or Reconfigured DL TrCH information</li> <li>- Downlink transport channel type</li> <li>- DL Transport channel identity</li> <li>- CHOICE DL parameters</li> <li>- Uplink Transport channel type</li> <li>- UL TrCH identity</li> <li>- DCH quality target</li> </ul>	<p>DCH</p> <p>10</p> <p>Same as UL</p> <p>DCH</p> <p>5</p> <p>Not Present</p>
<p>Frequency info</p>	<p>Not present</p>
<p>Maximum allowed UL TX power</p>	<p>Not present</p>
<p>CHOICE channel requirement</p>	<p>Not Present</p>
<p>Downlink information common for all radio links</p>	<p>Not Present</p>
<p>Downlink information for each radio link list</p>	<p>Not present</p>

<End of modified section>