3GPP TSG RAN Meeting #28

RP-050276

Quebec, Canada, 1 - 3 June 2005

Title CRs to 34.123-1 for approval Batch 6

Source 3GPP TSG RAN WG5 (Testing)

Agenda Item 7.6.5

WG Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R5-050700	34.123-1	1239	-	F	Rel-5	5.11.1	Tests for HCR TDD RAB combinations #38 thru #61	TEI
R5-050957	34.123-1	1240	-	F	Rel-5	5.11.1	Add TDD to RRC test case 8.4.1.33	TEI
R5-050958	34.123-1	1241	-	F	Rel-5	5.11.1	Correction to Package 4 RRC test case 8.4.1.26 to change TDD content	TEI
R5-050959	34.123-1	1242	-	F	Rel-5	5.11.1	Correction RRC test case 8.4.1.7A (TDD)	TEI
R5-050954	34.123-1	1243	-	F	Rel-5	5.11.1	Correction to Package 4 Inter system cell reselection test case 8.3.9.3	TEI
R5-050970	34.123-1	1244	-	F	Rel-5	5.11.1	Correction to GCF WI-014 MAC-HS test case 7.1.5.1	TEI
R5-050971	34.123-1	1245	-	F	Rel-5	5.11.1	Correction to GCF WI-014 MAC-HS test case 7.1.5.4	TEI
R5-050972	34.123-1	1246	-	F	Rel-5	5.11.1	Correction to GCF WI-014 MAC-HS test case 7.1.5.5	TEI
R5-050985	34.123-1	1247	-	F	Rel-5	5.11.1	Correction to GCF WI-10 NAS Test Cases 12.2.1.2, 12.2.1.5a Proc 1, 12.2.1.5a Proc 2, 12.3.2.7, 12.4.1.2 and 12.6.1.2	TEI
R5-050876	34.123-1	1248	-	F	Rel-5	5.11.1	CR to 34.123-1 Rel-5: Correction to WI-012 RLC test case 7.2.3.28	TEI
R5-050878	34.123-1	1249	-	F	Rel-5	5.11.1	Corrections to WI-10 P4 approved GMM test case 12.2.1.5a Test Procedures 1 & 2	TEI

3GPP TSG-R5 Meeting #27 Bath, England, 29th April – 30th April 2005

			CHANG	E REQ	UEST		,	CR-Form-v7
[x]	34.12	3-1 CR	1239	жrev	- [#]	Current versi	on: 5.11.1	$ \mathfrak{R} $
For <u>HELP</u> on	using th	is form, se	e bottom of tl	his page or l	look at the	e pop-up text	over the ₩ sym	nbols.
Proposed change affects: UICC apps ■ ME X Radio Access Network X Core Network								
Title:	光 Test	s for HCR	TDD RAB co	mbinations :	#38 thru #	‡ 61		
Source:	₩ 3GP	P TSG RA	N WG5 (Test	ting)				
Work item code:	₩ TEI					Date: ⊯	13/04/05	
Category:	F A E C Detail	(correction (correspor (addition of (functional (editorial n	ids to a correct f feature), modification of modification) ons of the abo	tion in an ear		Use <u>one</u> of t 2 R96 R97 R98 R99 Rel-4 Rel-5	Rel-5 The following rele (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5) (Release 6)	ases:
Reason for chang	ge: 🕱 🛚	Need to be	able to test th	he HCR TDI	D RAB co	mbinations in	the 34.108 doo	cument
Summary of char		Add to sect 8.2.2.61.2		Bearer Test	s for 3.84	Mcps TDD opt	ion 18.2.2.38 th	ru
Consequences if not approved:	[#] \	Will not be	able to test th	ne HCR TDE	RABs in	34.108 witho	ut this change	
Clauses affected:	: X	18.2.2						
Other specs affected:	[X]	X Test	er core specifi specification I Specificatio	S				
Other comments:	<i>:</i> ₩							

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.
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18.2.2.38 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

18.2.2.38.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB / Payload 320

18.2.2.38.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.38.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38 for the uplink payload 320 case.

18.2.2.38.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (32 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	0x336	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	N/A

Uplink TFCS:

<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
UL_TFC0	(TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL TFC3	(TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL_TFC5	(TF2, TF1, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL_TFC7	(TF1, TF0, TF0, TF2, TF0)
<u>UL_TFC8</u>	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF1)
UL_TFC10	(TF1, TF0, TF0, TF1)
UL TFC11	(TF2, TF1, TF1, TF0, TF1)
UL TFC12	(TF0, TF0, TF1, TF1)
UL_TFC13	(TF1, TF0, TF0, TF1, TF1)
UL TFC14	(TF2, TF1, TF1, TF1, TF1)
UL_TFC15	(TF0, TF0, TF0, TF2, TF1)
UL_TFC16	(TF1, TF0, TF0, TF2, TF1)
UL_TFC17	(TF2, TF1, TF1, TF2, TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (8 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	1x81	N/A	N/A	N/A	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF1)
DL_TFC7	(TF1, TF0, TF0, TF1)
DL TFC8	(TF2, TF1, TF1, TF0, TF1)
DL TFC9	(TF0, TF0, TF1, TF1)
DL_TFC10	(TF1, TF0, TF0, TF1, TF1)
DL TFC11	(TF2, TF1, TF1, TF1, TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS	TFCS		<u>TFCIs</u>	SDU size	(bits)
	under test	<u>Under test</u>			(bits) (note)	(note)
1	DL TFC1	UL TFC1	DL TFC0, DL TFC6,	UL TFC0,	RB5: 39	RB5: 39
'	DL TFC7	UL TFC10	UL TFC0, UL TFC9	UL TFC1,	RB6: 103	RB6: No data
	<u>DL_11 07</u>	<u> </u>	<u>0L_11 00; 0L_11 00</u>	UL TFC9,	RB7: 60	RB7: No data
				UL TFC10	RB8: 632	RB8: No data
2	DL TFC2	UL TFC2	DL TFC0, DL TFC6,	UL TFC0,	RB5: 81	RB5: 81
	DL TFC8	UL TFC11	UL TFC0, UL TFC9	UL TFC2,	RB6: 103	RB6: 103
				UL TFC9,	RB7: 60	RB7: 60
				UL TFC11	RB8: 632	RB8: No data
<u>3</u>	DL_TFC3	UL_TFC3	DL_TFC0, DL_TFC6,	UL_TFC0,	RB5: 39	RB5: No data
	DL TFC9	UL_TFC12	UL TFC0, UL TFC9	UL TFC3,	RB6: 103	RB6: No data
				UL TFC9,	RB7: 60	RB7: No data
				UL_TFC12	RB8: 632	RB8: 312
<u>4</u>	DL_TFC4	UL_TFC4	DL_TFC0, DL_TFC6,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC10	UL TFC13	UL TFC0, UL TFC9	UL TFC1,	RB6: 103	RB6: No data
				UL_TFC3,	RB7: 60	RB7: No data
				UL_TFC4,	RB8: 632	RB8: 312
				UL TFC9,		
				UL_TFC10,		
				UL TFC12, UL TFC13		
<u>5</u>	DL TFC5	UL TFC5	DL TFC0, DL TFC6,	UL TFC0,	RB5: 81	RB5: 81
<u> </u>	DL_TFC5 DL_TFC11	UL TFC14	UL TFC0, UL TFC9	UL TFC2,	RB6: 103	RB6: 103
	DL_IFCII	OL_IFC14	OL_TPC0, OL_TPC9	UL TFC3,	RB7: 60	RB7: 60
				UL TFC5,	RB8: 632	RB8: 312
				UL TFC9,	<u>11.00.002</u>	100.012
				UL TFC11,		
				UL TFC12,		
				UL TFC14		
<u>6</u>	DL TFC3	UL TFC6	DL TFC0, DL TFC6,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC9	UL_TFC15	UL TFC0, UL TFC9	UL_TFC6,	RB6: 103	RB6: No data
				UL TFC9,	RB7: 60	RB7: No data
				UL_TFC15	RB8: 1272	RB8: 312
<u>7</u>	DL_TFC4	UL_TFC7	DL_TFC0, DL_TFC6,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC10	UL TFC16	UL TFC0, UL TFC9	UL_TFC1,	RB6: 103	RB6: No data
				UL_TFC6,	RB7: 60	RB7: No data
				UL_TFC7,	RB8: 1272	RB8: 312
				UL TFC9, UL TFC10,		
				UL TFC15,		
				UL TFC15,		
<u>8</u>	DL TFC5	UL TFC8	DL TFC0, DL TFC6,	UL TFC0,	RB5: 81	RB5: 81
=	DL TFC11	UL TFC17	UL TFC0, UL TFC9	UL TFC2,	RB6: 103	RB6: 103
	<u> </u>	22		UL TFC6,	RB7: 60	RB7: 60
				UL TFC8,	RB8: 1272	RB8: 312
				UL_TFC9,		
				UL TFC11,		
				UL_TFC15,		
				UL TFC17		

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the uplink TTI for RB8 is 20 ms while the downlink TTI is 40 ms then, to achieve continous data transmission in uplink the size of the uplink RLC SDU has been set such that it will be transmitted over two subsequent TTIs, i.e. UL RLC SDU SIZE has been set to two times the uplink TFS size minus 8 (the size of a 7 bit length indicator and expansion bit).

18.2.2.38.1.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub test.

3. At step 15 the UE shall return

- for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
- for sub-test 2; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
- for sub-test 3: an RLC SDU on RB8 having the same content as 2 times plus 8 lsb's of the DL RLC SDU sent by the SS in the downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 4: an RLC SDU on RB5 having the same content as sent by SS and on RB8 having the same content as 2 times plus 8 lsb's of the DL RLC SDU sent by the SS in the downlink; and no data shall be received on RB6 and RB7.
- for sub-test 5: an RLC SDU on RB5, RB6, RB7 having the same content as sent by SS and on RB8 having the same content as 2 times plus 8 lsb's of the DL RLC SDU sent by the SS in the downlink.
- for sub-test 6: an RLC SDU on RB8 having the same content as 4 times plus 24 lsb's of the DL RLC SDU sent by the SS in the downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: an RLC SDU on RB5 having the same content as sent by SS and on RB8 having the same content as 4 times plus 24 lsb's of the DL RLC SDU sent by the SS in the downlink; and no data shall be received on RB6 and RB7.
- for sub-test 8: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS and on RB8 having the same content as 4 times plus 24 lsb's of the DL RLC SDU sent by the SS in the downlink.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.38.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:8 kbps / PS RAB / Payload 128

18.2.2.38.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.38.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38 for the uplink payload 128 case.

18.2.2.38.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (RAB subflow #1)	RB6 (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	<u>RB8</u> (32 kbps)	DCCH
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	<u>5x144</u>	N/A

<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
UL_TFC0	(TF0, TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
UL_TFC8	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF1)
UL_TFC10	(TF1, TF0, TF0, TF1)
UL_TFC11	(TF2, TF1, TF1, TF0, TF1)
UL TFC12	(TF0, TF0, TF1, TF1)
UL_TFC13	(TF1, TF0, TF0, TF1, TF1)
UL TFC14	(TF2, TF1, TF1, TF1, TF1)
UL TFC15	(TF0, TF0, TF0, TF2, TF1)
UL_TFC16	(TF1, TF0, TF0, TF2, TF1)
UL TFC17	(TF2, TF1, TF1, TF2, TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (8 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	N/A	N/A

Downlink TFCS:

<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0, TF0, TF0, TF0)
DL_TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL TFC5	(TF2, TF1, TF1, TF1, TF0)
DL_TFC6	(TF0, TF0, TF0, TF1)
DL TFC7	(TF1, TF0, TF0, TF1)
DL TFC8	(TF2, TF1, TF1, TF0, TF1)
DL_TFC9	(TF0, TF0, TF1, TF1)
DL TFC10	(TF1, TF0, TF0, TF1, TF1)
DL_TFC11	(TF2, TF1, TF1, TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS	TFCS		<u>TFCIs</u>	SDU size	(bits)
	under test	<u>Under test</u>			(bits) (note)	(noto)
1	DL TFC1	UL TFC1	DL TFC0, DL TFC6,	UL TFC0,	RB5: 39	(note) RB5: 39
1	DL TFC7	UL TFC10	UL TFC0, UL TFC9	UL TFC1,	RB6: 103	RB6: No data
	DL_II CI	<u>0L_11 010</u>	<u>0L_11 C0, 0L_11 C9</u>	UL TFC9,	RB7: 60	RB7: No data
				UL TFC10	RB8: 248	RB8: No data
2	DL TFC2	UL TFC2	DL TFC0, DL TFC6,	UL TFC0,	RB5: 81	RB5: 81
=	DL TFC8	UL TFC11	UL TFC0, UL TFC9	UL TFC2,	RB6: 103	RB6: 103
				UL TFC9,	RB7: 60	RB7: 60
				UL TFC11	RB8: 248	RB8: No data
<u>3</u>	DL TFC3	UL TFC3	DL TFC0, DL TFC6,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC9	UL TFC12	UL TFC0, UL TFC9	UL TFC3,	RB6: 103	RB6: No data
				UL TFC9,	RB7: 60	RB7: No data
				UL_TFC12	RB8: 248	RB8: 312
4	DL_TFC4	UL_TFC4	DL_TFC0, DL_TFC6,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC10	UL TFC13	UL TFC0, UL TFC9	UL TFC1,	RB6: 103	RB6: No data
				UL_TFC3,	RB7: 60	RB7: No data
				UL_TFC4,	RB8: 248	RB8: 312
				UL TFC9,		
				UL_TFC10,		
				UL TFC12,		
!				UL_TFC13		
<u>5</u>	DL_TFC5	UL_TFC5	DL_TFC0, DL_TFC6,	UL_TFC0,	RB5: 81	RB5: 81
	DL_TFC11	UL_TFC14	UL_TFC0, UL_TFC9	UL_TFC2,	RB6: 103	RB6: 103
				UL TFC3,	RB7: 60	RB7: 60 RB8: 312
				UL_TFC5, UL_TFC9,	RB8: 248	<u>RB8: 312</u>
				UL TFC11,		
				UL TFC12,		
				UL TFC14		
<u>6</u>	DL TFC3	UL TFC6	DL TFC0, DL TFC6,	UL TFC0,	RB5: 39	RB5: No data
=	DL TFC9	UL TFC15	UL TFC0, UL TFC9	UL TFC6,	RB6: 103	RB6: No data
	<u> </u>	<u> </u>	<u></u>	UL TFC9,	RB7: 60	RB7: No data
				UL TFC15	RB8: 1272	RB8: 312
<u>7</u>	DL TFC4	UL TFC7	DL TFC0, DL TFC6,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC10	UL TFC16	UL TFC0, UL TFC9	UL TFC1,	RB6: 103	RB6: No data
	_		_	UL_TFC6,	RB7: 60	RB7: No data
				UL_TFC7,	RB8: 1272	RB8: 312
				UL TFC9,		
				UL_TFC10,		
				UL TFC15,		
	DI TEGE	III TEO0	DI TEON DI TEON	UL_TFC16	DDE: 04	DD5: 04
<u>8</u>	DL TFC5	UL TFC8	DL TFC0, DL TFC6,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC11	UL_TFC17	UL_TFC0, UL_TFC9	UL_TFC2,	RB6: 103	RB6: 103
				UL TFC6, UL TFC8,	RB7: 60 RB8: 1272	RB7: 60 RB8: 312
				UL TFC9,	ND0. 12/2	ND0. 312
				UL TFC11,		
				UL TFC15,		
[]				UL TFC17		

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the uplink TTI for RB8 is 20 ms while the downlink TTI is 40 ms then, to achieve continous data transmission in uplink the size of the uplink RLC SDU has been set such that it will be transmitted over two subsequent TTIs, i.e. UL RLC SDU SIZE has been set to two times the uplink TFS size minus 8 (the size of a 7 bit length indicator and expansion bit).

18.2.2.38.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub test.

3. At step 15 the UE shall return

- for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
- for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
- for sub-test 3: an RLC SDU on RB8 having the first 248 bits equal to the content sent by the SS in the downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 4: an RLC SDU on RB5 having the same content as sent by SS and on RB8 having the first 248 bits equal to the content sent by the SS in the downlink; and no data shall be received on RB6 and RB7.
- for sub-test 5: an RLC SDU on RB5, RB6, and RB7 having the same content as sent by SS and on RB8 having the first 248 bits equal to the content sent by the SS in the downlink.
- for sub-test 6: an RLC SDU on RB8 having the same content as 4 times plus 24 lsb's of the DL RLC SDU sent by the SS in the downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: an RLC SDU on RB5 having the same content as sent by SS and on RB8 having the same content as 4 times plus 24 lsb's of the DL RLC SDU sent by the SS in the downlink; and no data shall be received on RB6 and RB7.
- for sub-test 8: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS and on RB8 having the same content as 4 times plus 24 lsb's of the DL RLC SDU sent by the SS in the downlink.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38a Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.38a.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload size 320.

18.2.2.38a.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.38a.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38a for the uplink payload 320 case.

18.2.2.38a.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

		<u>TFI</u>	<u>RB5</u> (RAB subflow #1)	<u>RB6</u> (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	<u>RB8</u> (0 kbps)	<u>DCCH</u>
Г		TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	N/A	<u>1x148</u>
		TF2, bits	1x81	N/A	N/A	N/A	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL_TFC0	(TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF0, TF1)
UL TFC4	(TF1, TF0, TF0, TF1)
UL TFC5	(TF2, TF1, TF1, TF0, TF1)

			RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (0 kbps)	<u>DCCH</u>
<u>TFS</u>		TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	0x336	<u>0x148</u>
	<u>FS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	N/A	<u>1x148</u>
	•	TF2, bits	1x81	N/A	N/A	N/A	N/A

Downlink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF0, TF1)
DL TFC4	(TF1, TF0, TF0, TF1)
DL TFC5	(TF2, TF1, TF1, TF0, TF1)

Sub-tests:

Sub- test	Downlink TFCS Under	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)		
	<u>Test</u>			(note 1)	(note 2)	(note 2)		
1	DL TFC1	UL TFC1	DL TFC0, DL TFC3,	UL TFC0,	RB5: 39	RB5: 39		
	DL TFC4	UL TFC4	UL TFC0, UL TFC3,	UL TFC1,	RB6: 103	RB6: No data		
				UL TFC2,	RB7: 60	RB7: No data		
				UL TFC3,	RB8: 0	RB8: No data		
				UL TFC4				
2	DL TFC2	UL TFC2	DL TFC0, DL TFC3,	UL TFC0,	RB5: 81	RB5: 81		
	DL TFC5	UL TFC5	UL TFC0, UL TFC3,	UL TFC1,	RB6: 103	RB6: 103		
				UL TFC2,	RB7: 60	RB7: 60		
				UL TFC3,	RB8: 0	RB8: No data		
				UL TFC5				
NOTE	NOTE 1: UL TFC0, UL TFC1, UL TFC2 and UL TFC3 are part of minimum set of TFCIs.							
NOTE	2: See TS 34	.109 [10] claus	se 5.3.2.6.2 for details red	garding loopback	of RLC SDUs.			

18.2.2.38a.1.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.38a.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Pavload size 128.

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38a for the uplink payload 128 case.

See test case 18.2.2.38a.1 for test procedure and test requirement.

Except Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (RAB subflow #1)	<u>RB6</u> (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	<u>RB8</u> (0 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	N/A	<u>1x148</u>
	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

- 18.2.2.38b Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.38b.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320, TTI 40 ms.

18.2.2.38b.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.38b.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38b for the uplink payload 320, and uplink TTI 40 ms case.

18.2.2.38b.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (8 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	N/A	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL_TFC0	(TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0, TF0)
UL_TFC2	(TF2, TF1, TF1, TF0, TF0)
UL TFC3	(TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL_TFC5	(TF2, TF1, TF1, TF1, TF0)
UL_TFC6	(TF0, TF0, TF0, TF1)
UL_TFC7	(TF1, TF0, TF0, TF1)
UL TFC8	(TF2, TF1, TF1, TF0, TF1)
UL_TFC9	(TF0, TF0, TF1, TF1)
UL TFC10	(TF1, TF0, TF0, TF1, TF1)
UL TFC11	(TF2, TF1, TF1, TF1)

		RB5	RB6	RB7	RB8	DCCH
		(RAB subflow #1)	(RAB subflow #2)	(RAB subflow #3)	(8 kbps)	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	N/A	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL_TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF0, TF1, TF0)
DL TFC4	(TF1, TF0, TF0, TF1, TF0)
DL TFC5	(TF2, TF1, TF1, TF0)
DL_TFC6	(TF0, TF0, TF0, TF1)
DL TFC7	(TF1, TF0, TF0, TF1)
DL_TFC8	(TF2, TF1, TF1, TF0, TF1)
DL_TFC9	(TF0, TF0, TF1, TF1)
DL_TFC10	(TF1, TF0, TF0, TF1, TF1)
DL_TFC11	(TF2, TF1, TF1, TF1)

Sub-tests:

Sub-	<u>Downlink</u>	<u>Uplink</u>	Implicitely tested	Restricted UL	UL RLC	Test data size
test	TFCS	TFCS		TFCIs	SDU size	(bits)
	<u>Under</u>	<u>Under test</u>			(bits)	4 4 6
	Test			(note 1)	(note 2)	(note 2)
1	DL TFC1	UL TFC1	DL TFC0, DL TFC6,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC7	UL_TFC7	UL_TFC0, UL_TFC6	UL_TFC1,	RB6: 103	RB6: No data
				UL TFC2,	RB7: 60 RB8: 312	RB7: No data RB8: No data
				UL TFC3, UL TFC6,	RD0. 312	RDO. NO data
				UL TFC7		
2	DL TFC2	UL TFC2	DL TFC0, DL TFC6,	UL TFC0,	RB5: 81	RB5: 81
_	DL TFC8	UL TFC8	UL TFC0, UL TFC6	UL TFC1.	RB6: 103	RB6: 103
	<u>BL_11 00</u>	<u> </u>	02 11 00, 02 11 00	UL TFC2,	RB7: 60	RB7: 60
				UL TFC3,	RB8: 312	RB8: No data
				UL TFC6,		
				UL TFC8		
<u>3</u>	DL TFC3	UL TFC3	DL TFC0, DL TFC6,	UL TFC0,	RB5: 81	RB5: No data
	DL_TFC9	UL_TFC9	UL_TFC0, UL_TFC6	UL_TFC1,	RB6: 103	RB6: No data
				UL TFC2,	RB7: 60	RB7: No data
				UL_TFC3,	RB8: 312	RB8: 312
				UL TFC6,		
4	DL TFC4	UL TFC4	DL TFC0, DL TFC6,	UL_TFC9 UL_TFC0,	RB5: 39	RB5: 39
<u>4</u>	DL TFC4 DL TFC10	UL TFC10	UL TFC0, UL TFC6,	UL TFC1,	RB6: 103	RB6: No data
	DL_IFC10	OL_II-CIO	OL_IFCO, OL_IFCO	UL TFC2,	RB7: 60	RB7: No data
				UL TFC3,	RB8: 312	RB8: 312
				UL TFC4,	1100.012	1100.012
				UL TFC6,		
				UL TFC7,		
				UL TFC9,		
				UL_TFC10		
<u>5</u>	DL_TFC5	UL_TFC5	DL TFC0, DL TFC6,	UL_TFC0,	RB5: 81	RB5: 81
	DL TFC11	UL TFC11	UL TFC0, UL TFC6	UL TFC1,	RB6: 103	RB6: 103
				UL_TFC2,	RB7: 60	RB7: 60
				UL_TFC3,	RB8: 312	RB8: 312
				UL TFC5, UL TFC6,		
				UL TFC8,		
				UL TFC9,		
				UL TFC11		

NOTE 1: UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3 and UL_TFC6 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB8 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit).

18.2.2.38b.1.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.

- for sub-test 3: an RLC SDU on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 4: an RLC SDU on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 5: an RLC SDU on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.38b.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128, TTI 80 ms.

18.2.2.38b.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.38b.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38b for the uplink payload 128, and uplink TTI 80 ms case.

18.2.2.38b.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (RAB subflow #1)	RB6 (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	RB8 (8 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	<u>N/A</u>	<u>5x144</u>	<u>N/A</u>

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL_TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF1, TF0)
UL_TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF0)
<u>UL_TFC6</u>	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
UL TFC8	(TF2, TF1, TF1, TF2, TF0)
<u>UL_TFC9</u>	(TF0, TF0, TF0, TF1)
UL TFC10	(TF1, TF0, TF0, TF1)
UL_TFC11	(TF2, TF1, TF1, TF0, TF1)
UL_TFC12	(TF0, TF0, TF1, TF1)
UL TFC13	(TF1, TF0, TF0, TF1, TF1)
UL_TFC14	(TF2, TF1, TF1, TF1)
UL TFC15	(TF0, TF0, TF0, TF2, TF1)
UL_TFC16	(TF1, TF0, TF0, TF2, TF1)
UL TFC17	(TF2, TF1, TF1, TF2, TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	<u>RB8</u> (8 kbps)	<u>DCCH</u>
<u>TFS</u>	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>

	TF2, bits	1x81	N/A	N/A	N/A	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF0, TF1, TF0)
DL TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF0)
DL_TFC6	(TF0, TF0, TF0, TF1)
DL TFC7	(TF1, TF0, TF0, TF1)
DL_TFC8	(TF2, TF1, TF1, TF0, TF1)
DL TFC9	(TF0, TF0, TF1, TF1)
DL TFC10	(TF1, TF0, TF0, TF1, TF1)
DL_TFC11	(TF2, TF1, TF1, TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC	Test data size
test	TFCS	TFCS	implicatory tested	TFCIs	SDU size	(bits)
====	under	Under test		<u></u>	(bits)	10.007
	test	<u> </u>			(note)	(note)
1	DL TFC1	UL TFC1	DL TFC0, DL TFC6,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC7	UL TFC10	UL TFC0, UL TFC9	UL TFC1,	RB6: 103	RB6: No data
				UL TFC9,	RB7: 60	RB7: No data
				UL TFC10	RB8: 56	RB8: No data
<u>2</u>	DL TFC2	UL TFC2	DL TFC0, DL TFC6,	UL TFC0,	RB5: 81	RB5: 81
	DL TFC8	UL TFC11	UL TFC0, UL TFC9	UL TFC2,	RB6: 103	RB6: 103
				UL TFC9,	RB7: 60	RB7: 60
				UL TFC11	RB8: 56	RB8: No data
<u>3</u>	DL TFC3	UL TFC3	DL TFC0, DL TFC6,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC9	UL TFC12	UL TFC0, UL TFC9	UL TFC3,	RB6: 103	RB6: No data
				UL TFC9,	RB7: 60	RB7: No data
				UL TFC12	RB8: 56	RB8: 312
4	DL TFC4	UL TFC4	DL TFC0, DL TFC6,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC10	UL TFC13	UL TFC0, UL TFC9	UL TFC1,	RB6: 103	RB6: No data
				UL TFC3,	RB7: 60	RB7: No data
				UL TFC4,	RB8: 56	RB8: 312
				UL_TFC9,		
				UL TFC10,		
				UL TFC12,		
				UL_TFC13		
<u>5</u>	DL TFC5	UL TFC5	DL TFC0, DL TFC6,	UL TFC0,	RB5: 81	RB5: 81
	DL TFC11	UL TFC14	UL TFC0, UL TFC9	UL TFC2,	RB6: 103	RB6: 103
				UL_TFC3,	RB7: 60	RB7: 60
				UL TFC5,	RB8: 56	RB8: 312
				UL_TFC9,		
				UL_TFC11,		
				UL TFC12,		
				UL_TFC14		
<u>6</u>	DL_TFC3	UL_TFC6	DL_TFC0, DL_TFC6,	UL_TFC0,	RB5: 39	RB5: No data
	DL TFC9	UL TFC15	UL TFC0, UL TFC9	UL TFC6,	RB6: 103	RB6: No data
				UL_TFC9,	RB7: 60	RB7: No data
 	DI TEO:	III TEOT	DI TEON DI TEON	UL_TFC15	RB8: 312	RB8: 312
<u>7</u>	DL_TFC4	UL_TFC7	DL_TFC0, DL_TFC6,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC10	UL TFC16	UL TFC0, UL TFC9	UL TFC1,	RB6: 103	RB6: No data
				UL_TFC6, UL_TFC7,	RB7: 60 RB8: 312	RB7: No data RB8: 312
				UL TFC7,	KD0. 312	ND0. 312
				UL TFC9,		
				UL TFC15,		
				UL TFC15,		
8	DL TFC5	UL TFC8	DL TFC0, DL TFC6,	UL TFC0,	RB5: 81	RB5: 81
=	DL_TFC5	UL TFC17	UL TFC0, UL TFC9	UL TFC2,	RB6: 103	RB6: 103
	<u> </u>	<u> </u>	<u> </u>	UL TFC6,	RB7: 60	RB7: 60
				UL TFC8,	RB8: 312	RB8: 312
				UL TFC9,	1100.012	1.00.012
				UL TFC11,		
				UL TFC15,		
				UL TFC17		
	i .	1				

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the uplink TTI for RB8 is 80 ms while the downlink TTI is 40 ms then, to achieve continous data transmission in uplink the size of the uplink RLC SDU has been set such that 2 of them will be transmitted over a TTI, i.e. UL RLC SDU SIZE has been set to ½ the uplink TFS size minus 8 (the size of a 7 bit length indicator and expansion bit) in the next smaller whole numbers of octets.

18.2.2.38b.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.

- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6. RB7 and RB8.
 - for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3: an RLC SDU on RB8 having the same content as the first 56 lsb's sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: an RLC SDU on RB5 having the same content as sent by SS and on RB8 having the same content as the first 56 lsb's sent by the SS in the downlink; and no data shall be received on RB6 and RB7.
 - for sub-test 5: an RLC SDU on RB5, RB6, and RB7 having the same content as sent by SS and on RB8 having same content as the first 56 lsb's sent by the SS in the downlink.
 - for sub-test 6: an RLC SDU on RB8 having the same content as the DL RLC SDU sent by the SS in the downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: an RLC SDU on RB5 having the same content as sent by SS and on RB8 having the same content as the DL RLC SDU sent by the SS in the downlink; and no data shall be received on RB6 and RB7.
 - for sub-test 8: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS and on RB8 having the same content as the DL RLC SDU sent by the SS in the downlink.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38c Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.38c.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320.
- 18.2.2.38c.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.38c.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38c for the uplink payload 320 case.

18.2.2.38c.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (RAB subflow #1)	<u>RB6</u> (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	<u>RB8</u> (32 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	2x336	<u>N/A</u>

<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
UL_TFC0	(TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
UL_TFC8	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF1)
UL_TFC10	(TF1, TF0, TF0, TF1)
UL_TFC11	(TF2, TF1, TF1, TF0, TF1)
UL TFC12	(TF0, TF0, TF1, TF1)
UL_TFC13	(TF1, TF0, TF0, TF1, TF1)
UL TFC14	(TF2, TF1, TF1, TF1, TF1)
UL TFC15	(TF0, TF0, TF0, TF2, TF1)
UL_TFC16	(TF1, TF0, TF0, TF2, TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (32 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	0x336	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	2x336	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF1)
DL_TFC10	(TF1, TF0, TF0, TF1)
DL TFC11	(TF2, TF1, TF1, TF0, TF1)
DL_TFC12	(TF0, TF0, TF1, TF1)
DL_TFC13	(TF1, TF0, TF0, TF1, TF1)
DL TFC14	(TF2, TF1, TF1, TF1)
DL_TFC15	(TF0, TF0, TF0, TF2, TF1)
DL TFC16	(TF1, TF0, TF0, TF2, TF1)
DL TFC17	(TF2, TF1, TF1, TF2, TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC	Test data size
test	TFCS	TFCS	implicitely tested	TFCIs	SDU size	(bits)
	Under	Under test			(bits)	
	<u>Test</u>			<u>(note 1)</u>	(note 2)	(note 2)
<u>1</u>	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC10	UL_TFC10	DL_TFC9,	UL_TFC1,	RB6: 103	RB6: No data
			UL TFCO,	UL TFC2,	RB7: 60	RB7: No data
			UL TFC9	UL TFC3, UL TFC9,	RB8: 312	RB8: No data
				UL TFC10		
2	DL TFC2,	UL TFC2,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
_	DL_TFC11	UL TFC11	DL TFC9,	UL TFC1,	RB6: 103	RB6: 103
		<u> </u>	UL TFC0.	UL TFC2,	RB7: 60	RB7: 60
			UL TFC9	UL TFC3,	RB8: 312	RB8: No data
			_	UL TFC9,		
				UL TFC11		
<u>3</u>	DL TFC3,	UL TFC3,	DL TFCO,	UL TFC0,	RB5: 81	RB5: No data
	DL_TFC12	UL_TFC12	DL_TFC9,	UL_TFC1,	RB6: 103	RB6: No data
			UL TFC0, UL TFC9	UL TFC2, UL TFC3,	RB7: 60 RB8: 312	RB7: No data RB8: 312
			UL_IFC9	UL TFC9,	RD0. 312	<u>KD0. 312</u>
				UL TFC12		
4	DL TFC4,	UL TFC4,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
-	DL TFC13	UL TFC13	DL TFC9,	UL TFC1,	RB6: 103	RB6: No data
			DL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC9	UL_TFC3,	RB8: 312	RB8: 312
				UL_TFC4,		
				UL TFC9,		
				UL_TFC10,		
				UL TFC12, UL TFC13		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
<u> </u>	DL TFC14	UL TFC14	DL TFC9,	UL TFC1,	RB6: 103	RB6: 103
			UL TFC0,	UL TFC2,	RB7: 60	RB7: 60
			UL_TFC9	UL TFC3,	RB8: 312	RB8: 312
				UL TFC5,		
				UL_TFC9,		
				UL TFC11,		
				UL TFC12, UL TFC14		
<u>6</u>	DL TFC6,	UL TFC6.	DL TFC0,	UL TFC0,	RB5: 81	RB5: No data
-	DL TFC15	UL TFC15	DL TFC9,	UL TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL TFC9	UL TFC3,	RB8: 632	RB8: 632
				UL_TFC6,		
				UL_TFC9,		
-	DI TEOZ	III TEO7	DI TECO	UL TFC15	DDE: 00	DDE: 20
<u>7</u>	DL TFC7, DL TFC16	UL TFC7, UL TFC16	DL TFC0, DL TFC9,	UL TFC0, UL TFC1,	RB5: 39	RB5: 39
	DL_IFC16	UL_IFC16	UL TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC9	UL TFC3,	RB8: 632	RB8: 632
			<u> </u>	UL TFC6,	1100.002	1.00.002
				UL TFC7,		
				UL_TFC9,		
				UL TFC10,		
				UL_TFC15,		
NOTE	4 III TECC	III TEC1 III	TEC2 III TEC3 and	UL_TFC16	rt of minimum e	L.CTEO!

NOTE 1: UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3 and UL_TFC15 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38c.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3 and 6: an RLC SDU on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4 and 7: an RLC SDU on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 5 and 8: an RLC SDU on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38c.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128.

18.2.2.38c.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.38c.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38c for the uplink payload 128 case.

18.2.2.38c.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (32 kbps)	DCCH
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	<u>5x144</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
<u>UL_TFC0</u>	(TF0, TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
<u>UL_TFC8</u>	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF1)
UL_TFC10	(TF1, TF0, TF0, TF1)
UL_TFC11	(TF2, TF1, TF1, TF0, TF1)
UL TFC12	(TF0, TF0, TF1, TF1)
UL_TFC13	(TF1, TF0, TF0, TF1, TF1)
UL TFC14	(TF2, TF1, TF1, TF1)
UL TFC15	(TF0, TF0, TF0, TF2, TF1)
UL_TFC16	(TF1, TF0, TF0, TF2, TF1)
UL TFC17	(TF2, TF1, TF1, TF2, TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (32 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0, TF0, TF0, TF0, TF0)
DL_TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL TFC5	(TF2, TF1, TF1, TF0)
DL_TFC6	(TF0, TF0, TF0, TF2, TF0)
DL TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL_TFC9	(TF0, TF0, TF0, TF1)
DL TFC10	(TF1, TF0, TF0, TF1)
DL_TFC11	(TF2, TF1, TF1, TF0, TF1)
DL_TFC12	(TF0, TF0, TF1, TF1)
DL TFC13	(TF1, TF0, TF0, TF1, TF1)
DL_TFC14	(TF2, TF1, TF1, TF1)
DL TFC15	(TF0, TF0, TF0, TF2, TF1)
DL TFC16	(TF1, TF0, TF0, TF2, TF1)
DL_TFC17	(TF2, TF1, TF1, TF2, TF1)

Sub-tests:

Sub-	Downlink	<u>Uplink</u>	Implicitely tested	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS Under	TFCS Under test		TFCIs	SDU size (bits)	(bits)
	Test	<u>Ondor toot</u>		(note 1)	(note 2)	(note 2)
<u>1</u>	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC10	UL_TFC10	DL_TFC9, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC9	UL TFC3,	RB8: 120	RB8: No data
			<u></u>	UL_TFC9,	<u></u>	<u> </u>
		====	5	UL TFC10		
<u>2</u>	DL_TFC2, DL_TFC11	UL_TFC2, UL_TFC11	DL_TFC0, DL_TFC9,	UL_TFC0, UL_TFC1,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	DL_II CII	<u>OL_II CII</u>	UL TFC0,	UL TFC2,	RB7: 60	RB7: 60
			UL_TFC9	UL TFC3,	RB8: 120	RB8: No data
				UL TFC9,		
3	DL TFC3,	UL TFC3,	DL TFC0,	UL TFC11 UL TFC0,	RB5: 81	RB5: No data
<u> </u>	DL TFC12	UL TFC12	DL TFC9,	UL TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC9	UL_TFC3,	RB8: 120	RB8: 312
				UL TFC9, UL TFC12		
4	DL TFC4,	UL TFC4,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
_	DL_TFC13	UL_TFC13	DL_TFC9,	UL_TFC1,	RB6: 103	RB6: No data
			DL TFCO,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC9	UL_TFC3, UL_TFC4,	RB8: 120	RB8: 312
				UL TFC9,		
				UL TFC10,		
				UL TFC12,		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL_TFC13 UL_TFC0,	RB5: 81	RB5: 81
<u> </u>	DL TFC14	UL TFC14	DL TFC9,	UL TFC1,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC2,	RB7: 60	RB7: 60
			UL_TFC9	UL_TFC3, UL_TFC5,	RB8: 120	RB8: 312
				UL TFC9,		
				UL TFC11,		
				UL TFC12,		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0,	UL_TFC14 UL_TFC0,	RB5: 81	RB5: No data
<u>u</u>	DL_TFC0, DL_TFC15	UL TFC15	DL_TFC0, DL_TFC9,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC2,	RB7: 60	RB7: No data
			UL TFC9	UL_TFC3,	RB8: 632	RB8: 632
				UL_TFC6, UL_TFC9,		
				UL TFC15		
<u>7</u>	DL TFC7,	UL TFC7,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC16	UL_TFC16	DL_TFC9,	UL_TFC1,	RB6: 103	RB6: No data
			UL TFC0, UL TFC9	UL TFC2, UL TFC3,	RB7: 60 RB8: 632	RB7: No data RB8: 632
			<u> </u>	UL TFC6,	100.002	1100.002
				UL TFC7,		
				UL_TFC9,		
				UL TFC10, UL TFC15,		
				<u>UL_TFC16</u>		
				UL_IFC16		

Sub-	<u>Downlink</u>	<u>Uplink</u>	Implicitely tested	Restricted UL	UL RLC	Test data size
<u>test</u>	<u>TFCS</u>	<u>TFCS</u>		<u>TFCIs</u>	SDU size	(bits)
	<u>Under</u>	Under test			<u>(bits)</u>	
	<u>Test</u>			<u>(note 1)</u>	(note 2)	(note 2)
<u>8</u>	DL TFC8,	UL TFC8,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC17	UL_TFC17	DL_TFC9,	UL_TFC1,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC2,	RB7: 60	RB7: 60
			UL TFC9	UL TFC3,	RB8: 632	RB8: 632
				UL_TFC6,		
				UL TFC8,		
				UL TFC9,		
				UL TFC11,		
				UL TFC15,		
				UL TFC17		

NOTE 1: UL TFC0, UL TFC1, UL TFC2, , UL TFC3 and UL TFC15 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38c.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3: an RLC SDU on RB8 having the same content as the first 120 lsb's sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: an RLC SDU on RB5 having the same content as sent by SS and on RB8 having the same content as the first 120 lsb's sent by the SS in the downlink; and no data shall be received on RB6 and RB7.
 - for sub-test 5: an RLC SDU on RB5, RB6, and RB7 having the same content as sent by SS and on RB8 having same content as the first 120 lsb's sent by the SS in the downlink.
 - for sub-test 6: an RLC SDU on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: an RLC SDU on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 8: an RLC SDU on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.38d Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 kbps SRBs for DCCH.

18.2.2.38d.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320.

18.2.2.38d.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.38d.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38d for the uplink payload 320 case.

18.2.2.38d.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 + RB9 (64 kbps, 20 ms TTI)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x340</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x340</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	N/A	N/A	2x340	<u>N/A</u>
	TF3, bits	N/A	N/A	N/A	3x340	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	4x340	N/A

TFCI	(RB5, RB6, RB7, RB8+RB9, DCCH)
UL_TFC0	(TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
UL_TFC8	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF3, TF0)
UL_TFC10	(TF1, TF0, TF0, TF3, TF0)
UL_TFC11	(TF2, TF1, TF1, TF3, TF0)
UL TFC12	(TF0, TF0, TF0, TF4, TF0)
UL_TFC13	(TF1, TF0, TF0, TF4, TF0)
UL TFC14	(TF2, TF1, TF1, TF4, TF0)
UL TFC15	(TF0, TF0, TF0, TF1)
UL_TFC16	(TF1, TF0, TF0, TF1)
UL TFC17	(TF2, TF1, TF1, TF0, TF1)
UL_TFC18	(TF0, TF0, TF1, TF1)
UL_TFC19	(TF1, TF0, TF0, TF1, TF1)
UL_TFC20	(TF2, TF1, TF1, TF1)
UL_TFC21	(TF0, TF0, TF0, TF2, TF1)
UL TFC22	(TF1, TF0, TF0, TF2, TF1)
UL_TFC23	(TF2, TF1, TF1, TF2, TF1)
UL TFC24	(TF0, TF0, TF0, TF3, TF1)
UL TFC25	(TF1, TF0, TF0, TF3, TF1)
UL_TFC26	(TF2, TF1, TF1, TF3, TF1)
UL TFC27	(TF0, TF0, TF0, TF4, TF1)
UL_TFC28	(TF1, TF0, TF0, TF4, TF1)
UL_TFC29	(TF2, TF1, TF1, TF4, TF1)

-		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 + RB9 (64 kbps, 20 ms TTI)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x340</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x340</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	N/A	N/A	2x340	N/A
	TF3, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	3x340	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	4x340	N/A

TFCI	(RB5, RB6, RB7, RB8+RB9, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL_TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF1, TF0)
DL TFC4	(TF1, TF0, TF0, TF1, TF0)
DL TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL TFC7	(TF1, TF0, TF0, TF2, TF0)
DL_TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL_TFC11	(TF2, TF1, TF1, TF3, TF0)
DL TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL TFC15	(TF0, TF0, TF0, TF1)
DL_TFC16	(TF1, TF0, TF0, TF1)
DL TFC17	(TF2, TF1, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL_TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF1, TF1)
DL_TFC21	(TF0, TF0, TF0, TF2, TF1)
DL TFC22	(TF1, TF0, TF0, TF2, TF1)
DL_TFC23	(TF2, TF1, TF1, TF2, TF1)
DL TFC24	(TF0, TF0, TF0, TF3, TF1)
DL TFC25	(TF1, TF0, TF0, TF3, TF1)
DL_TFC26	(TF2, TF1, TF1, TF3, TF1)
DL TFC27	(TF0, TF0, TF0, TF4, TF1)
DL_TFC28	(TF1, TF0, TF0, TF4, TF1)
DL_TFC29	(TF2, TF1, TF1, TF4, TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely	Restricted	UL RLC	Test data size
test	TFCS	TFCS	tested	UL TFCIs	SDU size	(bits)
	<u>Under</u> Test	<u>Under test</u>			(bits) Note 1	Note 1
1	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
_	DL_TFC16	UL_TFC16	DL_TFC15,	UL_TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
			UL TFC15	UL TFC16	RB8: 312 RB9: 312	RB8: No data RB9: No data
2	DL TFC2,	UL TFC2,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
_	DL_TFC17	UL_TFC17	DL TFC15,	UL TFC2,	RB6: 103	RB6: 103
			UL TFC0,	UL TFC15,	RB7: 60	RB7: 60
			UL_TFC15	UL_TFC17	RB8: 312 RB9: 312	RB8: No data RB9: No data
3	DL TFC3,	UL TFC3,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
_	DL_TFC18	UL_TFC18	DL_TFC15,	UL_TFC3,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC18	RB8: 312 RB9: 312	RB8: 312 RB9: No data
4	DL TFC4,	UL TFC4,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC19	UL TFC19	DL TFC15,	UL TFC1,	RB6: 103	RB6: No data
			DUL_TFC0, UL_TFC15	UL_TFC3, UL_TFC4,	RB7: 60	RB7: No data RB8: 312
			UL IFCIS	UL TFC15,	RB8: 312 RB9: 312	RB9: No data
				UL TFC16,	1100.012	rtbo. Ho data
				UL TFC18,		
-	DL TFC5,	UL TFC5,	DL TFC0,	UL_TFC19 UL_TFC0,	RB5: 81	RB5: 81
<u>5</u>	DL_TFC5,	UL TFC5,	DL_TFC0, DL_TFC15,	UL TFC2,	RB6: 103	RB6: 103
			UL TFC0,	UL TFC3,	RB7: 60	RB7: 60
			UL_TFC15	UL_TFC5,	RB8: 312	RB8: 312
				UL TFC15, UL TFC17,	RB9: 312	RB9: No data
				UL TFC18,		
				UL_TFC20		
<u>6</u>	DL_TFC6, DL_TFC21	UL_TFC6, UL_TFC21	DL_TFC0, DL_TFC15,	UL_TFC0,	RB5: 39	RB5: No data
	DL_IFC21	UL_IFC21	UL TFC0,	UL_TFC6, UL_TFC15,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL_TFC15	UL_TFC21	RB8: 632	RB8: 632
	DI TEOT	=====	DI TEGO	- TEOO	RB9: 632	RB9: No data
<u>7</u>	DL TFC7, DL TFC22	UL TFC7, UL TFC22	DL TFC0, DL TFC15,	UL TFC0, UL TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DL_II CZZ	<u>UL_11 UZZ</u>	UL TFC0,	UL TFC6,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC7,	RB8: 632	RB8: 632
				UL_TFC15,	RB9: 632	RB9: No data
				UL TFC16, UL TFC21,		
		<u> </u>		UL TFC22		
<u>8</u>	DL_TFC8,	UL_TFC8,	DL_TFC0,	UL_TFC0,	RB5: 81	RB5: 81
	DL TFC23	UL TFC23	DL TFC15, UL TFC0,	UL TFC2, UL TFC6,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
			UL TFC15	UL TFC8,	RB7: 60 RB8: 632	RB8: 632
				UL_TFC15,	RB9: 632	RB9: No data
				UL TFC17,		
				UL_TFC21, UL_TFC23		
9	DL TFC9,	UL TFC9,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC24	UL TFC24	DL TFC15,	UL TFC9,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC24	RB8: 952 RB9: 952	RB8: 952 RB9: No data
	l	<u> </u>	I.	1	17D9, 90Z	NDO. NO GAIA

Sub- test	Downlink TFCS Under Test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits) Note 1	Test data size (bits) Note 1
10	DL TFC10, DL TFC25	UL TFC10, UL TFC25	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC9, UL TFC10, UL TFC15, UL TFC16, UL TFC24, UL TFC25	RB5: 39 RB6: 103 RB7: 60 RB8: 952 RB9: 952	RB5: 39 RB6: No data RB7: No data RB8: 952 RB9: No data
11	DL_TFC11, DL_TFC26	UL TFC11, UL TFC26	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC2, UL_TFC9, UL_TFC11, UL_TFC15, UL_TFC17, UL_TFC24, UL_TFC26	RB5: 81 RB6: 103 RB7: 60 RB8: 952 RB9: 952	RB5: 81 RB6: 103 RB7: 60 RB8: 952 RB9: No data
12	DL_TFC12, DL_TFC27	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC12, UL_TFC15, UL_TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 1272 RB9: 1272	RB5: No data RB6: No data RB7: No data RB8: 1272 RB9: No data
13	DL_TFC13, DL_TFC28	UL TFC13, UL TFC28	DL TFC0, DL TFC15, UL TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC12, UL TFC13, UL TFC15, UL TFC16, UL TFC27, UL TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 1272 RB9: 1272	RB5: 39 RB6: No data RB7: No data RB8: 1272 RB9: No data
14	DL TFC14, DL TFC29	UL TFC14, UL TFC29	DL TFC0, DL_TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC12, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272 RB9: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 1272 RB9: No data
<u>15</u>	DL_TFC14, DL_TFC29	UL_TFC14, UL_TFC29	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC2, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272 RB9: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: No data RB9: 1272

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8 and RB9: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38d.1.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return

- for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7, RB8 or RB9.
- for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8 or RB9.
- for sub-test 3, 6, 9 and 12: an RLC SDU on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6, RB7 or RB9.
- for sub-test 4, 7, 10 and 13: an RLC SDU on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6, RB7 or RB9.
- for sub-test 5, 8, 11 and 14; an RLC SDU on RB5, RB6, RB7 and RB8 having the same content as sent by SS. No data shall be received on RB9.
- for sub-test 15: an RLC SDU on RB5, RB6, RB7 and RB9 having the same content as sent by SS; and no data shall be received on RB8.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38d.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128.

18.2.2.38d.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.38d.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38d for the uplink payload 128 case.

18.2.2.38d.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 + RB9 (64 kbps, 20 ms TTI)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x148</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x148</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	<u>N/A</u>	N/A	<u>3x148</u>	<u>N/A</u>
	TF3, bits	<u>N/A</u>	<u>N/A</u>	N/A	<u>7x148</u>	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	<u>10x148</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8+RB9, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
UL_TFC8	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF3, TF0)
UL_TFC10	(TF1, TF0, TF0, TF3, TF0)
UL_TFC11	(TF2, TF1, TF1, TF3, TF0)
UL TFC12	(TF0, TF0, TF0, TF4, TF0)
UL_TFC13	(TF1, TF0, TF0, TF4, TF0)
UL TFC14	(TF2, TF1, TF1, TF4, TF0)
UL TFC15	(TF0, TF0, TF0, TF1)
UL_TFC16	(TF1, TF0, TF0, TF1)
UL TFC17	(TF2, TF1, TF1, TF0, TF1)
UL_TFC18	(TF0, TF0, TF1, TF1)
UL_TFC19	(TF1, TF0, TF0, TF1, TF1)
UL_TFC20	(TF2, TF1, TF1, TF1)
UL_TFC21	(TF0, TF0, TF0, TF2, TF1)
UL TFC22	(TF1, TF0, TF0, TF2, TF1)
UL_TFC23	(TF2, TF1, TF1, TF2, TF1)
UL TFC24	(TF0, TF0, TF0, TF3, TF1)
UL TFC25	(TF1, TF0, TF0, TF3, TF1)
UL_TFC26	(TF2, TF1, TF1, TF3, TF1)
UL TFC27	(TF0, TF0, TF0, TF4, TF1)
UL_TFC28	(TF1, TF0, TF0, TF4, TF1)
UL_TFC29	(TF2, TF1, TF1, TF4, TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 + RB9 (64 kbps, 20 ms TTI)	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x340</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x340</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	2x340	<u>N/A</u>
	TF3, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	3x340	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	4x340	N/A

TFCI	(RB5, RB6, RB7, RB8+RB9, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL_TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF0, TF1, TF0)
DL TFC4	(TF1, TF0, TF0, TF1, TF0)
DL TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL TFC7	(TF1, TF0, TF0, TF2, TF0)
DL_TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL_TFC11	(TF2, TF1, TF1, TF3, TF0)
DL TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL TFC15	(TF0, TF0, TF0, TF1)
DL_TFC16	(TF1, TF0, TF0, TF1)
DL TFC17	(TF2, TF1, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL_TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF1, TF1)
DL_TFC21	(TF0, TF0, TF0, TF2, TF1)
DL TFC22	(TF1, TF0, TF0, TF2, TF1)
DL_TFC23	(TF2, TF1, TF1, TF2, TF1)
DL TFC24	(TF0, TF0, TF0, TF3, TF1)
DL TFC25	(TF1, TF0, TF0, TF3, TF1)
DL_TFC26	(TF2, TF1, TF1, TF3, TF1)
DL TFC27	(TF0, TF0, TF0, TF4, TF1)
DL_TFC28	(TF1, TF0, TF0, TF4, TF1)
DL_TFC29	(TF2, TF1, TF1, TF4, TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely	Restricted	UL RLC	Test data size
test	TFCS	TFCS	tested	UL TFCIs	SDU size	(bits)
	<u>Under</u>	<u>Under test</u>			(bits) Note 1	Note 4
1	Test DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 39	Note 1 RB5: 39
<u> </u>	DL TFC16	UL TFC16	DL TFC15,	UL TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL TFC15	UL TFC16	RB8: 120	RB8: No data
	DI TECO	III TECO	DI TECO	III TECO	RB9: 120	RB9: No data
2	DL_TFC2, DL_TFC17	UL_TFC2, UL_TFC17	DL_TFC0, DL_TFC15,	UL_TFC0, UL_TFC2,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	<u>DL_11 017</u>	<u> </u>	UL TFC0,	UL TFC15,	RB7: 60	RB7: 60
			UL_TFC15	UL_TFC17	RB8: 120	RB8: No data
	DI TEON	III TEOO	DI TEON	III TEOO	RB9: 120	RB9: No data
<u>3</u>	DL TFC3, DL TFC18	UL TFC3, UL TFC18	DL TFC0, DL TFC15,	UL TFC0, UL TFC3,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL_II C IO	<u>UL_11 C10</u>	UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC18	RB8: 120	RB8: 312
		l ===		====	RB9: 120	RB9: No data
<u>4</u>	DL_TFC4, DL_TFC19	UL_TFC4, UL_TFC19	DL_TFC0, DL_TFC15,	UL_TFC0, UL_TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DE ILCIA	OL IITOIS	DUL TFC15,	UL TFC1,	RB0: 103 RB7: 60	RB7: No data
			UL TFC15	UL TFC4,	RB8: 120	RB8: 312
				UL_TFC15,	RB9: 120	RB9: No data
				UL TFC16,		
				UL TFC18, UL TFC19		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
_	DL TFC20	UL TFC20	DL TFC15,	UL TFC2,	RB6: 103	RB6: 103
			UL TFC0,	UL TFC3,	RB7: 60	RB7: 60
			UL_TFC15	UL_TFC5, UL_TFC15,	RB8: 120 RB9: 120	RB8: 312 RB9: No data
				UL TFC15,	KB9. 120	ND9. NO data
				UL TFC18,		
		====		UL_TFC20		
<u>6</u>	DL_TFC6, DL_TFC21	UL_TFC6, UL_TFC21	DL_TFC0, DL_TFC15,	UL_TFC0, UL_TFC6,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL_IFC21	UL_IFC21	UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC21	RB8: 376	RB8: 632
	DI TECT	====	DI TEGG		RB9: 376	RB9: No data
<u>7</u>	DL TFC7, DL TFC22	UL TFC7, UL TFC22	DL TFC0, DL TFC15,	UL TFC0, UL TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DL_IFU22	UL_IFUZZ	UL TFC0,	UL TFC6,	RB6: 103 RB7: 60	RB7: No data
			UL_TFC15	UL_TFC7,	RB8: 376	RB8: 632
				UL_TFC15,	RB9: 376	RB9: No data
				UL TFC16, UL TFC21,		
				UL_TFC21, UL_TFC22		
8	DL TFC8,	UL TFC8,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL TFC23	UL TFC23	DL TFC15,	UL TFC2,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC6,	RB7: 60	RB7: 60
			UL TFC15	UL TFC8, UL TFC15,	RB8: 376 RB9: 376	RB8: 632 RB9: No data
				UL TFC15,	1103. 310	INDO. INO UAIA
				UL_TFC21,		
	B. =====		DI ==0:	UL_TFC23	DD 5 6 5	DD5 At the
9	DL_TFC9, DL_TFC24	UL_TFC9, UL_TFC24	DL_TFC0, DL_TFC15,	UL_TFC0, UL_TFC9,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL 11-024	<u> </u>	UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC24	RB8: 888	RB8: 952
					RB9: 888	RB9: No data

Sub- test	Downlink TFCS Under Test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits) Note 1	Test data size (bits) Note 1
10	DL TFC10, DL TFC25	UL TFC10, UL TFC25	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC9, UL TFC10, UL TFC15, UL TFC16, UL TFC24, UL TFC25	RB5: 39 RB6: 103 RB7: 60 RB8: 888 RB9: 888	RB5: 39 RB6: No data RB7: No data RB8: 952 RB9: No data
11	DL_TFC11, DL_TFC26	UL TFC11, UL TFC26	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC2, UL_TFC9, UL_TFC11, UL_TFC15, UL_TFC17, UL_TFC24, UL_TFC26	RB5: 81 RB6: 103 RB7: 60 RB8: 888 RB9: 888	RB5: 81 RB6: 103 RB7: 60 RB8: 952 RB9: No data
12	DL_TFC12, DL_TFC27	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC12, UL_TFC15, UL_TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 1272 RB9: 1272	RB5: No data RB6: No data RB7: No data RB8: 1272 RB9: No data
13	DL_TFC13, DL_TFC28	UL TFC13, UL TFC28	DL TFC0, DL TFC15, UL TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC12, UL TFC13, UL TFC15, UL TFC16, UL TFC27, UL TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 1272 RB9: 1272	RB5: 39 RB6: No data RB7: No data RB8: 1272 RB9: No data
14	DL TFC14, DL TFC29	UL TFC14, UL TFC29	DL TFC0, DL_TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC12, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272 RB9: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 1272 RB9: No data
<u>15</u>	DL_TFC14, DL_TFC29	UL_TFC14, UL_TFC29	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC2, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272 RB9: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: No data RB9: 1272

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8 and RB9: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38d.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return

- for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7, RB8 or RB9.
- for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8 or RB9.
- for sub-test 3: an RLC SDU on RB8 having the same content as the first 120 lsb's sent by SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 4: an RLC SDU on RB5 having the same content as sent by SS and on RB8 having the same content as the first 120 lsb's sent by the SS in the downlink; and no data shall be received on RB6 and RB7.
- for sub-test 5: an RLC SDU on RB5, RB6, and RB7 having the same content as sent by SS and on RB8 having same content as the first 120 lsb's sent by the SS in the downlink.
- for sub-test 6: an RLC SDU on RB8 having the same content as the first 376 lsb's sent by SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: an RLC SDU on RB5 having the same content as sent by SS and on RB8 having the same content as the first 376 lsb's sent by the SS in the downlink; and no data shall be received on RB6 and RB7.
- for sub-test 8: an RLC SDU on RB5, RB6, and RB7 having the same content as sent by SS and on RB8 having same content as the first 376 lsb's sent by the SS in the downlink.
- for sub-test 9: an RLC SDU on RB8 having the same content as the first 888 lsb's sent by SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 10: an RLC SDU on RB5 having the same content as sent by SS and on RB8 having the same content as the first 888 lsb's sent by the SS in the downlink; and no data shall be received on RB6 and RB7.
- for sub-test 11: an RLC SDU on RB5, RB6, and RB7 having the same content as sent by SS and on RB8 having same content as the first 888 lsb's sent by the SS in the downlink.
- for sub-test 12: an RLC SDU on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6, RB7 or RB9.
- for sub-test 13: an RLC SDU on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6, RB7 or RB9.
- for sub-test 14: an RLC SDU on RB5, RB6, RB7 and RB8 having the same content as sent by SS. No data shall be received on RB9.
- for sub-test 15: an RLC SDU on RB5, RB6, RB7 and RB9 having the same content as sent by SS; and no data shall be received on RB8.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38e Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.38e.1 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320.
- 18.2.2.38e.1.1 Conformance requirement

See 18.2.2.4.1.

<u>18.2.2.38e.1.2</u> Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38e for the uplink payload 320 case.

18.2.2.38e.1.3 Method of test

See 18.2.1.2 for test procedure.

<u>Uplink TFS:</u>

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (0 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>N/A</u>	<u>1x148</u>
	TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
	TF3, bits	<u>1x55</u>	<u>1x84</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
	TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
	TF5, bits	<u>1x81</u>	N/A	N/A	N/A	N/A

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF0, TF0, TF0)
UL TFC3	(TF3, TF2, TF0, TF0, TF0)
UL_TFC4	(TF4, TF3, TF0, TF0, TF0)
UL TFC5	(TF5, TF1, TF1, TF0, TF0)
UL_TFC6	(TF0, TF0, TF0, TF1)
UL TFC7	(TF1, TF0, TF0, TF1)
UL_TFC8	(TF2, TF1, TF0, TF0, TF1)
UL_TFC9	(TF3, TF2, TF0, TF0, TF1)
UL TFC10	(TF4, TF3, TF0, TF0, TF1)
UL_TFC11	(TF5, TF1, TF1, TF0, TF1)

Downlink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (0 kbps)	DCCH
<u>TFS</u>	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	N/A	<u>1x148</u>
	TF2, bits	1x42	<u>1x63</u>	N/A	N/A	N/A
	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	N/A	<u>N/A</u>
	TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	N/A	N/A
	TF5, bits	<u>1x81</u>	N/A	N/A	N/A	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF0, TF0, TF0)
DL_TFC3	(TF3, TF2, TF0, TF0, TF0)
DL_TFC4	(TF4, TF3, TF0, TF0, TF0)
DL_TFC5	(TF5, TF1, TF1, TF0, TF0)
DL TFC6	(TF0, TF0, TF0, TF1)
DL_TFC7	(TF1, TF0, TF0, TF1)
DL TFC8	(TF2, TF1, TF0, TF0, TF1)
DL TFC9	(TF3, TF2, TF0, TF0, TF1)
DL_TFC10	(TF4, TF3, TF0, TF1)
DL TFC11	(TF5, TF1, TF1, TF0, TF1)

Sub- test	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
1001	<u>Under</u> Test	<u>Under test</u>		<u>11 010</u>	(bits) (note)	(note)
1	DL TFC1, DL TFC7	UL TFC1, UL TFC7	DL TFC0, DL_TFC6, UL TFC0, UL TFC6	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC7	RB5: 39 bits RB6: 103 bits RB7: 60 bits RB8: 0 bits	RB5: 39 bits RB6: No data RB7: No data RB8: No data
2	DL TFC2, DL TFC8	UL TFC2, UL TFC8	DL TFC0, DL TFC6, UL TFC0, UL TFC6	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC8	RB5: 42 bits RB6: 53 bits RB7: 60 bits RB8: 0 bits	RB5: 42 bits RB6: 53 bits RB7: No data RB8: No data
3	DL TFC3, DL_TFC9	UL TFC3, UL TFC9	DL TFCO, DL TFC6, UL TFCO, UL TFC6	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC9	RB5: 55 bits RB6: 63 bits RB7: 60 bits RB8: 0 bits	RB5: 55 bits RB6: 63 bits RB7: No data RB8: No data
4	DL_TFC4, DL_TFC10	UL_TFC4, UL_TFC10	DL_TFC0, DL TFC6, UL_TFC0, UL_TFC6	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC10	RB5: 75 bits RB6: 84 bits RB7: 60 bits RB8: 0 bits	RB5: 75 bits RB6: 84 bits RB7: No data RB8: No data
<u>5</u>	DL_TFC5, DL_TFC11	UL_TFC5, UL_TFC11	DL_TFC0, DL TFC6, UL TFC0, UL_TFC6	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC11	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 0 bits	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: No data

NOTE 1: UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC4, UL_TFC5 and UL_TFC6 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

18.2.2.38e.1.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return

- for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
- for sub-test 2,3 and 4: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
- for sub-test 5: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38e.2 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:0 DL:0 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128.

18.2.2.38e.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.38e.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38e for the uplink payload 128 case.

18.2.2.38e.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u>	RB6	<u>RB7</u>	<u>RB8</u>	<u>DCCH</u>
	<u></u>	(RAB subflow #1)	(RAB subflow #2)	(RAB subflow #3)	<u>(0 kbps)</u>	
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x128</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>N/A</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	N/A	<u>N/A</u>
11-3	TF3, bits	<u>1x55</u>	<u>1x84</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
	TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
	TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

Uplink TFCS:

<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
UL_TFC0	(TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0, TF0)
UL_TFC2	(TF2, TF1, TF0, TF0, TF0)
UL_TFC3	(TF3, TF2, TF0, TF0, TF0)
UL TFC4	(TF4, TF3, TF0, TF0, TF0)
<u>UL_TFC5</u>	(TF5, TF1, TF1, TF0, TF0)
UL TFC6	(TF0, TF0, TF0, TF1)
UL TFC7	(TF1, TF0, TF0, TF1)
UL_TFC8	(TF2, TF1, TF0, TF0, TF1)
UL TFC9	(TF3, TF2, TF0, TF0, TF1)
UL_TFC10	(TF4, TF3, TF0, TF0, TF1)
UL_TFC11	(TF5, TF1, TF1, TF0, TF1)

	<u>TFI</u>	<u>RB5</u> (RAB subflow #1)	<u>RB6</u> (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	<u>RB8</u> (0 kbps)	DCCH
<u>TFS</u>	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	N/A	<u>1x148</u>
	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	<u>N/A</u>	<u>N/A</u>
	TF3, bits	1x55	1x84	N/A	N/A	N/A

TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
TF5, bits	1x81	N/A	N/A	N/A	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF0, TF0, TF0)
DL TFC3	(TF3, TF2, TF0, TF0, TF0)
DL_TFC4	(TF4, TF3, TF0, TF0, TF0)
DL_TFC5	(TF5, TF1, TF1, TF0, TF0)
DL TFC6	(TF0, TF0, TF0, TF1)
DL_TFC7	(TF1, TF0, TF0, TF1)
DL TFC8	(TF2, TF1, TF0, TF0, TF1)
DL TFC9	(TF3, TF2, TF0, TF0, TF1)
DL_TFC10	(TF4, TF3, TF0, TF0, TF1)
DL TFC11	(TF5, TF1, TF1, TF0, TF1)

Sub- test	Downlink TFCS Under Test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)
1	DL TFC1, DL TFC7	UL TFC1, UL TFC7	DL TFC0, DL_TFC6, UL TFC0, UL TFC6	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC7	(note) RB5: 39 bits RB6: 103 bits RB7: 60 bits RB8: 0 bits	(note) RB5: 39 bits RB6: No data RB7: No data RB8: No data
2	DL TFC2, DL TFC8	UL TFC2, UL TFC8	DL TFC0, DL_TFC6, UL TFC0, UL TFC6	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC6	RB5: 42 bits RB6: 53 bits RB7: 60 bits RB8: 0 bits	RB5: 42 bits RB6: 53 bits RB7: No data RB8: No data
3	DL TFC3, DL_TFC9	UL TFC3, UL_TFC9	DL TFC0, DL TFC6, UL TFC0, UL TFC6	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC9	RB5: 55 bits RB6: 63 bits RB7: 60 bits RB8: 0 bits	RB5: 55 bits RB6: 63 bits RB7: No data RB8: No data
4	DL_TFC4, DL_TFC10	UL_TFC4, UL_TFC10	DL_TFC0, DL_TFC6, UL_TFC0, UL_TFC6	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC10	RB5: 75 bits RB6: 84 bits RB7: 60 bits RB8: 0 bits	RB5: 75 bits RB6: 84 bits RB7: No data RB8: No data
<u>5</u>	DL_TFC5, DL_TFC11	UL_TFC5, UL_TFC11	DL_TFC0, DL TFC6, UL TFC0, UL_TFC6	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC11	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 0 bits	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: No data

NOTE 1: UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC4, UL_TFC5 and UL_TFC6 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

18.2.2.38e.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return

- for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
- for sub-test 2,3 and 4: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
- for sub-test 5: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38f Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.38f.1 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320 TTI 40 ms.

18.2.2.38f.1.1 Conformance requirement

See clause 18.2.2.4.1.

18.2.2.38f.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38f for the uplink payload 320 and 40 ms TTI case.

18.2.2.38f.1.3 Method of test

See clause 18.2.1.2 for test procedure.

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (8 kbps, 40 ms TTI)	DCCH
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	<u>N/A</u>	N/A
11 5	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	N/A	N/A
	TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	<u>N/A</u>	N/A
	TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7,RB8,DCCH)
UL_TFC0	(TF0,TF0,TF0,TF0)
UL TFC1	(TF1,TF0,TF0,TF0,TF0)
UL_TFC2	(TF2,TF1,TF0,TF0,TF0)
UL_TFC3	(TF3,TF2,TF0,TF0,TF0)
UL_TFC4	(TF4,TF3,TF0,TF0,TF0)
UL_TFC5	(TF5,TF4,TF1,TF0,TF0)
UL TFC6	(TF0,TF0,TF1,TF0)
UL_TFC7	(TF1,TF0,TF0,TF1,TF0)
UL TFC8	(TF2,TF1,TF0,TF1,TF0)
UL TFC9	(TF3,TF2,TF0,TF1,TF0)
UL_TFC10	(TF4,TF3,TF0,TF1,TF0)
UL TFC11	(TF5,TF4,TF1,TF1,TF0)
UL_TFC12	(TF0,TF0,TF0,TF1)
UL_TFC13	(TF1,TF0,TF0,TF1)
UL TFC14	(TF2,TF1,TF0,TF0,TF1)
UL_TFC15	(TF3,TF2,TF0,TF0,TF1)
UL TFC16	(TF4,TF3,TF0,TF0,TF1)
UL TFC17	(TF5,TF4,TF1,TF0,TF1)
UL_TFC18	(TF0,TF0,TF1,TF1)
UL TFC19	(TF1,TF0,TF0,TF1,TF1)
UL_TFC20	(TF2,TF1,TF0,TF1,TF1)
UL TFC21	(TF3,TF2,TF0,TF1,TF1)
UL_TFC22	(TF4,TF3,TF0,TF1,TF1)
UL TFC23	(TF5,TF4,TF1,TF1)

<u>Downlink TFS:</u>

			RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (8 kbps, 40 ms TTI)	DCCH
		TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
		TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS		TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
11 5		TF3, bits	<u>1x55</u>	<u>1x84</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
		TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	N/A	<u>N/A</u>
		TF5, bits	<u>1x81</u>	N/A	N/A	N/A	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0,TF0,TF0,TF0)
DL TFC1	(TF1,TF0,TF0,TF0)
DL TFC2	(TF2,TF1,TF0,TF0,TF0)
DL TFC3	(TF3,TF2,TF0,TF0)
DL TFC4	(TF4,TF3,TF0,TF0,TF0)
DL TFC5	(TF5,TF4,TF1,TF0,TF0)
DL TFC6	(TF0,TF0,TF0,TF1,TF0)
DL TFC7	(TF1,TF0,TF0,TF1,TF0)
DL_TFC8	(TF2,TF1,TF0,TF1,TF0)
DL TFC9	(TF3,TF2,TF0,TF1,TF0)
DL_TFC10	(TF4,TF3,TF0,TF1,TF0)
DL_TFC11	(TF5,TF4,TF1,TF0)
DL TFC12	(TF0,TF0,TF0,TF1)
DL_TFC13	(TF1,TF0,TF0,TF1)
DL TFC14	(TF2,TF1,TF0,TF0,TF1)
DL TFC15	(TF3,TF2,TF0,TF0,TF1)
DL_TFC16	(TF4,TF3,TF0,TF0,TF1)
DL TFC17	(TF5,TF4,TF1,TF0,TF1)
DL_TFC18	(TF0,TF0,TF1,TF1)
DL_TFC19	(TF1,TF0,TF0,TF1,TF1)
DL_TFC20	(TF2,TF1,TF0,TF1,TF1)
DL_TFC21	(TF3,TF2,TF0,TF1,TF1)
DL TFC22	(TF4,TF3,TF0,TF1,TF1)
DL_TFC23	(TF5,TF4,TF1,TF1)

Sub-	Downlink	Uplink	Implicitely tested	Restricted	UL RLC SDU	Test data size
<u>test</u>	TFCS under test	TFCS Under test		<u>UL TFCIs</u>	<u>size</u>	
			DI TEON DI TEON	(note 1)	(note 2)	(note 2)
1	DL TFC1, DL TFC13	UL TFC1, UL TFC13	DL TFC0, DL TFC12, UL TFC0, UL TFC12	UL TFC0, UL TFC1,	RB5: 39 bits RB6: 103 bits	RB5: 39 bits RB6: No data
	<u>DL_11 010</u>	<u> </u>	<u>0L_11 00; 0L_11 012</u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: No data
				UL_TFC4, UL_TFC5,		
				UL TFC6,		
				UL_TFC12,		
2	DL TFC2,	UL TFC2,	DL TFC0, DL TFC12,	UL TFC13 UL TFC0,	RB5: 42 bits	RB5: 42 bits
=	DL TFC14	UL TFC14	UL TFC0, UL TFC12	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3, UL TFC4,	RB8: 312 bits	RB8: No data
				UL TFC5,		
				UL_TFC6,		
				UL TFC12, UL TFC14		
<u>3</u>	DL TFC3,	UL TFC3,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL_TFC15	UL_TFC15	UL_TFC0, UL_TFC12	UL_TFC1,	RB6: 63 bits	RB6: 63 bits
				UL TFC2, UL TFC3,	RB7: 60 bits RB8: 312 bits	RB7: No data RB8: No data
				UL_TFC4,	100.012 bits	INDO: 140 data
				UL TFC5,		
				UL_TFC6, UL_TFC12,		
				UL_TFC15		
<u>4</u>	DL_TFC4,	UL_TFC4, UL_TFC16	DL_TFC0, DL_TFC12,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC16	UL IFC16	UL TFC0, UL TFC12	UL TFC1, UL TFC2,	RB6: 84 bits RB7: 60 bits	RB6: 84 bits RB7: No data
				UL_TFC3,	RB8: 312 bits	RB8: No data
				UL TFC4, UL TFC5,		
				UL TFC6,		
				UL TFC12,		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0, DL TFC12,	UL_TFC16 UL_TFC0,	RB5: 81 bits	RB5: 81 bits
=	DL TFC3, DL TFC17	UL TFC17	UL TFC0, UL TFC12,	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3, UL TFC4,	RB8: 312 bits	RB8: No data
				UL TFC5,		
				UL TFC6,		
				UL_TFC12, UL_TFC17		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL_TFC18	UL_TFC18	UL_TFC0, UL_TFC12	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2, UL_TFC3,	RB7: 60 bits RB8: 312 bits	RB7: No data RB8: 312 bits
				UL_TFC4,	<u></u>	<u></u>
				UL TFC5, UL TFC6,		
				UL_TFC6, UL_TFC12,		
				UL TFC18		

1 -	DI TEOT	LU TEOZ	DI TEON DI TEONS	LII TEOO	DDE: 00 130	DDE: 00 130
7	DL_TFC7, DL_TFC19	UL_TFC7, UL_TFC19	DL_TFC0, DL_TFC12, UL_TFC0, UL_TFC12	UL_TFC0, UL_TFC1,	RB5: 39 bits RB6: 103 bits	RB5: 39 bits RB6: No data
	DL IFC19	UL IFC19	OL IFCU, OL IFC12	UL TFC1,	RB7: 60 bits	RB7: No data
				UL TFC3,		
					RB8: 312 bits	RB8: 312 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC7,		
				UL_TFC12,		
				UL TFC13,		
				UL_TFC18,		
	DI TEOO	TEO0	DI TEON DI TEON	UL TFC19	DDE 40 LTL	DD5 40 L1L
<u>8</u>	DL TFC8,	UL TFC8,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL_TFC20	UL_TFC20	UL_TFC0, UL_TFC12	UL_TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL_TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL_TFC8,		
				UL TFC12,		
[[UL_TFC14,		
				UL TFC18,		
1	D. T-00		DI TEON DI TEON	UL TFC20	DD5 55 : "	555 55111
9	DL_TFC9,	UL_TFC9,	DL_TFC0, DL_TFC12,	UL_TFC0.	RB5: 55 bits	RB5: 55 bits
	DL TFC21	UL TFC21	UL TFC0, UL TFC12	UL TFC1,	RB6: 63 bits	RB6: 63 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC9,		
				UL_TFC12,		
				UL TFC15,		
				UL_TFC18,		
10	DI TEO10	III TE040	DI TEON DI TEON	UL_TFC21	DDE 7513	DD5 75 130
<u>10</u>	DL TFC10,	UL TFC10,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL_TFC22	UL_TFC22	UL_TFC0, UL_TFC12	UL_TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL_TFC4,		
				UL TFC5, UL TFC6,		
				UL_TFC10, UL_TFC12,		
[[UL TFC12,		
[[UL TFC18,		
[[UL TFC18,		
11	DL TFC11,	UL TFC11,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC11,	UL TFC23	UL TFC0, UL TFC12,	UL TFC1,	RB6: 103 bits	RB6: 103 bits
	DL_IFU23	OL_IFU23	OL II CO, OL IFOIZ	UL TFC1,	RB7: 60 bits	RB7: 60 bits
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,	11DU. 012 DILO	INDU. UTZ DILO
				UL TFC5,		
				UL TFC6,		
				UL TFC11,		
				UL TFC12,		
[[UL TFC17,		
[[UL TFC18,		
				UL TFC18,		
!		I		OL IFO23		

NOTE 1: UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC4, UL_TFC5, UL_TFC6 and UL_TFC12 are part of minimum set of TFC1s.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size parameter has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38f.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2,3 and 4: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 5: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 6: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 8,9 and 10: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
 - for sub-test 11: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.38f.2 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128 TTI 80 ms.

18.2.2.38f.2.1 Conformance requirement

See clause 18.2.2.4.1.

18.2.2.38f.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38f for the uplink payload 128 and 80 ms TTI case.

18.2.2.38f.2.3 Method of test

See clause 18.2.1.2 for test procedure.

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (8 kbps, 80 ms <u>TTI)</u>	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	<u>5x144</u>	<u>N/A</u>
11-3	TF3, bits	<u>1x55</u>	<u>1x84</u>	<u>N/A</u>	<u>N/A</u>	N/A
ĺ	TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	<u>N/A</u>	N/A
	TF5, bits	<u>1x81</u>	N/A	N/A	N/A	N/A

TFCI	(RB5, RB6, RB7,RB8,DCCH)
UL_TFC0	(TF0,TF0,TF0,TF0)
UL TFC1	(TF1,TF0,TF0,TF0,TF0)
UL_TFC2	(TF2,TF1,TF0,TF0,TF0)
UL_TFC3	(TF3,TF2,TF0,TF0,TF0)
UL_TFC4	(TF4,TF3,TF0,TF0,TF0)
UL_TFC5	(TF5,TF4,TF1,TF0,TF0)
UL TFC6	(TF0,TF0,TF1,TF0)
UL_TFC7	(TF1,TF0,TF0,TF1,TF0)
UL TFC8	(TF2,TF1,TF0,TF1,TF0)
UL TFC9	(TF3,TF2,TF0,TF1,TF0)
UL_TFC10	(TF4,TF3,TF0,TF1,TF0)
UL TFC11	(TF5,TF4,TF1,TF0)
UL_TFC12	(TF0,TF0,TF0,TF2,TF0)
UL_TFC13	(TF1,TF0,TF0,TF2,TF0)
UL TFC14	(TF2,TF1,TF0,TF2,TF0)
UL_TFC15	(TF3,TF2,TF0,TF2,TF0)
UL TFC16	(TF4,TF3,TF0,TF2,TF0)
UL TFC17	(TF5,TF4,TF1,TF2,TF0)
UL_TFC18	(TF0,TF0,TF0,TF1)
UL TFC19	(TF1,TF0,TF0,TF1)
UL_TFC20	(TF2,TF1,TF0,TF0,TF1)
UL TFC21	(TF3,TF2,TF0,TF0,TF1)
UL TFC22	(TF4,TF3,TF0,TF0,TF1)
UL TFC23	(TF5,TF4,TF1,TF0,TF1)
UL TFC24	(TF0,TF0,TF1,TF1)
UL_TFC25	(TF1,TF0,TF0,TF1,TF1)
UL TFC26	(TF2,TF1,TF0,TF1,TF1)
UL_TFC27	(TF3,TF2,TF0,TF1,TF1)
UL_TFC28	(TF4,TF3,TF0,TF1,TF1)
UL TFC29	(TF5,TF4,TF1,TF1)
UL_TFC30	(TF0,TF0,TF0,TF2,TF1)
UL TFC31	(TF1,TF0,TF0,TF2,TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (8 kbps, 40 ms TTI)	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	<u>N/A</u>	<u>N/A</u>
11 3	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	<u>N/A</u>	<u>N/A</u>
	TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	<u>N/A</u>	<u>N/A</u>
	TF5, bits	<u>1x81</u>	<u>N/A</u>	N/A	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0,TF0,TF0,TF0)
DL TFC1	(TF1,TF0,TF0,TF0,TF0)
DL TFC2	(TF2,TF1,TF0,TF0,TF0)
DL_TFC3	(TF3,TF2,TF0,TF0,TF0)
DL TFC4	(TF4,TF3,TF0,TF0,TF0)
DL TFC5	(TF5,TF4,TF1,TF0,TF0)
DL TFC6	(TF0,TF0,TF1,TF0)
DL TFC7	(TF1,TF0,TF0,TF1,TF0)
DL_TFC8	(TF2,TF1,TF0,TF1,TF0)
DL TFC9	(TF3,TF2,TF0,TF1,TF0)
DL_TFC10	(TF4,TF3,TF0,TF1,TF0)
DL_TFC11	(TF5,TF4,TF1,TF1,TF0)
DL TFC12	(TF0,TF0,TF0,TF1)
DL_TFC13	(TF1,TF0,TF0,TF1)
DL TFC14	(TF2,TF1,TF0,TF0,TF1)
DL TFC15	(TF3,TF2,TF0,TF0,TF1)
DL_TFC16	(TF4,TF3,TF0,TF0,TF1)
DL TFC17	(TF5,TF4,TF1,TF0,TF1)
DL_TFC18	(TF0,TF0,TF1,TF1)
DL_TFC19	(TF1,TF0,TF0,TF1,TF1)
DL_TFC20	(TF2,TF1,TF0,TF1,TF1)
DL_TFC21	(TF3,TF2,TF0,TF1,TF1)
DL TFC22	(TF4,TF3,TF0,TF1,TF1)
DL_TFC23	(TF5,TF4,TF1,TF1)

Sub-	Downlink	Uplink	Implicitely tested	Restricted	UL RLC SDU	Test data size
test	TFCS	TFCS	implicitely tested	UL TFCIs	size	rest data size
1001	under test	Under test		<u> </u>	<u>5.25</u>	
				(note 1)	(note 2)	(note 2)
1	DL TFC1,	UL TFC1,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC13	UL TFC19	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: No data
	_			UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 56 bits	RB8: No data
				UL_TFC4,		
				UL TFC5,		
				UL_TFC6, UL_TFC18,		
				UL TFC18,		
2	DL TFC2,	UL TFC2,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
=	DL TFC14	UL TFC20	UL TFC0, UL TFC18	UL TFC1,	RB6: 53 bits	RB6: 53 bits
	<u> </u>	<u> </u>	<u> </u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 56 bits	RB8: No data
				UL TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC18,		
	DI TECC	III TECC	DI TECO DI TECAS	UL_TFC20	DDE, 55 5%-	DDC: 55 54-
<u>3</u>	DL TFC3, DL TFC15	UL TFC3, UL TFC21	DL TFC0, DL TFC12, UL TFC0, UL TFC18	UL TFC0, UL TFC1,	RB5: 55 bits RB6: 63 bits	RB5: 55 bits RB6: 63 bits
	DL_IFC15	UL_IFC21	OL_IFCO, OL_IFC16	UL TFC1,	RB0: 63 bits	RB7: No data
				UL TFC3,	RB8: 56 bits	RB8: No data
				UL TFC4,	INDO. OO DIIO	NDO: 140 data
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL_TFC21		
4	DL_TFC4,	UL_TFC4,	DL_TFC0, DL_TFC12,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC16	UL TFC22	UL TFC0, UL TFC18	UL TFC1, UL TFC2,	RB6: 84 bits	RB6: 84 bits
				UL TFC2,	RB7: 60 bits RB8: 56 bits	RB7: No data RB8: No data
				UL TFC4,	KD0. 30 DILS	RDO. NO Udla
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL_TFC22		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC17	UL TFC23	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3, UL TFC4,	RB8: 56 bits	RB8: No data
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL TFC23		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL_TFC18	UL_TFC24	UL_TFC0, UL_TFC18	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 56 bits	RB8: 312 bits
				UL_TFC4, UL_TFC5,		
				UL TFC5,		
				UL TFC18,		
[]				UL TFC24		
·	1	1	<u> </u>		1	1

	DI TECT		DI TEON DI TEON	T.U. TEO.	DDE 00 : "	DDE 00:::
<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0, DL_TFC12,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC19	UL TFC25	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 56 bits	RB8: 312 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6, UL TFC7,		
				UL TFC18,		
				UL TFC19,		
				UL TFC24,		
				UL TFC25		
<u>8</u>	DL TFC8,	UL TFC8,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC20	UL TFC26	UL TFC0, UL TFC18	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 56 bits	RB8: 312 bits
				UL TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL_TFC8,		
				UL TFC18,		
				UL_TFC20,		
				UL TFC24,		
	DI TEOO	TEOO	DI TEON DI TEON	UL TFC26	DDE EE LU	DDE SELVE
9	DL_TFC9, DL_TFC21	UL_TFC9, UL_TFC27	DL_TFC0, DL_TFC12,	UL_TFC0,	RB5: 55 bits	RB5: 55 bits
	DL TFC21	UL IFC27	UL TFC0, UL TFC18	UL TFC1, UL TFC2,	RB6: 63 bits	RB6: 63 bits
					RB7: 60 bits RB8: 56 bits	RB7: No data
				UL_TFC3, UL_TFC4,	RB0. 30 DILS	RB8: 312 bits
				UL TFC5,		
				UL TFC6,		
				UL TFC9,		
				UL TFC18,		
				UL TFC21,		
				UL TFC24,		
				UL TFC27		
<u>10</u>	DL TFC10,	UL TFC10,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL_TFC22	UL_TFC28	UL_TFC0, UL_TFC18	UL_TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 56 bits	RB8: 312 bits
				UL_TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC10, UL_TFC18,		
				UL TFC16,		
				UL TFC24,		
				UL TFC28		
11	DL TFC11,	UL TFC11,	DL TFC0, DL TFC12,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC23	UL TFC29	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3,	RB8: 56 bits	RB8: 312 bits
				UL_TFC4,		
				UL_TFC5,		
				UL_TFC6,		
				UL TFC11,		
				UL_TFC18,		
				UL TFC23,		
				UL TFC24,		
				UL TFC29		

12	DL_TFC6, DL_TFC18	UL_TFC6, UL_TFC30	DL_TFC0, DL_TFC12, UL_TFC0, UL_TFC18	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC18, UL TFC30	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 312 bits	RB5: No data RB6: No data RB7: No data RB8: 312 bits
13	DL_TFC7, DL_TFC19	UL_TFC13, UL_TFC31	DL TFC0, DL TFC12, UL_TFC0, UL_TFC18	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC6, UL TFC13, UL TFC18, UL TFC19, UL TFC24, UL TFC31	RB5: 39 bits RB6: 103 bits RB7: 60 bits RB8: 312 bits	RB5: 39 bits RB6: No data RB7: No data RB8: 312 bits

NOTE 1: UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC4, UL_TFC5, UL_TFC6 and UL_TFC18 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the uplink TTI for RB8 is 80 ms while the downlink TTI is 40 ms then, to

achieve continuous data transmission in uplink the size of the uplink RLC SDU has been set such that 2 of them will be transmitted over a TTI, i.e. UL RLC SDU SIZE has been set to ½ the uplink TFS size minus 8 (the size of a 7 bit length indicator and expansion bit) in the next smaller whole numbers of octets.

18.2.2.38f.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2,3 and 4: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 5: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 6: an RLC SDU on RB8 having the same content as the first 56 lsb's sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: RLC SDUs on RB5 having the same content as sent by the SS; on RB8 having the same content as the first 56 lsb's sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 8,9 and 10: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; on RB8 having the same content as the first 56 lsb's sent by the SS; and no data shall be received on RB7.
 - for sub-test 11: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and on RB8 having the same content as the first 56 lsb's sent by the SS.

- for sub-test 12: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38g Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.38g.1 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320.

18.2.2.38g.1.1 Conformance requirement

See clause 18.2.2.4.1.

18.2.2.38g.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38g for the uplink payload 320 case.

<u>18.2.2.38g.1.3</u> Method of test

See clause 18.2.1.2 for test procedure.

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (16 kbps, 40 ms <u>TTI)</u>	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	<u>2x336</u>	<u>N/A</u>
11-3	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	N/A	N/A
	TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	N/A	N/A
	TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0.TF0.TF0.TF0)
UL TFC1	(TF1,TF0,TF0,TF0)
UL TFC2	(TF2,TF1,TF0,TF0,TF0)
UL TFC3	(TF3.TF2.TF0.TF0.TF0)
UL TFC4	(TF4.TF3.TF0.TF0)
UL TFC5	(TF5,TF4,TF1,TF0,TF0)
UL TFC6	(TF0,TF0,TF1,TF0)
UL TFC7	(TF1,TF0,TF0,TF1,TF0)
UL TFC8	(TF3,TF2,TF0,TF1,TF0)
UL TFC9	(TF4,TF3,TF0,TF1,TF0)
UL TFC10	(TF5,TF4,TF1,TF1,TF0)
UL TFC11	(TF0,TF0,TF0,TF2,TF0)
UL_TFC12	(TF1,TF0,TF0,TF2,TF0)
UL_TFC13	(TF3,TF2,TF0,TF2,TF0)
UL TFC14	(TF4,TF3,TF0,TF2,TF0)
UL_TFC15	(TF5,TF4,TF1,TF2,TF0)
UL TFC16	(TF0,TF0,TF0,TF1)
UL TFC17	(TF1,TF0,TF0,TF1)
UL_TFC18	(TF2,TF1,TF0,TF0,TF1)
UL TFC19	(TF3,TF2,TF0,TF0,TF1)
UL_TFC20	(TF4,TF3,TF0,TF0,TF1)
UL TFC21	(TF5,TF4,TF1,TF0,TF1)
UL_TFC22	(TF0,TF0,TF1,TF1)
UL TFC23	(TF1,TF0,TF0,TF1,TF1)
UL TFC24	(TF3,TF2,TF0,TF1,TF1)
UL_TFC25	(TF4,TF3,TF0,TF1,TF1)
UL TFC26	(TF5,TF4,TF1,TF1)
UL_TFC27	(TF0,TF0,TF0,TF2,TF1)
UL_TFC28	(TF1,TF0,TF0,TF2,TF1)
UL TFC29	(TF3,TF2,TF0,TF2,TF1)
UL_TFC30	(TF4,TF3,TF0,TF2,TF1)
UL TFC31	(TF5,TF4,TF1,TF2,TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (16 kbps, 40 ms TTI)	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	<u>2x336</u>	<u>N/A</u>
11 3	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	<u>N/A</u>	<u>N/A</u>
	TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	<u>N/A</u>	<u>N/A</u>
	TF5, bits	<u>1x81</u>	<u>N/A</u>	N/A	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0.TF0.TF0.TF0)
DL_TFC1	(TF1,TF0,TF0,TF0,TF0)
DL TFC2	(TF2,TF1,TF0,TF0,TF0)
DL TFC3	(TF3,TF2,TF0,TF0,TF0)
DL TFC4	(TF4,TF3,TF0,TF0,TF0)
DL TFC5	(TF5,TF4,TF1,TF0,TF0)
DL TFC6	(TF0,TF0,TF0,TF1,TF0)
DL TFC7	(TF1,TF0,TF0,TF1,TF0)
DL_TFC8	(TF2,TF1,TF0,TF1,TF0)
DL TFC9	(TF3,TF2,TF0,TF1,TF0)
DL_TFC10	(TF4,TF3,TF0,TF1,TF0)
DL_TFC11	(TF5,TF4,TF1,TF1,TF0)
DL TFC12	(TF0,TF0,TF0,TF2,TF0)
DL_TFC13	(TF1,TF0,TF0,TF2,TF0)
DL TFC14	(TF2,TF1,TF0,TF2,TF0)
DL TFC15	(TF3,TF2,TF0,TF2,TF0)
DL_TFC16	(TF4,TF3,TF0,TF2,TF0)
DL TFC17	(TF5,TF4,TF1,TF2,TF0)
DL_TFC18	(TF0,TF0,TF0,TF1)
DL_TFC19	(TF1,TF0,TF0,TF1)
DL_TFC20	(TF2,TF1,TF0,TF0,TF1)
DL_TFC21	(TF3,TF2,TF0,TF0,TF1)
DL TFC22	(TF4,TF3,TF0,TF0,TF1)
DL_TFC23	(TF5,TF4,TF1,TF0,TF1)
DL TFC24	(TF0,TF0,TF1,TF1)
DL TFC25	(TF1,TF0,TF0,TF1,TF1)
DL_TFC26	(TF2,TF1,TF0,TF1,TF1)
DL TFC27	(TF3,TF2,TF0,TF1,TF1)
DL_TFC28	(TF4,TF3,TF0,TF1,TF1)
DL_TFC29	(TF5,TF4,TF1,TF1)
DL TFC30	(TF0,TF0,TF0,TF2,TF1)
DL_TFC31	(TF1,TF0,TF0,TF2,TF1)
DL TFC32	(TF2,TF1,TF0,TF2,TF1)
DL TFC33	(TF3,TF2,TF0,TF2,TF1)
DL_TFC34	(TF4,TF3,TF0,TF2,TF1)
DL TFC35	(TF5,TF4,TF1,TF2,TF1)

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC SDU	Test data size
test	TFCS	TFCS	improitory tootou	TFCIs	size	1001 data 0120
	under test	Under test				
				<u>(note 1)</u>	<u>(note 2)</u>	<u>(note 2)</u>
1	DL TFC1,	UL TFC1,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC19	UL_TFC17	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3, UL TFC4,	RB8: 312 bits	RB8: No data
				UL TFC5,		
				UL TFC6,		
				UL TFC16.		
				UL TFC17		
<u>2</u>	DL TFC2,	UL TFC2,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL_TFC20	UL_TFC18	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 53 bits	RB6: 53 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: No data
				UL_TFC4, UL_TFC5,		
				UL TFC6,		
				UL TFC16,		
				UL TFC18		
<u>3</u>	DL TFC3,	UL TFC3,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
_	DL_TFC21	UL_TFC19	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 63 bits	RB6: 63 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 312 bits	RB8: No data
				UL_TFC4,		
				UL TFC5, UL TFC6,		
				UL TFC16,		
				UL TFC19		
4	DL TFC4,	UL TFC4,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC22	UL TFC20	UL TFC0, UL TFC16	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 312 bits	RB8: No data
				UL TFC4, UL TFC5,		
				UL TFC6,		
				UL TFC16,		
				UL TFC20		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC23	UL TFC21	UL TFC0, UL TFC16	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3, UL TFC4,	RB8: 312 bits	RB8: No data
				UL TFC5,		
				UL TFC6,		
				UL TFC16,		
[UL TFC21		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL_TFC24	UL_TFC22	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3, UL TFC4,	RB8: 312 bits	RB8: 312 bits
				UL TFC5,		
				UL TFC6,		
				UL TFC16,		
				UL TFC22		

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<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC25	UL TFC23	UL TFC0, UL TFC16	UL TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,	1.20.0.12.0.10	1.201012010
				UL TFC5,		
				UL TFC6,		
				UL TFC7,		
				UL_TFC16,		
				UL TFC17,		
				UL_TFC22,		
				UL TFC23		
<u>8</u>	DL TFC8,	UL TFC8,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 42 bits
	DL TFC26	UL TFC24	UL TFC0, UL TFC16	UL TFC1,	RB6: 63 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,	TEDO: O12 DITO	TABO: O12 bito
				UL TFC5,		
				UL_TFC6,		
		1		UL_TFC8,		
		1		UL TFC16,		
		1		UL_TFC19,		
				UL TFC22,		
				UL TFC24		
9	DL TFC9,	UL TFC8,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
_	DL TFC27	UL TFC24	UL TFC0, UL TFC16	UL TFC1,	RB6: 63 bits	RB6: 63 bits
	<u> </u>	<u> </u>	<u>02 11 00, 02 11 010</u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,	11D0. 312 013	11D0. 312 DIG
				UL TFC5,		
				UL TFC6,		
				UL TFC8,		
				UL_TFC16,		
				UL TFC19,		
				UL TFC22,		
				UL TFC24		
10	DL TFC10,	UL TFC9,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC28	UL TFC25	UL TFC0, UL TFC16	UL TFC1,	RB6: 84 bits	RB6: 84 bits
	22020	32 020	<u></u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,	INDO. O 12 DILO	INDU. UTZ DILO
		1				
				UL TFC5,		
				UL TFC6,		
		1		UL_TFC9,		
				UL TFC16,		
		1		UL_TFC20,		
				UL TFC22,		
				UL TFC25		
<u>11</u>	DL TFC11,	UL TFC10,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC29	UL TFC26	UL TFC0, UL TFC16	UL TFC1,	RB6: 103 bits	RB6: 103 bits
	<u> </u>	22		UL TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,	INDO. O 12 DILO	INDU. UTZ DILO
		1				
		1		UL_TFC5,		
				UL_TFC6,		
		1		UL TFC10,		
				UL_TFC16,		
				UL TFC21,		
				UL TFC22,		
				UL TFC26		
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<u>12</u>	DL_TFC12,	UL_TFC11,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 81 bits	RB5: No data
	DL TFC30	UL TFC27	UL TFC0, UL TFC16	UL TFC1, UL TFC2,	RB6: 103 bits	RB6: No data
				UL_TFC2, UL_TFC3,	RB7: 60 bits RB8: 632 bits	RB7: No data RB8: 632 bits
				UL TFC3,	KD0. 032 DILS	KD0. 032 DILS
				UL TFC5,		
				UL TFC6,		
				UL TFC11,		
				UL_TFC16,		
		====		UL TFC27		777 22111
<u>13</u>	DL_TFC13, DL_TFC31	UL_TFC12, UL_TFC28	DL_TFC0, DL_TFC18, UL_TFC0, UL_TFC16	UL_TFC0, UL_TFC1,	RB5: 39 bits	RB5: 39 bits RB6: No data
	DL_IFC31	UL_IFC26	OL_IFCO, OL_IFC16	UL TFC1,	RB6: 103 bits RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC11,		
				UL_TFC12, UL_TFC16,		
				UL TFC16,		
				UL TFC27,		
				UL TFC28		
<u>14</u>	DL TFC14,	UL TFC13,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 42 bits
	DL_TFC32	UL_TFC29	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 63 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC4,	RB8: 632 bits	RB8: 632 bits
				UL TFC5,		
				UL TFC6,		
				UL TFC11,		
				UL TFC13,		
				UL_TFC16,		
				UL TFC19, UL TFC27,		
				UL TFC29		
<u>15</u>	DL TFC15,	UL TFC13,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL_TFC33	UL_TFC29	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 63 bits	RB6: 63 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL_TFC4,		
				UL TFC6,		
				UL_TFC11,		
				UL TFC13,		
				UL_TFC16,		
				UL TFC19, UL TFC27,		
				UL TFC27,		
<u>16</u>	DL TFC16,	UL TFC14,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC34	UL TFC30	UL TFC0, UL TFC16	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 632 bits	RB8: 632 bits
				UL_TFC4, UL_TFC5,		
				UL_TFC5, UL_TFC6,		
				UL TFC11,		
				UL TFC14,		
				UL TFC16,		
				UL_TFC20,		
				UL TFC27,		
11	1	I	İ	UL TFC30	1	i l

<u>17</u>	DL_TFC17,	UL_TFC15,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC35	UL TFC31	UL TFC0, UL TFC16	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL_TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC11,		
				UL_TFC15,		
				UL TFC16,		
				UL_TFC21,		
				UL_TFC27,		
				UL TFC31		

NOTE 1: UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC4, UL_TFC5, UL_TFC6 and UL_TFC16 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size parameter has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38g.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2,3 and 4: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 5: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 6: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 8: RLC SDUs on RB5 having the same content as 1 times plus 13 lsb's of the test data sent by the SS in downlink; RLC SDUs on RB6 having the same content as 1 times plus 10 lsb's of the test data sent by the SS in downlink; RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB7. for sub-test 9 and 10: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
 - for sub-test 11: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.

- for sub-test 12: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 14: RLC SDUs on RB5 having the same content as 1 times plus 13 lsb's of the test data sent by the SS in downlink; RLC SDUs on RB6 having the same content as 1 times plus 10 lsb's of the test data sent by the SS in downlink; RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 15 and 16: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 17: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.38g.2 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:16 DL:16 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128.

18.2.2.38g.2.1 Conformance requirement

See clause 18.2.2.4.1.

18.2.2.38g.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38g for the uplink payload 128 case.

18.2.2.38g.2.3 Method of test

See clause 18.2.1.2 for test procedure.

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (16 kbps, 40 ms <u>TTI)</u>	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	<u>5x144</u>	N/A
11-3	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	N/A	<u>N/A</u>
	TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	N/A	N/A
	TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0,TF0,TF0,TF0,TF0)
UL TFC1	(TF1,TF0,TF0,TF0,TF0)
UL TFC2	(TF2,TF1,TF0,TF0,TF0)
UL TFC3	(TF3,TF2,TF0,TF0,TF0)
UL TFC4	(TF4,TF3,TF0,TF0,TF0)
UL TFC5	(TF5,TF4,TF1,TF0,TF0)
UL TFC6	(TF0,TF0,TF1,TF0)
UL_TFC7	(TF1,TF0,TF0,TF1,TF0)
UL TFC8	(TF3,TF2,TF0,TF1,TF0)
UL TFC9	(TF4,TF3,TF0,TF1,TF0)
UL_TFC10	(TF5,TF4,TF1,TF1,TF0)
UL TFC11	(TF0,TF0,TF0,TF2,TF0)
UL_TFC12	(TF1,TF0,TF0,TF2,TF0)
UL_TFC13	(TF3,TF2,TF0,TF2,TF0)
UL TFC14	(TF4,TF3,TF0,TF2,TF0)
UL_TFC15	(TF5,TF4,TF1,TF2,TF0)
UL TFC16	(TF0,TF0,TF0,TF1)
UL TFC17	(TF1,TF0,TF0,TF1)
UL_TFC18	(TF2,TF1,TF0,TF0,TF1)
UL TFC19	(TF3,TF2,TF0,TF0,TF1)
UL_TFC20	(TF4,TF3,TF0,TF0,TF1)
UL TFC21	(TF5,TF4,TF1,TF0,TF1)
UL_TFC22	(TF0,TF0,TF1,TF1)
UL TFC23	(TF1,TF0,TF0,TF1,TF1)
UL TFC24	(TF3,TF2,TF0,TF1,TF1)
UL_TFC25	(TF4,TF3,TF0,TF1,TF1)
UL TFC26	(TF5,TF4,TF1,TF1)
UL_TFC27	(TF0,TF0,TF0,TF2,TF1)
UL_TFC28	(TF1,TF0,TF0,TF2,TF1)
UL TFC29	(TF3,TF2,TF0,TF2,TF1)
UL_TFC30	(TF4,TF3,TF0,TF2,TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (16 kbps, 40 ms <u>TTI)</u>	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	<u>2x336</u>	N/A
11 3	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	N/A	N/A
j	TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
	TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

TECL	(DDE DDE DDZ DD9 DCCU)
TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0,TF0,TF0,TF0)
DL_TFC1	(TF1,TF0,TF0,TF0)
DL TFC2	(TF2,TF1,TF0,TF0,TF0)
DL_TFC3	(TF3,TF2,TF0,TF0,TF0)
DL TFC4	(TF4,TF3,TF0,TF0,TF0)
DL TFC5	(TF5,TF4,TF1,TF0,TF0)
DL TFC6	(TF0,TF0,TF1,TF0)
DL TFC7	(TF1,TF0,TF0,TF1,TF0)
DL_TFC8	(TF2,TF1,TF0,TF1,TF0)
DL TFC9	(TF3,TF2,TF0,TF1,TF0)
DL_TFC10	(TF4,TF3,TF0,TF1,TF0)
DL_TFC11	(TF5,TF4,TF1,TF1,TF0)
DL TFC12	(TF0,TF0,TF0,TF2,TF0)
DL_TFC13	(TF1,TF0,TF0,TF2,TF0)
DL TFC14	(TF2,TF1,TF0,TF2,TF0)
DL TFC15	(TF3,TF2,TF0,TF2,TF0)
DL TFC16	(TF4,TF3,TF0,TF2,TF0)
DL TFC17	(TF5,TF4,TF1,TF2,TF0)
DL TFC18	(TF0,TF0,TF0,TF1)
DL TFC19	(TF1,TF0,TF0,TF1)
DL_TFC20	(TF2,TF1,TF0,TF0,TF1)
DL TFC21	(TF3,TF2,TF0,TF0,TF1)
DL TFC22	(TF4,TF3,TF0,TF0,TF1)
DL_TFC23	(TF5,TF4,TF1,TF0,TF1)
DL TFC24	(TF0,TF0,TF1,TF1)
DL TFC25	(TF1,TF0,TF0,TF1,TF1)
DL_TFC26	(TF2,TF1,TF0,TF1,TF1)
DL TFC27	(TF3,TF2,TF0,TF1,TF1)
DL TFC28	(TF4,TF3,TF0,TF1,TF1)
DL_TFC29	(TF5,TF4,TF1,TF1)
DL TFC30	(TF0,TF0,TF0,TF2,TF1)
DL_TFC31	(TF1,TF0,TF0,TF2,TF1)
DL TFC32	(TF2,TF1,TF0,TF2,TF1)
DL TFC33	(TF3,TF2,TF0,TF2,TF1)
DL_TFC34	(TF4,TF3,TF0,TF2,TF1)
DL TFC35	(TF5,TF4,TF1,TF2,TF1)

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC SDU	Test data size
test	TFCS	TFCS	implicitely tested	TFCIs	size	Test data size
1001	under test	Under test		<u></u>	<u> </u>	
				(note 1)	(note 2)	(note 2)
<u>1</u>	DL TFC1,	UL TFC1,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC19	UL_TFC17	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL_TFC4,		
				UL TFC5, UL TFC6,		
				UL TFC16,		
				UL TFC17		
2	DL TFC2,	UL TFC2,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
=	DL TFC20	UL TFC18	UL TFC0, UL TFC16	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL_TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC16,		
	DI TECO	III TECO	DL TFC0, DL TFC18,	UL_TFC18	DDE: EE bito	DDE, EE bita
<u>3</u>	DL TFC3, DL TFC21	UL TFC3, UL TFC19	UL TFC0, UL TFC18,	UL TFC0, UL TFC1,	RB5: 55 bits RB6: 63 bits	RB5: 55 bits RB6: 63 bits
	DL_IFC21	UL_IFC19	UL_IFCO, UL_IFC16	UL TFC1,	RB0: 63 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL TFC4,	11DO. 120 DILO	INDO: NO data
				UL TFC5,		
				UL TFC6,		
				UL TFC16,		
				UL_TFC19		
4	DL_TFC4,	UL_TFC4,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC22	UL TFC20	UL TFC0, UL TFC16	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL TFC2, UL TFC3,	RB7: 60 bits RB8: 120 bits	RB7: No data RB8: No data
				UL TFC4,	RDO. 120 DILS	RDO. NO Gala
				UL TFC5,		
				UL TFC6,		
				UL TFC16,		
				UL_TFC20		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC23	UL TFC21	UL TFC0, UL TFC16	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3, UL TFC4,	RB8: 120 bits	RB8: No data
				UL TFC5,		
				UL TFC6,		
				UL TFC16,		
				UL TFC21		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL_TFC24	UL_TFC22	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL_TFC4,		
				UL TFC5, UL TFC6,		
[]				UL TFC16,		
[]				UL TFC22		
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	T = - =-	T	T	T	T	T
<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC25	UL TFC23	UL TFC0, UL TFC16	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC7,		
				UL_TFC16,		
				UL TFC17,		
				UL_TFC22,		
				UL TFC23		
<u>8</u>	DL TFC8,	UL TFC8,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 42 bits
	DL_TFC26	UL_TFC24	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 63 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL_TFC8,		
				UL TFC16,		
				UL TFC19,		
				UL TFC22,		
				UL TFC24		
9	DL_TFC9,	UL_TFC8,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 55 bits	RB5: 55 bits
	DL TFC27	UL TFC24	UL TFC0, UL TFC16	UL TFC1,	RB6: 63 bits	RB6: 63 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC8,		
				UL_TFC16,		
				UL TFC19,		
				UL_TFC22,		
				UL_TFC24		
<u>10</u>	DL TFC10,	UL TFC9,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL_TFC28	UL_TFC25	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL_TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC9,		
				UL TFC16,		
				UL_TFC20,		
				UL TFC22,		
		====		UL TFC25		
<u>11</u>	DL TFC11,	UL TFC10,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL_TFC29	UL_TFC26	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 103 bits	RB6: 103 bits
				UL TFC2,	RB7: 60 bits	RB7: 60 bits
				UL_TFC3,	RB8: 120 bits	RB8: 312 bits
				UL_TFC4,		
				UL_TFC5,		
				UL_TFC6,		
				UL TFC10,		
				UL_TFC16,		
				UL TFC21,		
				UL TFC22,		
П				UL TFC26	1	1

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<u>12</u>	DL_TFC12,	UL_TFC11,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 81 bits	RB5: No data
	DL TFC30	UL TFC27	UL TFC0, UL TFC16	UL TFC1, UL TFC2,	RB6: 103 bits	RB6: No data
				UL_TFC2, UL_TFC3,	RB7: 60 bits RB8: 632 bits	RB7: No data RB8: 632 bits
				UL TFC3,	KD0. 032 DILS	KD0. 032 DILS
				UL TFC5,		
				UL TFC6,		
				UL TFC11,		
				UL_TFC16,		
		====		UL TFC27		777 22111
<u>13</u>	DL_TFC13, DL_TFC31	UL_TFC12, UL_TFC28	DL_TFC0, DL_TFC18, UL_TFC0, UL_TFC16	UL_TFC0, UL_TFC1,	RB5: 39 bits	RB5: 39 bits RB6: No data
	DL_IFC31	UL_IFC26	OL_IFCO, OL_IFC16	UL TFC1,	RB6: 103 bits RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC11,		
				UL_TFC12, UL_TFC16,		
				UL TFC16,		
				UL TFC27,		
				UL TFC28		
<u>14</u>	DL TFC14,	UL TFC13,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 42 bits
	DL_TFC32	UL_TFC29	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 63 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC4,	RB8: 632 bits	RB8: 632 bits
				UL TFC5,		
				UL TFC6,		
				UL TFC11,		
				UL TFC13,		
				UL_TFC16,		
				UL TFC19, UL TFC27,		
				UL TFC29		
<u>15</u>	DL TFC15,	UL TFC13,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL_TFC33	UL_TFC29	UL_TFC0, UL_TFC16	UL_TFC1,	RB6: 63 bits	RB6: 63 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL_TFC4,		
				UL TFC6,		
				UL_TFC11,		
				UL TFC13,		
				UL_TFC16,		
				UL TFC19, UL TFC27,		
				UL TFC27,		
<u>16</u>	DL TFC16,	UL TFC14,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC34	UL TFC30	UL TFC0, UL TFC16	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 632 bits	RB8: 632 bits
				UL_TFC4, UL_TFC5,		
				UL_TFC5, UL_TFC6,		
				UL TFC11,		
				UL TFC14,		
				UL TFC16,		
				UL_TFC20,		
				UL TFC27,		
11	1	I	İ	UL TFC30	1	i l

<u>17</u>	DL_TFC17,	UL_TFC15	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC35		UL TFC0, UL TFC16	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL_TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC11,		
				UL_TFC15,		
				<u>UL TFC16,</u>		
				UL_TFC21,		
				UL TFC27		

NOTE 1: UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6 and UL TFC16 are part of minimum set of TFC1s.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size parameter has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38g.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2,3 and 4: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 5: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 6: an RLC SDU on RB8 having the same content as the first 120 lsb's sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7; RLC SDUs on RB5 having the same content as sent by the SS; RB8 having the same content as the first 120 lsb's sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 8: RLC SDUs on RB5 having the same content as 1 times plus 13 lsb's of the test data sent by the SS in downlink; RLC SDUs on RB6 having the same content as 1 times plus 10 lsb's of the test data sent by the SS in downlink; RLC SDUs on RB8 having the same content as the first 120 lsb's sent by SS; and no data shall be received on RB7.
 - for sub-test 9 and 10: RLC SDUs on RB5, and RB6 having the same content as sent by the SS; RB8 having the same content as the first 120 lsb's sent by SS; and no data shall be received on RB7.
 - for sub-test 11: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RB8 having the same content as the first 120 lsb's sent by SS.

- for sub-test 12: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 14: RLC SDUs on RB5 having the same content as 1 times plus 13 lsb's of the test data sent by the SS in downlink; RLC SDUs on RB6 having the same content as 1 times plus 10 lsb's of the test data sent by the SS in downlink; RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 15 and 16: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 17: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38h Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.38h.1 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320.

18.2.2.38h.1.1 Conformance requirement

See clause 18.2.2.4.1.

18.2.2.38h.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38h for the uplink payload 320 case.

<u>18.2.2.38h.1.3</u> Method of test

See clause 18.2.1.2 for test procedure.

<u>Uplink TFS:</u>

		<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (32 kbps, 20 ms TTI)	DCCH
<u>TFS</u>		TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
		TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
		TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	2x336	N/A
		TF3, bits	<u>1x55</u>	<u>1x84</u>	<u>N/A</u>	<u>N/A</u>	N/A
		TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
		TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	N/A

TFCI	(RB5, RB6, RB7,RB8,DCCH)
UL TFC0	(TF0.TF0.TF0.TF0)
UL TFC1	(TF0,TF0,TF0,TF1,TF0)
UL TFC2	(TF0,TF0,TF0,TF2,TF0)
UL TFC3	(TF5.TF4.TF1.TF0.TF0)
UL TFC4	(TF5.TF4.TF1.TF0)
UL TFC5	(TF5,TF4,TF1,TF2,TF0)
UL TFC6	(TF4,TF3,TF0,TF0,TF0)
UL TFC7	(TF4,TF3,TF0,TF1,TF0)
UL TFC8	(TF4,TF3,TF0,TF2,TF0)
UL TFC9	(TF3,TF2,TF0,TF0,TF0)
UL TFC10	(TF3,TF2,TF0,TF1,TF0)
UL TFC11	(TF3,TF2,TF0,TF2,TF0)
UL TFC12	(TF2.TF1.TF0.TF0)
UL TFC13	(TF2,TF1,TF0,TF1,TF0)
UL TFC14	(TF2,TF1,TF0,TF2,TF0)
UL TFC15	(TF1,TF0,TF0,TF0)
UL TFC16	(TF1,TF0,TF0,TF1,TF0)
UL TFC17	(TF1,TF0,TF0,TF2,TF0)
UL TFC18	(TF0,TF0,TF0,TF1)
UL TFC19	(TF0,TF0,TF1,TF1)
UL_TFC20	(TF0,TF0,TF0,TF2,TF1)
UL TFC21	(TF5,TF4,TF1,TF0,TF1)
UL_TFC22	(TF5,TF4,TF1,TF1,TF1)
UL TFC23	(TF4,TF3,TF0,TF0,TF1)
UL TFC24	(TF4,TF3,TF0,TF1,TF1)
UL_TFC25	(TF3,TF2,TF0,TF0,TF1)
UL TFC26	(TF3,TF2,TF0,TF1,TF1)
UL_TFC27	<u>(TF2,TF1,TF0,TF0,TF1)</u>
UL_TFC28	(TF2,TF1,TF0,TF1,TF1)
UL TFC29	(TF1,TF0,TF0,TF1)
UL_TFC30	(TF1,TF0,TF0,TF1,TF1)
UL TFC31	(TF1,TF0,TF0,TF2,TF1)

Downlink TFS:

			RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (32 kbps, 20 ms TTI)	DCCH
<u>TFS</u>		TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
		TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
		TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	<u>2x336</u>	<u>N/A</u>
		TF3, bits	<u>1x55</u>	<u>1x84</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
		TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
		TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

F	
<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0,TF0,TF0,TF0)
DL_TFC1	(TF0,TF0,TF1,TF0)
DL TFC2	(TF0,TF0,TF0,TF2,TF0)
DL TFC3	(TF5,TF4,TF1,TF0,TF0)
DL TFC4	(TF5,TF4,TF1,TF1,TF0)
DL TFC5	(TF5,TF4,TF1,TF2,TF0)
DL TFC6	(TF4,TF3,TF0,TF0,TF0)
DL TFC7	(TF4,TF3,TF0,TF1,TF0)
DL_TFC8	(TF4,TF3,TF0,TF2,TF0)
DL TFC9	(TF3,TF2,TF0,TF0,TF0)
DL_TFC10	(TF3,TF2,TF0,TF1,TF0)
DL_TFC11	(TF3,TF2,TF0,TF2,TF0)
DL TFC12	(TF2,TF1,TF0,TF0,TF0)
DL_TFC13	(TF2,TF1,TF0,TF1,TF0)
DL TFC14	(TF2,TF1,TF0,TF2,TF0)
DL TFC15	(TF1,TF0,TF0,TF0,TF0)
DL_TFC16	(TF1,TF0,TF0,TF1,TF0)
DL TFC17	(TF1,TF0,TF0,TF2,TF0)
DL_TFC18	(TF0,TF0,TF0,TF1)
DL_TFC19	(TF0,TF0,TF1,TF1)
DL_TFC20	(TF0,TF0,TF0,TF2,TF1)
DL_TFC21	(TF5,TF4,TF1,TF0,TF1)
DL TFC22	(TF5,TF4,TF1,TF1,TF1)
DL TFC23	(TF4,TF3,TF0,TF0,TF1)
DL TFC24	(TF4,TF3,TF0,TF1,TF1)
DL TFC25	(TF3,TF2,TF0,TF0,TF1)
DL_TFC26	(TF3,TF2,TF0,TF1,TF1)
DL TFC27	(TF2,TF1,TF0,TF0,TF1)
DL_TFC28	(TF2,TF1,TF0,TF1,TF1)
DL_TFC29	(TF1,TF0,TF0,TF1)
DL TFC30	(TF1,TF0,TF0,TF1,TF1)
DL_TFC31	(TF1,TF0,TF0,TF2,TF1)

Sub-	Downlink	<u>Uplink</u>	Implicitely tested	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	TFCS under test	TFCS Under test		<u>TFCIs</u>	<u>size</u>	
				<u>(note 1)</u>	(note 2)	<u>(note 2)</u>
<u>1</u>	DL TFC1, DL TFC19	UL TFC1, UL TFC19	DL TFC0, DL TFC18, UL TFC0, UL TFC18	UL TFC0, UL TFC1,	RB5: 81 bits RB6: 103 bits	RB5: No data RB6: No data
	DL_IFC19	UL_IFC19	OL_IFCO, OL_IFC16	UL TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 312 bits	RB8: 312 bits
				UL_TFC9, UL_TFC12,		
				UL_TFC15,		
				UL_TFC18,		
2	DL TFC2,	UL TFC2,	DL TFC0, DL TFC18,	UL TFC19 UL TFC0,	RB5: 81 bits	RB5: No data
_	DL_TFC20	UL_TFC20	UL_TFC0, UL_TFC18	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2, UL_TFC3,	RB7: 60 bits RB8: 632 bits	RB7: No data RB8: 632 bits
				UL TFC6,	INDO. GOZ DIG	1100.002 bits
				UL TFC9, UL TFC12,		
				UL TFC12,		
				UL TFC18,		
<u>3</u>	DL TFC3,	UL TFC3,	DL TFC0, DL TFC18,	UL TFC20 UL TFC0,	RB5: 81 bits	RB5: 81 bits
<u> </u>	DL TFC21	UL TFC21	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC3, UL_TFC6,	RB7: 60 bits RB8: 312 bits	RB7: 60 bits RB8: No data
				UL TFC9,	KD0. 312 DILS	RDO. NO data
				UL_TFC12,		
				UL TFC15, UL TFC18,		
				UL TFC21		
<u>4</u>	DL TFC4, DL TFC22	UL TFC4, UL TFC22	DL TFC0, DL TFC18, UL TFC0, UL TFC18	UL TFC0, UL TFC1,	RB5: 81 bits RB6: 103 bits	RB5: 81 bits RB6: 103 bits
	DL 11 CZZ	OL ITOZZ	OL 11 CO, OL 11 C10	UL TFC3,	RB7: 60 bits	RB7: 60 bits
				UL TFC5,	RB8: 312 bits	RB8: 312 bits
				UL_TFC6, UL_TFC9,		
				UL TFC12,		
				UL_TFC15, UL_TFC18,		
				UL_TFC19,		
				UL_TFC21, UL_TFC22		
<u>5</u>	DL_TFC5,	UL_TFC5,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 81 bits	RB5: 81 bits
	DL_TFC22	UL_TFC22	UL_TFC0, UL_TFC18	UL_TFC1, UL_TFC2,	RB6: 103 bits	RB6: 103 bits
				UL TFC3,	RB7: 60 bits RB8: 632 bits	RB7: 60 bits RB8: 632 bits
				UL TFC5,		
				UL TFC6, UL TFC9,		
				UL TFC12,		
				UL_TFC15, UL_TFC18,		
				UL TFC20,		
				UL_TFC21, UL_TFC22		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL_TFC23	UL_TFC23	UL_TFC0, UL_TFC18	UL_TFC1,	RB6: 84 bits	RB6: 84 bits
				UL TFC3, UL TFC6,	RB7: 60 bits RB8: 312 bits	RB7: No data RB8: No data
				UL TFC9,		
				UL TFC12, UL TFC15,		
				UL TFC18,		
				UL TFC23		

I 7	DI TEC7	III TEC7	DI TECO DI TECAS	III TECO	DDE: 75 bits	DD5: 75 bito
7	DL_TFC7, DL_TFC24	UL_TFC7, UL_TFC24	DL_TFC0, DL_TFC18, UL_TFC0, UL_TFC18	UL_TFC0, UL_TFC1,	RB5: 75 bits RB6: 84 bits	RB5: 75 bits RB6: 84 bits
[[<u> </u>	<u> </u>	<u>52 11 50, 62 11 616</u>	UL TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 312 bits	RB8: 312 bits
				UL TFC7,		
				UL TFC9,		
				UL TFC12,		
				UL TFC15,		
				UL_TFC18,		
				UL TFC19,		
				UL_TFC23, UL_TFC24		
8	DL TFC8,	UL TFC8,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
=	DL TFC24	UL TFC24	UL TFC0, UL TFC18	UL TFC1,	RB6: 84 bits	RB6: 84 bits
	<u>BL_11 OL1</u>	<u> </u>	<u> </u>	UL TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 632 bits	RB8: 632 bits
				UL TFC8,		
				UL TFC9,		
				UL_TFC12,		
				UL_TFC15,		
				UL TFC18, UL TFC19,		
				UL_TFC19, UL_TFC23,		
				UL TFC24		
9	DL TFC9,	UL TFC9,	DL TFC0, DL TFC18,	UL TFC0.	RB5: 55 bits	RB5: 55 bits
	DL TFC25	UL TFC25	UL TFC0, UL TFC18	UL TFC1,	RB6: 63 bits	RB6: 63 bits
				UL_TFC3,	RB7: 60 bits	RB7: No data
				UL_TFC6,	RB8: 312 bits	RB8: No data
				UL TFC9,		
				UL_TFC12,		
				UL TFC15, UL TFC9,		
				UL TFC9,		
				UL TFC25		
<u>10</u>	DL TFC10,	UL TFC10,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL_TFC26	UL_TFC26	UL_TFC0, UL_TFC18	UL TFC1,	RB6: 63 bits	RB6: 63 bits
				UL TFC3,	RB7: 60 bits	RB7: No data
				UL_TFC6,	RB8: 312 bits	RB8: 312 bits
				UL_TFC10,		
				UL TFC9, UL TFC12,		
				UL TFC12,		
				UL TFC18,		
				UL TFC19,		
				UL TFC23,		
				UL_TFC26		
<u>11</u>	DL_TFC11,	UL_TFC11,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 55 bits	RB5: 55 bits
	DL_TFC26	UL_TFC26	UL_TFC0, UL_TFC18	UL_TFC1,	RB6: 63 bits	RB6: 63 bits
				UL TFC3, UL TFC6,	RB7: 60 bits RB8: 632 bits	RB7: No data RB8: 632 bits
				UL TFC6,	NDO. USZ DILS	INDO. 032 DILS
				UL TFC9,		
				UL TFC12,		
				UL TFC15,		
				UL_TFC18,		
				UL TFC19,		
				UL_TFC23, UL_TFC26		
12	DL TFC12,	UL TFC12,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC27	UL TFC27	UL TFC0, UL TFC18	UL TFC1,	RB6: 53 bits	RB6: 53 bits
			, , , , , , , , ,	UL_TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 312 bits	RB8: No data
				UL_TFC9,		
				UL_TFC12,		
				UL TFC15,		
				UL_TFC18, UL_TFC27		
l <u>L</u>	<u> 1</u>	1	<u> </u>	OL II OZI	1	

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<u>13</u>	DL_TFC13,	UL_TFC13,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC28	UL TFC28	UL TFC0, UL TFC18	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL_TFC3,	RB7: 60 bits	RB7: No data
				UL_TFC6,	RB8: 312 bits	RB8: 312 bits
				UL TFC13,		
				UL TFC9,		
				UL TFC12,		
				UL TFC15,		
				UL TFC18,		
				UL TFC19,		
				UL TFC23,		
				UL TFC28		
14	DL TFC14,	UL TFC14,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 42bits	RB5: 42 bits
II	DL TFC28	UL TFC28	UL TFC0, UL TFC18	UL TFC1,	RB6: 53bits	RB6: 53 bits
	<u>DL_11 020</u>	<u> </u>	<u>02_11 00; 02_11 010</u>	UL TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 632 bits	RB8: 632 bits
				UL TFC14,	100.002 bits	11D0: 002 bits
				UL TFC9,		
				UL TFC12,		
				UL TFC15,		
				UL TFC15,		
				UL TFC18,		
				UL TFC19,		
				UL TFC23,		
4.5	DI TEO45	LII TEO45	DI TEON DI TEOM		DDE: 00 hit-	DDE: 00 hits
<u>15</u>	DL_TFC15,	UL_TFC15, UL_TFC29	DL_TFC0, DL_TFC18, UL_TFC0, UL_TFC18	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC29	UL IFC29	UL TECU, UL TEC18	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC3,	RB7: 60 bits	RB7: No data
				UL_TFC6.	RB8: 312 bits	RB8: No data
				UL TFC9,		
				UL_TFC12,		
				UL TFC15,		
				UL TFC18,		
<u> </u>		====		UL_TFC29		
<u>16</u>	DL_TFC16,	UL_TFC16,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC30	UL TFC30	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 312 bits	RB8: 312 bits
				UL_TFC9,		
				UL_TFC12,		
				UL TFC15,		
				UL_TFC13,		
				UL TFC18,		
				UL TFC19,		
				UL_TFC29,		
<u> </u>				UL TFC30		
<u>17</u>	DL TFC17,	UL TFC17,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC31	UL_TFC31	UL_TFC0, UL_TFC18	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL_TFC6,		
				UL TFC9,		
				UL_TFC12,		
				UL_TFC15,		
				UL_TFC17,		
				UL TFC18,		
				UL TFC20,		
				UL TFC29,		
[[UL TFC31		
-	•	•				

NOTE 1: UL_TFC0, UL_TFC1, UL_TFC3, UL_TFC6, UL_TFC9, UL_TFC12, UL_TFC15, and UL_TFC18 are part of minimum set of TFCIs.

minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size parameter has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2. 38h.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1 and 2: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 3: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 4 and 5: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
 - for sub-test 6: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 7 and 8: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
 - for sub-test 9: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 10 and 11: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
 - for sub-test 12; RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 13 and 14: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
 - for sub-test 15: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 16 and 17: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message (in subtests 8, 11, and 14 this may make RB8 temporarily slow down).
- 18.2.2.38h.2 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:32 DL:32 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128.

18.2.2.38h.2.1 Conformance requirement

See clause 18.2.2.4.1.

18.2.2.38h.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38h for the uplink payload 128 case.

18.2.2.38h.2.3 Method of test

See clause 18.2.1.2 for test procedure.

		<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (32 kbps, 20 ms TTI)	DCCH
		TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
ĺ		TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
TFS		TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	<u>5x144</u>	<u>N/A</u>
11 5		TF3, bits	<u>1x55</u>	<u>1x84</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
		TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	N/A	<u>N/A</u>
		TF5, bits	<u>1x81</u>	N/A	N/A	N/A	<u>N/A</u>

_	
<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
UL_TFC0	(TF0,TF0,TF0,TF0)
UL TFC1	(TF0,TF0,TF1,TF0)
UL_TFC2	(TF0,TF0,TF0,TF2,TF0)
UL_TFC3	(TF5,TF4,TF1,TF0,TF0)
UL TFC4	(TF5,TF4,TF1,TF1,TF0)
UL_TFC5	(TF5,TF4,TF1,TF2,TF0)
UL TFC6	(TF4,TF3,TF0,TF0,TF0)
UL TFC7	(TF4,TF3,TF0,TF1,TF0)
UL TFC8	(TF4,TF3,TF0,TF2,TF0)
UL TFC9	(TF3,TF2,TF0,TF0,TF0)
UL TFC10	(TF3,TF2,TF0,TF1,TF0)
UL TFC11	(TF3,TF2,TF0,TF2,TF0)
UL TFC12	(TF2,TF1,TF0,TF0,TF0)
UL TFC13	(TF2,TF1,TF0,TF1,TF0)
UL TFC14	(TF2,TF1,TF0,TF2,TF0)
UL_TFC15	(TF1,TF0,TF0,TF0)
UL TFC16	(TF1,TF0,TF0,TF1,TF0)
UL TFC17	(TF1,TF0,TF0,TF2,TF0)
UL_TFC18	(TF0,TF0,TF0,TF1)
UL TFC19	(TF0,TF0,TF1,TF1)
UL TFC20	(TF0,TF0,TF0,TF2,TF1)
UL TFC21	(TF5,TF4,TF1,TF0,TF1)
UL TFC22	(TF5,TF4,TF1,TF1,TF1)
UL TFC23	(TF4,TF3,TF0,TF0,TF1)
UL TFC24	(TF4,TF3,TF0,TF1,TF1)
UL TFC25	(TF3,TF2,TF0,TF0,TF1)
UL TFC26	(TF3,TF2,TF0,TF1,TF1)
UL TFC27	(TF2,TF1,TF0,TF0,TF1)
UL TFC28	(TF2,TF1,TF0,TF1,TF1)
UL TFC29	(TF1,TF0,TF0,TF1)
UL TFC30	(TF1,TF0,TF0,TF1,TF1)
UL TFC31	(TF1,TF0,TF0,TF2,TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (32 kbps, 20 ms TTI)	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	2x336	N/A
11-3	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	N/A	N/A
İ	TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	N/A	N/A
	TF5, bits	1x81	N/A	N/A	N/A	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0,TF0,TF0,TF0)
DL TFC1	(TF0,TF0,TF1,TF0)
DL TFC2	(TF0,TF0,TF2,TF0)
DL TFC3	(TF5,TF4,TF1,TF0,TF0)
DL TFC4	(TF5,TF4,TF1,TF1,TF0)
DL TFC5	(TF5,TF4,TF1,TF2,TF0)
DL TFC6	(TF4,TF3,TF0,TF0,TF0)
DL TFC7	(TF4,TF3,TF0,TF1,TF0)
DL_TFC8	(TF4,TF3,TF0,TF2,TF0)
DL TFC9	(TF3,TF2,TF0,TF0,TF0)
DL_TFC10	(TF3,TF2,TF0,TF1,TF0)
DL_TFC11	(TF3,TF2,TF0,TF2,TF0)
DL TFC12	(TF2,TF1,TF0,TF0,TF0)
DL_TFC13	(TF2,TF1,TF0,TF1,TF0)
DL TFC14	(TF2,TF1,TF0,TF2,TF0)
DL TFC15	(TF1,TF0,TF0,TF0,TF0)
DL_TFC16	(TF1,TF0,TF0,TF1,TF0)
DL TFC17	(TF1,TF0,TF0,TF2,TF0)
DL_TFC18	(TF0,TF0,TF0,TF1)
DL_TFC19	(TF0,TF0,TF1,TF1)
DL_TFC20	(TF0,TF0,TF0,TF2,TF1)
DL_TFC21	(TF5,TF4,TF1,TF0,TF1)
DL TFC22	(TF5,TF4,TF1,TF1)
DL_TFC23	(TF4,TF3,TF0,TF0,TF1)
DL TFC24	(TF4,TF3,TF0,TF1,TF1)
DL TFC25	(TF3,TF2,TF0,TF0,TF1)
DL_TFC26	(TF3,TF2,TF0,TF1,TF1)
DL TFC27	(TF2,TF1,TF0,TF0,TF1)
DL_TFC28	(TF2,TF1,TF0,TF1,TF1)
DL_TFC29	(TF1,TF0,TF0,TF1)
DL TFC30	(TF1,TF0,TF0,TF1,TF1)
DL_TFC31	(TF1,TF0,TF0,TF2,TF1)

Sub-	Downlink	<u>Uplink</u>	Implicitely tested	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	TFCS under test	TFCS Under test		<u>TFCIs</u>	<u>size</u>	
				<u>(note 1)</u>	(note 2)	<u>(note 2)</u>
<u>1</u>	DL TFC1, DL TFC19	UL TFC1, UL TFC19	DL TFC0, DL TFC18, UL TFC0, UL TFC18	UL TFC0, UL TFC1,	RB5: 81 bits RB6: 103 bits	RB5: No data RB6: No data
	DL_IFC19	OL_IFC19	OL_IFCO, OL_IFC16	UL TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 120 bits	RB8: 312 bits
				UL_TFC9, UL_TFC12,		
				UL_TFC15,		
				UL_TFC18,		
2	DL TFC2,	UL TFC2,	DL TFC0, DL TFC18,	UL TFC19 UL TFC0,	RB5: 81 bits	RB5: No data
_	DL_TFC20	UL_TFC20	UL_TFC0, UL_TFC18	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2, UL_TFC3,	RB7: 60 bits RB8: 632 bits	RB7: No data RB8: 632 bits
				UL TFC6,	<u>INDO: 032 bits</u>	INDO. 032 DIES
				UL TFC9, UL TFC12,		
				UL TFC12,		
				UL TFC18,		
3	DL TFC3,	UL TFC3,	DL TFC0, DL TFC18,	UL TFC20 UL TFC0,	RB5: 81 bits	RB5: 81 bits
<u> </u>	DL TFC21	UL TFC21	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC3, UL_TFC6,	RB7: 60 bits	RB7: 60 bits
				UL TFC9,	RB8: 120 bits	RB8: No data
				UL TFC12,		
				UL TFC15, UL TFC18,		
				UL TFC21		
<u>4</u>	DL TFC4, DL TFC22	UL TFC4, UL TFC22	DL TFC0, DL TFC18, UL TFC0, UL TFC18	UL TFC0, UL TFC1,	RB5: 81 bits RB6: 103 bits	RB5: 81 bits RB6: 103 bits
	DL IFC22	OL IFC22	OL IFCO, OL IFC16	UL TFC3,	RB7: 60 bits	RB7: 60 bits
				UL TFC5,	RB8: 120 bits	RB8: 312 bits
				UL_TFC6, UL_TFC9,		
				UL TFC12,		
				UL_TFC15, UL_TFC18,		
				<u>UL_TFC19,</u>		
				UL_TFC21,		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0, DL TFC18,	UL TFC22 UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL_TFC22	UL TFC22	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL TFC2, UL TFC3,	RB7: 60 bits RB8: 632 bits	RB7: 60 bits RB8: 632 bits
				UL TFC5,	. 150. 002 bito	<u>50. 002 bito</u>
				UL TFC6, UL TFC9,		
				UL TFC12,		
				UL_TFC15, UL_TFC18,		
				UL_TFC18,		
				UL TFC21,		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0, DL TFC18,	UL TFC22 UL TFC0,	RB5: 75 bits	RB5: 75 bits
_	DL_TFC23	UL_TFC23	UL_TFC0, UL_TFC18	UL_TFC1,	RB6: 84 bits	RB6: 84 bits
				UL TFC3, UL TFC6,	RB7: 60 bits RB8: 120 bits	RB7: No data RB8: No data
				UL TFC9,	1100. 120 010	1100. 140 data
				UL TFC12, UL TFC15,		
				UL TFC18,		
				UL TFC23		

<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC24	UL TFC24	UL TFC0, UL TFC18	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 120 bits	RB8: 312 bits
				UL TFC7,	1.1201 120 10.10	1.20.0.2.0.0
				UL TFC9.		
				UL TFC12,		
				UL TFC15,		
				UL_TFC18,		
				UL TFC19,		
				UL TFC23,		
				UL TFC24		
Q	DL TFC8,	UL TFC8,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
<u>8</u>						
	DL_TFC24	UL_TFC24	UL_TFC0, UL_TFC18	UL_TFC1,	RB6: 84 bits	RB6: 84 bits
				UL TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 632 bits	RB8: 632 bits
				UL_TFC8,		
				UL TFC9,		
				UL TFC12,		
[[UL TFC15,		
[[UL TFC18,		
[[UL TFC18,		
		1				
		1		UL TFC23,		
				UL TFC24		
9	DL TFC9,	UL TFC9,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
11 -	DL TFC25	UL TFC25	UL TFC0, UL TFC18	UL TFC1,	RB6: 63 bits	RB6: 63 bits
			,	UL TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 120 bits	RB8: No data
				UL TFC9,	1XD0. 120 bits	INDO. INO Gala
				UL_TFC12,		
[[UL TFC15,		
[[UL TFC9,		
		1		UL TFC18,		
				UL TFC25		
10	DL TFC10,	UL TFC10,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL TFC26	UL TFC26	UL TFC0, UL TFC18	UL TFC1,	RB6: 63 bits	RB6: 63 bits
[[DL_II 020	<u>UL_11 UZU</u>	<u> </u>	UL TFC3,	RB7: 60 bits	RB7: No data
[[
[[UL_TFC6,	RB8: 120 bits	RB8: 312 bits
[[UL_TFC10,		
[[UL TFC9,		
[[UL_TFC12,		
[[UL TFC15,		
		1		UL TFC18,		
		1		UL TFC19,		
				UL TFC23,		
[[
				UL_TFC26		<u> </u>
<u>11</u>	DL_TFC11,	UL_TFC11,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 55 bits	RB5: 55 bits
	DL_TFC26	UL_TFC26	UL_TFC0, UL_TFC18	UL_TFC1,	RB6: 63 bits	RB6: 63 bits
				UL TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 632 bits	RB8: 632 bits
				UL TFC11,		
[[UL TFC9,		
[[
				UL_TFC12,		
[[UL_TFC15,		
[[UL_TFC18,		
				UL TFC19,		
				UL_TFC23,		
				UL TFC26		
<u>12</u>	DL TFC12,	UL TFC12,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC27	UL TFC27	UL TFC0, UL TFC18	UL TFC1,	RB6: 53 bits	RB6: 53 bits
	DE II OZI	OL II OZI	<u>52 11 50, 62 1F6 16</u>	UL TFC3,		
					RB7: 60 bits	RB7: No data
		1		UL TFC6,	RB8: 120 bits	RB8: No data
				UL_TFC9,		
				UL_TFC12,		
[[UL TFC15,		
11				UL TFC18,		
	1			UL TFC27		
						1

	T =	T	T	T		1 = = -
<u>13</u>	DL_TFC13,	UL_TFC13,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC28	UL TFC28	UL TFC0, UL TFC18	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL_TFC3,	RB7: 60 bits	RB7: No data
				UL_TFC6,	RB8: 120 bits	RB8: 312 bits
				UL TFC13,		
				UL TFC9,		
				UL TFC12,		
				UL TFC15,		
				UL TFC18,		
				UL TFC19,		
				UL TFC23,		
				UL TFC28		
<u>14</u>	DL TFC14,	UL TFC14,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 42bits	RB5: 42 bits
	DL TFC28	UL TFC28	UL TFC0, UL TFC18	UL TFC1,	RB6: 53bits	RB6: 53 bits
	<u> </u>	<u> </u>	<u></u>	UL TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 632 bits	RB8: 632 bits
				UL TFC14,	TEDO: GOZ DITO	TABO: COZ DIA
				UL TFC9,		
				UL TFC12,		
				UL TFC12,		
				UL TFC15,		
				UL_TFC19,		
				UL TFC23,		
<u> </u>	DI TECAS	III TEO45	DI TEON DI TEON	UL TFC28	DD5 00 1 "	DD5 00 1 11
<u>15</u>	DL_TFC15,	UL_TFC15,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC29	UL TFC29	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC3,	RB7: 60 bits	RB7: No data
				UL_TFC6,	RB8: 120 bits	RB8: No data
				UL TFC9,		
				UL_TFC12,		
				UL TFC15,		
				UL TFC18,		
				UL_TFC29		
<u>16</u>	DL_TFC16,	UL_TFC16,	DL_TFC0, DL_TFC18,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC30	UL TFC30	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC3,	RB7: 60 bits	RB7: No data
				UL TFC6,	RB8: 120 bits	RB8: 312 bits
				UL TFC9,		
				UL_TFC12,		
				UL TFC15,		
				UL TFC13,		
				UL TFC18,		
				UL TFC19,		
				UL TFC29,		
				UL TFC30		
<u>17</u>	DL TFC17,	UL TFC17,	DL TFC0, DL TFC18,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC31	UL TFC31	UL TFC0, UL TFC18	UL TFC1,	RB6: 103 bits	RB6: No data
	22	22		UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC6,	. 120. 002 bito	
				UL TFC9.		
				<u>UL TFC12,</u>		
				UL TFC15,		
				UL TFC15,		
				UL TFC17,		
				UL TFC18,		
				UL_TFC29,		
l <u>L</u>				UL TFC31	1	

NOTE 1:

UL_TFC0, UL_TFC1, UL_TFC3, UL_TFC6, UL_TFC9, UL_TFC12, UL_TFC15, and UL_TFC18 are part of minimum set of TFCIs.

See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size parameter has been set equal to the size of the payload NOTE 2: size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2. 38h.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6, and RB7.
 - for sub-test 2: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 3: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 4: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink.
 - for sub-test 5: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
 - for sub-test 6: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 7: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB7.
 - for sub-test 8: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
 - for sub-test 9: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 10: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB7.
 - for sub-test 11: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
 - for sub-test 12: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 13: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB7.
 - for sub-test 14: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
 - for sub-test 15: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 16: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.

- for sub-test 17: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message (in subtests 8, 11, and 14 this may make RB8 temporarily slow down).
- 18.2.2.38i Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.38i.1 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320.

18.2.2.38i.1.1 Conformance requirement

See clause 18.2.2.4.1.

18.2.2.38i.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38i for the uplink payload 320 case.

18.2.2.38i.1.3 Method of test

See clause 18.2.1.2 for test procedure.

Uplink TFS:

		<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps, 20 ms TTI)	DCCH
		TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
		TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS		TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	2x336	N/A
11 3		TF3, bits	<u>1x55</u>	<u>1x84</u>	<u>N/A</u>	<u>3x336</u>	<u>N/A</u>
		TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	<u>4x336</u>	N/A
		TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7,RB8,DCCH)
UL TFC0	(TF0,TF0,TF0,TF0)
UL TFC1	(TF1,TF0,TF0,TF0)
UL TFC2	(TF2,TF1,TF0,TF0,TF0)
UL TFC3	(TF3,TF2,TF0,TF0,TF0)
UL TFC4	(TF4,TF3,TF0,TF0,TF0)
UL TFC5	(TF5,TF4,TF1,TF0,TF0)
UL TFC6	(TF0,TF0,TF1,TF0)
UL TFC7	(TF1,TF0,TF0,TF1,TF0)
UL TFC8	(TF2,TF1,TF0,TF1,TF0)
UL TFC9	(TF3,TF2,TF0,TF1,TF0)
UL TFC10	(TF4,TF3,TF0,TF1,TF0)
UL TFC11	(TF5,TF4,TF1,TF1,TF0)
UL TFC12	(TF0,TF0,TF0,TF2,TF0)
UL_TFC13	(TF1,TF0,TF0,TF2,TF0)
UL TFC14	(TF2,TF1,TF0,TF2,TF0)
UL_TFC15	(TF3,TF2,TF0,TF2,TF0)
UL TFC16	(TF4,TF3,TF0,TF2,TF0)
UL TFC17	(TF5,TF4,TF1,TF2,TF0)
UL_TFC18	<u>(TF0,TF0,TF0,TF4,TF0)</u>
UL TFC19	(TF1,TF0,TF0,TF4,TF0)
UL_TFC20	(TF2,TF1,TF0,TF4,TF0)
UL TFC21	(TF3,TF2,TF0,TF4,TF0)
UL_TFC22	<u>(TF4,TF3,TF0,TF4,TF0)</u>
UL TFC23	(TF5,TF4,TF1,TF4,TF0)
UL TFC24	(TF0,TF0,TF0,TF1)
UL_TFC25	(TF1,TF0,TF0,TF1)
UL TFC26	(TF2,TF1,TF0,TF0,TF1)
UL_TFC27	(TF3,TF2,TF0,TF0,TF1)
UL_TFC28	(TF4,TF3,TF0,TF0,TF1)
UL TFC29	(TF5,TF4,TF1,TF0,TF1)
UL_TFC30	(TF0,TF0,TF0,TF1,TF1)
UL TFC31	(TF1,TF0,TF0,TF1,TF1)
UL TFC32	(TF2,TF1,TF0,TF1,TF1)
UL_TFC33 UL_TFC34	(TF3,TF2,TF0,TF1,TF1) (TF4,TF3,TF0,TF1,TF1)
UL TFC35	(TF5,TF4,TF1,TF1)
UL TFC36	(TF0,TF0,TF0,TF2,TF1)
UL TFC37	(TF1,TF0,TF0,TF2,TF1)
UL TFC38	(TF2.TF1.TF0.TF2.TF1)
UL TFC39	(TF3,TF2,TF0,TF2,TF1)
UL TFC40	(TF4,TF3,TF0,TF2,TF1)
UL TFC41	(TF5,TF4,TF1,TF2,TF1)
UL TFC42	(TF0,TF0,TF4,TF1)
UL TFC43	(TF1,TF0,TF0,TF4,TF1)
UL TFC44	(TF2,TF1,TF0,TF4,TF1)
UL TFC45	(TF3,TF2,TF0,TF4,TF1)
UL TFC46	(TF4,TF3,TF0,TF4,TF1)
UL TFC47	(TF5,TF4,TF1,TF4,TF1)
	· · · · · · · · · · · · · · · · · · ·

			RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps, 20 ms TTI)	DCCH
		TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
		TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS		TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	2x336	<u>N/A</u>
11 3		TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	<u>3x336</u>	<u>N/A</u>
		TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	<u>4x336</u>	<u>N/A</u>
		TF5, bits	<u>1x81</u>	<u>N/A</u>	N/A	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0.TF0.TF0.TF0)
DL TFC1	(TF1,TF0,TF0,TF0,TF0)
DL TFC2	(TF2,TF1,TF0,TF0,TF0)
DL TFC3	(TF3,TF2,TF0,TF0,TF0)
DL TFC4	(TF4,TF3,TF0,TF0,TF0)
DL TFC5	(TF5.TF4.TF1.TF0.TF0)
DL TFC6	(TF0,TF0,TF0,TF1,TF0)
DL TFC7	(TF1,TF0,TF1,TF0)
DL TFC8	(TF2,TF1,TF0,TF1,TF0)
DL TFC9	(TF3,TF2,TF0,TF1,TF0)
DL TFC10	(TF4,TF3,TF0,TF1,TF0)
DL TFC11	(TF5,TF4,TF1,TF1,TF0)
DL TFC12	(TF0,TF0,TF0,TF2,TF0)
DL TFC13	(TF1,TF0,TF0,TF2,TF0)
DL TFC14	(TF2,TF1,TF0,TF2,TF0)
DL TFC15	(TF3,TF2,TF0,TF2,TF0)
DL_TFC16	(TF4,TF3,TF0,TF2,TF0)
DL TFC17	(TF5,TF4,TF1,TF2,TF0)
DL_TFC18	(TF0,TF0,TF0,TF3,TF0)
DL_TFC19	(TF1,TF0,TF0,TF3,TF0)
DL_TFC20	(TF2,TF1,TF0,TF3,TF0)
DL_TFC21	(TF3,TF2,TF0,TF3,TF0)
DL TFC22	(TF4,TF3,TF0,TF3,TF0)
DL_TFC23	(TF5,TF4,TF1,TF3,TF0)
DL TFC24	(TF0,TF0,TF0,TF4,TF0)
DL TFC25	(TF1,TF0,TF0,TF4,TF0)
DL_TFC26	(TF2,TF1,TF0,TF4,TF0)
DL TFC27 DL TFC28	(TF3,TF2,TF0,TF4,TF0) (TF4,TF3,TF0,TF4,TF0)
DL TFC29	(TF5,TF4,TF1,TF4,TF0)
DL TFC30	(TF0,TF0,TF0,TF1)
DL TFC31	(TF1,TF0,TF0,TF1,TF1)
DL TFC32	(TF2,TF1,TF0,TF1)
DL TFC33	(TF3,TF2,TF0,TF1)
DL TFC34	(TF4,TF3,TF0,TF0,TF1)
DL TFC35	(TF5,TF4,TF1,TF0,TF1)
DL_TFC36	(TF0,TF0,TF1,TF1)
DL_TFC37	(TF1,TF0,TF0,TF1,TF1)
DL_TFC38	(TF2,TF1,TF0,TF1,TF1)
DL_TFC39	(TF3,TF2,TF0,TF1,TF1)
DL TFC40	(TF4,TF3,TF0,TF1,TF1)
DL_TFC41	(TF5,TF4,TF1,TF1,TF1)
DL TFC42	(TF0,TF0,TF0,TF2,TF1)
DL TFC43	(TF1,TF0,TF0,TF2,TF1)
DL_TFC44	(TF2,TF1,TF0,TF2,TF1)
DL TFC45 DL TFC46	(TF3,TF2,TF0,TF2,TF1) (TF4.TF3.TF0.TF2.TF1)
DL TFC47	(TF5,TF4,TF1,TF2,TF1)
DL TFC48	(TF0,TF0,TF3,TF1)
DL TFC49	(TF1,TF0,TF0,TF3,TF1)
DL TFC50	(TF2,TF1,TF0,TF3,TF1)
DL TFC51	(TF3,TF2,TF0,TF3,TF1)
DL TFC52	(TF4,TF3,TF0,TF3,TF1)
DL TFC53	(TF5,TF4,TF1,TF3,TF1)
DL_TFC54	(TF0,TF0,TF0,TF4,TF1)
DL TFC55	(TF1,TF0,TF0,TF4,TF1)
DL_TFC56	(TF2,TF1,TF0,TF4,TF1)
DL TFC57	(TF3,TF2,TF0,TF4,TF1)
DL TFC58	(TF4,TF3,TF0,TF4,TF1)
DL_TFC59	(TF5,TF4,TF1,TF4,TF1)

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC SDU	Test data size
test	TFCS	TFCS	implicitely tested	TFCIs	size	rest data size
1000	under test	Under test		<u></u>	<u> </u>	
				(note 1)	(note 2)	(note 2)
1	DL TFC1,	UL TFC1,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC31	UL_TFC25	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: No data
				UL_TFC4,		
				UL TFC5,		
				UL_TFC6, UL_TFC24,		
				UL TFC25		
2	DL TFC2,	UL TFC2,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
_	DL TFC32	UL TFC26	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
	<u>BL_11 00L</u>	<u>02_11 020</u>	<u>31_11 30, 31_11 321</u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: No data
				UL TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC24,		
				UL_TFC26		
<u>3</u>	DL TFC3,	UL TFC3,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL_TFC33	UL_TFC27	UL_TFC0, UL_TFC24	UL_TFC1, UL_TFC2,	RB6: 63 bits RB7: 60 bits	RB6: 63 bits
				UL TFC3,	RB8: 312 bits	RB7: No data RB8: No data
				UL TFC4,	KDO. 312 DILS	RDO. NO Udla
				UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL TFC27		
4	DL_TFC4,	UL_TFC4,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC34	UL TFC28	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 312 bits	RB8: No data
				UL TFC4, UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL TFC28		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC35	UL TFC29	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3,	RB8: 312 bits	RB8: No data
				UL_TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL_TFC24, UL_TFC29		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
=	DL TFC36	UL TFC30	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL_TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC24,		
l L				UL TFC30		

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<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC37	UL TFC31	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC7,		
				UL_TFC24,		
				UL TFC25,		
				UL_TFC30,		
				UL TFC31		
<u>8</u>	DL TFC8,	UL TFC8,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL_TFC38	UL_TFC32	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL_TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL_TFC8,		
				UL TFC24,		
				UL_TFC26,		
				UL TFC30,		
				UL TFC32		
<u>9</u>	DL_TFC9,	UL_TFC9,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 55 bits	RB5: 55 bits
	DL TFC39	UL TFC33	UL TFC0, UL TFC24	UL TFC1,	RB6: 63 bits	RB6: 63 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC9,		
				UL_TFC24,		
				UL TFC27,		
				UL_TFC30,		
				UL_TFC33		
<u>10</u>	DL TFC10,	UL TFC10,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL_TFC40	UL_TFC34	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL_TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC10,		
				UL TFC24,		
				UL_TFC28,		
				UL TFC30,		
14	DI TECAA	III TEO44	DI TECO DI TECCO	UL TFC34	DDE: 04 kit-	DDE: 04 bit-
<u>11</u>	DL TFC11,	UL TFC11,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL_TFC41	UL_TFC35	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: 103 bits
				UL TFC2,	RB7: 60 bits RB8: 312 bits	RB7: 60 bits
				UL_TFC3,	KBO: 312 DITS	RB8: 312 bits
				UL_TFC4,		
				UL_TFC5,		
				UL_TFC6, UL_TFC11,		
				UL TFC11,		
				UL TFC24,		
				UL TFC30,		
		ĺ	1	UL_TFC35	I	I I

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<u>12</u>	DL_TFC12,	UL_TFC12,	DL_TFC0, DL_TFC30,	UL_TFC0.	RB5: 81 bits	RB5: No data
	DL TFC42	UL TFC36	UL TFC0, UL TFC24	UL TFC1, UL TFC2,	RB6: 103 bits	RB6: No data RB7: No data
				UL TFC3,	RB7: 60 bits RB8: 632 bits	RB7: No data RB8: 632 bits
				UL TFC4,	KD0. 032 DILS	KD0. 032 DILS
				UL TFC5,		
				UL TFC6,		
				UL TFC12,		
				UL_TFC24,		
				UL TFC36		
<u>13</u>	DL_TFC13,	UL_TFC13,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC43	UL_TFC37	UL_TFC0, UL_TFC24	UL_TFC1, UL_TFC2,	RB6: 103 bits RB7: 60 bits	RB6: No data RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,	TABO: GGE BIA	1120: 002 010
				UL TFC5,		
				UL_TFC6,		
				UL TFC12,		
				UL_TFC13,		
				UL_TFC24, UL_TFC25,		
				UL TFC36,		
				UL TFC37		
14	DL TFC14,	UL TFC14,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL_TFC44	UL_TFC38	UL_TFC0, UL_TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 632 bits	RB8: 632 bits
				UL_TFC4, UL_TFC5,		
				UL TFC6,		
				UL TFC12,		
				UL TFC14,		
				UL_TFC24,		
				UL TFC26,		
				UL_TFC36,		
15	DL TFC15,	UL TFC15,	DL TFC0, DL TFC30,	UL_TFC38 UL_TFC0,	RB5: 55 bits	RB5: 55 bits
10	DL TFC45	UL TFC39	UL TFC0, UL TFC24	UL TFC1,	RB6: 63 bits	RB6: 63 bits
		<u> </u>		UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL_TFC4,		
				UL TFC5,		
				UL TFC6, UL TFC12,		
				UL TFC12,		
				UL TFC24,		
				UL TFC27,		
				UL TFC36,		
		====		UL_TFC39		
<u>16</u>	DL_TFC16,	UL_TFC16,	DL_TFC0, DL_TFC30, UL_TFC0, UL_TFC24	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC46	UL TFC40	UL IFCU, UL IFC24	UL TFC1,	RB6: 84 bits RB7: 60 bits	RB6: 84 bits RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,	. 120. 302 bito	
				UL TFC5,		
				UL TFC6,		
				UL_TFC12,		
				UL TFC16, UL TFC24,		
				UL TFC24,		
				UL TFC36,		
				UL TFC40		

<u>17</u>	DL_TFC17,	UL_TFC17,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC47	UL TFC41	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL_TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,		
				UL_TFC5, UL_TFC6,		
				UL TFC12,		
				UL TFC12,		
				UL TFC24,		
				UL TFC29,		
				UL TFC36,		
				UL TFC41		
<u>18</u>	DL_TFC18,	UL_TFC18,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 81 bits	RB5: No data
	DL TFC48	UL TFC42	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 1272 bits	RB8: 952 bits
				UL TFC4,		
				UL_TFC5,		
				UL_TFC6,		
11				UL TFC18, UL TFC24,		
				UL TFC24,		
19	DL TFC19,	UL TFC19,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
10	DL TFC49	UL TFC43	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
	<u>DE_11 0 10</u>	<u> </u>	<u>02_11 00, 02_11 021</u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 952 bits
				UL TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC18,		
				UL TFC19,		
				UL_TFC24,		
				UL TFC25,		
				UL_TFC42, UL_TFC43		
20	DL TFC20,	UL TFC20,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
20	DL TFC50	UL TFC44	UL TFC0. UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
	<u>B2_11 000</u>	<u> </u>	<u>32_11 30, 32_11 321</u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 952 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC18,		
				UL TFC20,		
				UL_TFC24,		
				UL TFC26, UL TFC42,		
				UL TFC42,		
<u>21</u>	DL TFC21,	UL TFC21,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
= -	DL TFC51	UL TFC45	UL TFC0, UL TFC24	UL TFC1,	RB6: 63 bits	RB6: 63 bits
[]			<u> </u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 952 bits
				UL_TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL_TFC18,		
				UL TFC21,		
				UL TFC24,		
				UL_TFC27, UL_TFC42,		
				UL TFC42,		
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<u>22</u>	DL_TFC22,	UL_TFC22,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC52	UL TFC46	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 1272 bits	RB8: 952 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL_TFC22,		
				UL TFC24,		
				UL_TFC28,		
				UL_TFC42,		
00	DI TECCO	III TEOOO	DI TEON DI TEONS	UL TFC46	DDE: 04 1/10	DD5: 04 120
<u>23</u>	DL_TFC23,	UL_TFC23,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC53	UL TFC47	UL TFC0, UL TFC24	UL TFC1, UL TFC2,	RB6: 103 bits RB7: 60 bits	RB6: 103 bits RB7: 60 bits
				UL_TFC3, UL_TFC4,	RB8: 1272 bits	RB8: 952 bits
				UL TFC4,		
				UL TFC6,		
				UL TFC18,		
				UL TFC16,		
				UL TFC23,		
				UL TFC24,		
				UL TFC42,		
				UL TFC47		
<u>24</u>	DL TFC24,	UL TFC18,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL TFC54	UL TFC42	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
	22 11 304	<u> </u>	<u></u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,	1.20. 1212 516	<u> </u>
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL TFC24,		
				UL TFC42		
<u>25</u>	DL TFC25,	UL TFC19,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC55	UL_TFC43	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL_TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC18,		
				UL TFC19,		
				UL_TFC24,		
				UL TFC25,		
				UL TFC42,		
00	DI TECCO	III TEOOO	DI TEON DI TEONS	UL_TFC43	DD5: 40 530	DD5: 40 1:10
<u>26</u>	DL_TFC26,	UL_TFC20,	DL_TFC0, DL_TFC30,	UL_TFC0, UL_TFC1,	RB5: 42 bits	RB5: 42 bits
	DL TFC56	UL TFC44	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC3,	RB7: 60 bits RB8: 1272 bits	RB7: No data
				UL TFC4,	KDO. 12/2 DIES	RB8: 1272 bits
				UL TFC5.		
				UL TFC6,		
				UL TFC18,		
				UL TFC10,		
				UL TFC24,		
				UL TFC26,		
				UL TFC42,		
				UL TFC44		
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27	DL_TFC27, DL_TFC57	UL_TFC21, UL_TFC45	DL_TFC0, DL_TFC30, UL TFC0, UL TFC24	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC4, UL_TFC5, UL_TFC6, UL_TFC18, UL_TFC21, UL_TFC24, UL_TFC24, UL_TFC27, UL_TFC42, UL_TFC42, UL_TFC45	RB5: 55 bits RB6: 63 bits RB7: 60 bits RB8: 1272 bits	RB5: 55 bits RB6: 63 bits RB7: No data RB8: 1272 bits
28	DL_TFC28, DL_TFC58	UL_TFC22, UL TFC46	DL_TFC0, DL_TFC30, UL_TFC0, UL_TFC24	UL_TFC0, UL TFC1, UL TFC2, UL_TFC3, UL_TFC5, UL_TFC6, UL_TFC18, UL_TFC22, UL_TFC24, UL_TFC24, UL_TFC24, UL_TFC46	RB5: 75 bits RB6: 84 bits RB7: 60 bits RB8: 1272 bits	RB5: 75 bits RB6: 84 bits RB7: No data RB8: 1272 bits
<u>29</u>	DL_TFC29, DL_TFC59	UL_TFC23, UL_TFC47	DL_TFC0, DL_TFC30, UL_TFC0, UL_TFC24	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC18, UL TFC23, UL TFC24, UL TFC29, UL TFC42, UL TFC47	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 1272 bits	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 1272 bits

NOTE 1: UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6 and UL TFC24 are part of minimum set of TFC1s.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size parameter has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38i.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2,3 and 4: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 5: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.

- for sub-test 6: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 8,9 and 10: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 11: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- for sub-test 12: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 14,15 and 16: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 17: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- for sub-test 18: RLC SDUs on RB8 having the same content as 1 times plus 320 lsb's of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6, and RB7.
- for sub-test 19: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as 1 times plus 320 lsb's of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6, and RB7.
- for sub-test 20,21 and 22: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as 1 times plus 320 lsb's of the test data sent by the SS in downlink; and no data shall be received on RB7.
- for sub-test 23: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the same content as 1 times plus 320 lsb's of the test data sent by the SS in downlink.
- for sub-test 24: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 25: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 26,27 and 28: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 29: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38i.2 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128.

18.2.2.38i.2.1 Conformance requirement

See clause 18.2.2.4.1.

<u>18.2.2.38i.2.2</u> Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38i for the uplink payload 128 case.

18.2.2.38i.2.3 Method of test

See clause 18.2.1.2 for test procedure.

		<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps, 20 ms TTI)	<u>DCCH</u>
		TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
		TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
TES	,	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	<u>3x144</u>	<u>N/A</u>
115	2	TF3, bits	<u>1x55</u>	<u>1x84</u>	<u>N/A</u>	<u>7x144</u>	<u>N/A</u>
		TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	<u>10x144</u>	N/A
		TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7,RB8,DCCH)
UL TFC0	(TF0,TF0,TF0,TF0)
UL TFC1	(TF1,TF0,TF0,TF0)
UL TFC2	(TF2,TF1,TF0,TF0,TF0)
UL TFC3	(TF3,TF2,TF0,TF0,TF0)
UL TFC4	(TF4,TF3,TF0,TF0,TF0)
UL TFC5	(TF5,TF4,TF1,TF0,TF0)
UL TFC6	(TF0,TF0,TF0,TF1,TF0)
UL TFC7	(TF1,TF0,TF0,TF1,TF0)
UL TFC8	(TF2,TF1,TF0,TF1,TF0)
UL TFC9	(TF3,TF2,TF0,TF1,TF0)
UL TFC10	(TF4,TF3,TF0,TF1,TF0)
UL TFC11	(TF5,TF4,TF1,TF0)
UL TFC12	(TF0,TF0,TF0,TF2,TF0)
UL TFC13	(TF1,TF0,TF0,TF2,TF0)
UL TFC14	(TF2,TF1,TF0,TF2,TF0)
UL TFC15	(TF3,TF2,TF0,TF2,TF0)
UL TFC16	(TF4,TF3,TF0,TF2,TF0)
UL TFC17	(TF5,TF4,TF1,TF2,TF0)
UL TFC18	(TF0,TF0,TF0,TF4,TF0)
UL TFC19	(TF1,TF0,TF0,TF4,TF0)
UL_TFC20	(TF2,TF1,TF0,TF4,TF0)
UL TFC21	(TF3,TF2,TF0,TF4,TF0)
UL_TFC22	(TF4,TF3,TF0,TF4,TF0)
UL TFC23	(TF5,TF4,TF1,TF4,TF0)
UL TFC24	(TF0,TF0,TF0,TF1)
UL_TFC25	(TF1,TF0,TF0,TF1)
UL TFC26	(TF2,TF1,TF0,TF0,TF1)
UL_TFC27	(TF3,TF2,TF0,TF0,TF1)
UL_TFC28	(TF4,TF3,TF0,TF0,TF1)
UL TFC29	(TF5,TF4,TF1,TF0,TF1)
UL_TFC30	(TF0,TF0,TF1,TF1)
UL TFC31	(TF1,TF0,TF0,TF1,TF1)
UL TFC32	(TF2,TF1,TF0,TF1,TF1)
UL_TFC33	(TF3,TF2,TF0,TF1,TF1)
UL TFC34	(TF4,TF3,TF0,TF1,TF1)
UL_TFC35	(TF5,TF4,TF1,TF1)
UL TFC36	(TF0,TF0,TF0,TF2,TF1)
UL_TFC37	(TF1,TF0,TF0,TF2,TF1)
UL_TFC38	(TF2,TF1,TF0,TF2,TF1)
UL TFC39	(TF3,TF2,TF0,TF2,TF1)
UL_TFC40	(TF4,TF3,TF0,TF2,TF1)
UL TFC41	(TF5,TF4,TF1,TF2,TF1)
UL TFC42	(TF0,TF0,TF0,TF4,TF1)
UL_TFC43	(TF1,TF0,TF0,TF4,TF1)
UL TFC44	(TF2,TF1,TF0,TF4,TF1)
UL_TFC45	(TF3,TF2,TF0,TF4,TF1)
UL_TFC46	(TF4,TF3,TF0,TF4,TF1)
UL TFC47	(TF5,TF4,TF1,TF4,TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps, 20 ms TTI)	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	2x336	<u>N/A</u>
11 3	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	<u>3x336</u>	<u>N/A</u>
	TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	<u>4x336</u>	<u>N/A</u>
	TF5, bits	<u>1x81</u>	<u>N/A</u>	N/A	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0,TF0,TF0,TF0)
DL_TFC1	(TF1,TF0,TF0,TF0)
DL TFC2	(TF2,TF1,TF0,TF0,TF0)
DL_TFC3	(TF3,TF2,TF0,TF0,TF0)
DL TFC4	(TF4,TF3,TF0,TF0,TF0)
DL TFC5	(TF5,TF4,TF1,TF0,TF0)
DL TFC6	(TF0,TF0,TF1,TF0)
DL TFC7	(TF1,TF0,TF0,TF1,TF0)
DL_TFC8	(TF2,TF1,TF0,TF1,TF0)
DL TFC9	(TF3,TF2,TF0,TF1,TF0)
DL_TFC10	(TF4,TF3,TF0,TF1,TF0)
DL_TFC11	(TF5,TF4,TF1,TF1,TF0)
DL TFC12	(TF0,TF0,TF0,TF2,TF0)
DL_TFC13	(TF1,TF0,TF0,TF2,TF0)
DL TFC14	(TF2,TF1,TF0,TF2,TF0)
DL TFC15	(TF3,TF2,TF0,TF2,TF0)
DL_TFC16	(TF4,TF3,TF0,TF2,TF0)
DL TFC17	(TF5,TF4,TF1,TF2,TF0)
DL_TFC18	(TF0,TF0,TF0,TF3,TF0)
DL_TFC19	(TF1,TF0,TF0,TF3,TF0)
DL_TFC20	(TF2,TF1,TF0,TF3,TF0)
DL_TFC21	(TF3,TF2,TF0,TF3,TF0)
DL TFC22	(TF4,TF3,TF0,TF3,TF0)
DL_TFC23	(TF5,TF4,TF1,TF3,TF0)
DL TFC24	(TF0,TF0,TF0,TF4,TF0)
DL TFC25	(TF1,TF0,TF0,TF4,TF0)
DL TFC26	(TF2,TF1,TF0,TF4,TF0)
DL TFC27	(TF3,TF2,TF0,TF4,TF0)
DL TFC28	(TF4,TF3,TF0,TF4,TF0)
DL TFC29	(TF5,TF4,TF1,TF4,TF0)
DL TFC30	(TF0,TF0,TF0,TF1)
DL TFC31	(TF1,TF0,TF0,TF1)
DL TFC32	(TF2,TF1,TF0,TF0,TF1)
DL TFC33	(TF3,TF2,TF0,TF0,TF1)
DL_TFC34	(TF4,TF3,TF0,TF0,TF1)
DL TFC35	(TF5,TF4,TF1,TF0,TF1)
DL TFC36	(TF0,TF0,TF1,TF1)
DL TFC37	(TF1,TF0,TF0,TF1,TF1)
DL TFC38	(TF2,TF1,TF0,TF1,TF1)
DL TFC39	(TF3,TF2,TF0,TF1,TF1)
DL TFC40	(TF4,TF3,TF0,TF1,TF1)
DL_TFC41	(TF5,TF4,TF1,TF1,TF1)
DL TFC42	(TF0,TF0,TF0,TF2,TF1)
DL TFC43	(TF1,TF0,TF0,TF2,TF1)
DL TFC44	(TF2,TF1,TF0,TF2,TF1)
DL TFC45	(TF3,TF2,TF0,TF2,TF1)
DL_TFC46	(TF4,TF3,TF0,TF2,TF1)
DL TFC47	(TF5,TF4,TF1,TF2,TF1)
DL TFC48	(TF0,TF0,TF0,TF3,TF1)
DL TFC49	(TF1,TF0,TF0,TF3,TF1)
DL TFC50	(TF2,TF1,TF0,TF3,TF1)
DL TFC51	(TF3,TF2,TF0,TF3,TF1)
DL TFC52	(TF4,TF3,TF0,TF3,TF1)
DL TFC53	(TF5,TF4,TF1,TF3,TF1)
DL TFC54	(TF0,TF0,TF0,TF4,TF1)
DL TFC55	(TF1,TF0,TF0,TF4,TF1)
DL TFC56	(TF2,TF1,TF0,TF4,TF1)
DL TFC57	(TF3,TF2,TF0,TF4,TF1)
DL TFC58	(TF4,TF3,TF0,TF4,TF1)
DL TFC59	(TF5,TF4,TF1,TF4,TF1)

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC SDU	Test data size
test	TFCS	TFCS	implicitely tested	TFCIs	size	Test data size
1001	under test	Under test		<u></u>	<u> </u>	
				(note 1)	(note 2)	(note 2)
1	DL TFC1,	UL TFC1,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC31	UL_TFC25	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL_TFC4,		
				UL TFC5, UL TFC6,		
				UL TFC24.		
				UL TFC25		
2	DL TFC2,	UL TFC2,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
=	DL TFC32	UL TFC26	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL_TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC24,		
-	DL TFC3,	UL TFC3,	DL TFC0, DL TFC30,	UL TFC26 UL TFC0,	RB5: 55 bits	RB5: 55 bits
<u>3</u>	DL TFC3, DL TFC33	UL TFC3,	UL TFC0, UL TFC24	UL TFC0,	RB6: 63 bits	RB6: 63 bits
	DL_TFC33	OL_IFG21	OL TECO, OL TEC24	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL TFC4,	TABO. 120 BRO	rtbo. Ho data
				UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL_TFC27		
4	DL_TFC4,	UL_TFC4,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC34	UL TFC28	UL TFC0, UL TFC24	UL TFC1, UL TFC2,	RB6: 84 bits RB7: 60 bits	RB6: 84 bits RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL TFC4,	100. 120 bits	NDO. NO data
				UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL_TFC28		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC35	UL TFC29	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3, UL TFC4,	RB8: 120 bits	RB8: No data
				UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL TFC29		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL_TFC36	UL_TFC30	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL_TFC4, UL_TFC5,		
				UL TFC5,		
				UL TFC24,		
[]				UL TFC30		
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<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC37	UL TFC31	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC7,		
				UL TFC24,		
				UL TFC25,		
				UL TFC30,		
				UL TFC31		
8	DL TFC8,	UL TFC8,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC38	UL TFC32	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC8,		
				UL TFC24,		
				UL TFC26,		
				UL TFC30,		
				UL TFC32		
9	DL TFC9,	UL TFC9,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL TFC39	UL TFC33	UL TFC0, UL TFC24	UL TFC1,	RB6: 63 bits	RB6: 63 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC9,		
				UL TFC24,		
				UL TFC27,		
				UL TFC30,		
				UL TFC33		
10	DL TFC10,	UL TFC10,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC40	UL TFC34	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
	<u> </u>	<u> </u>	<u></u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC10.		
				UL TFC24,		
				UL TFC28,		
				UL TFC30,		
				UL TFC34		
11	DL TFC11,	UL TFC11,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC41	UL TFC35	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: 103 bits
	22_1.011	32	<u></u>	UL TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,	. 120. 120 010	
				UL TFC5,		
				UL TFC6,		
				UL TFC11,		
				UL TFC24,		
				UL TFC29,		
				UL TFC30,		
				UL TFC35		
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<u>12</u>	DL_TFC12,	UL_TFC12,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 81 bits	RB5: No data
	DL TFC42	UL TFC36	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 376 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC12,		
				UL TFC24,		
				UL TFC36		
40	DI TEOM	III TEO40	DI TEON DI TEONS		DDE 00 kill	DDE 00 Lit
<u>13</u>	DL_TFC13,	UL_TFC13,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC43	UL_TFC37	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 376 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC12,		
				<u>UL TFC13,</u>		
	1			UL TFC24,		
				UL TFC25,		
				UL_TFC36,		
				UL TFC37		
<u>14</u>	DL TFC14,	UL TFC14,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL_TFC44	UL_TFC38	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 376 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC12,		
				UL TFC14,		
				UL TFC24,		
				UL TFC26,		
				UL_TFC36,		
	DI TEO/F		DI TEON DI TEON	UL_TFC38	DD5 5513	DD5 55111
<u>15</u>	DL TFC15,	UL TFC15,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL_TFC45	UL_TFC39	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 63 bits	RB6: 63 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 376 bits	RB8: 632 bits
				UL_TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC12,		
				UL TFC15,		
				UL TFC24,		
				UL TFC27,		
				UL TFC36,		
10	DI TECAC	III TEO40	DI TECO DI TECOS	UL_TFC39	DDE: 75 535	DDE: 75 5:4-
<u>16</u>	DL_TFC16,	UL_TFC16,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC46	UL TFC40	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 376 bits	RB8: 632 bits
				UL_TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC12,		
	1			UL TFC16,		
				UL TFC24,		
				UL TFC28,		
				UL TFC36,		
				UL TFC40	1	

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<u>17</u>	DL_TFC17,	UL_TFC17,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC47	UL TFC41	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL_TFC3,	RB8: 376 bits	RB8: 632 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6, UL TFC12,		
				UL TFC12,		
				UL TFC17,		
				UL TFC29,		
				UL TFC36,		
				UL TFC41		
<u>18</u>	DL_TFC18,	UL_TFC18,	DL_TFC0, DL_TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL TFC48	UL TFC42	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 1272 bits	RB8: 952 bits
				UL TFC4,		
				UL_TFC5,		
				UL_TFC6,		
				UL TFC18,		
				UL_TFC24, UL_TFC42		
19	DL TFC19,	UL TFC19,	DL TFC0, DL TFC30,	UL TFC42	RB5: 39 bits	RB5: 39 bits
13	DL TFC19,	UL TFC43	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
	<u>DL_11 040</u>	<u>5L_11 040</u>	<u>52_11 00, 02_11 02+</u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 952 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL TFC19,		
				UL_TFC24,		
				UL TFC25,		
				UL_TFC42,		
20	DL TFC20,	UL TFC20,	DL TFC0, DL TFC30,	UL_TFC43 UL_TFC0,	RB5: 42 bits	RB5: 42 bits
<u>20</u>	DL TFC50	UL TFC44	UL TFC0, UL TFC30,	UL TFC0,	RB6: 53 bits	RB6: 53 bits
	DL_11 000	<u> </u>	<u> </u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 952 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC18,		
				UL TFC20,		
				UL_TFC24,		
				UL TFC26,		
				UL TFC42,		
0.1	DI TECCI	III TECC1	DI TEON DI TEON	UL_TFC44	DDE: 55 1 "	DDC: 55 1:1
<u>21</u>	DL_TFC21,	UL_TFC21,	DL_TFC0, DL_TFC30, UL_TFC0, UL_TFC24	UL_TFC0,	RB5: 55 bits	RB5: 55 bits
	DL TFC51	UL TFC45	UL IFCU, UL IFC24	UL TFC1, UL TFC2,	RB6: 63 bits RB7: 60 bits	RB6: 63 bits RB7: No data
				UL TFC3,	RB7: 60 bits RB8: 1272 bits	RB8: 952 bits
				UL TFC4,	NDO. 1212 DILS	INDO. SOZ DILS
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL TFC21,		
				UL TFC24,		
				UL TFC27,		
				UL TFC42,		
				UL TFC45		

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<u>22</u>	DL_TFC22,	UL_TFC22,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC52	UL TFC46	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 1272 bits	RB8: 952 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL_TFC22,		
				UL TFC24,		
				UL_TFC28,		
				UL_TFC42,		
00	DI TECCO	III TEOOO	DI TEON DI TEONS	UL TFC46	DDE: 04 1/10	DD5: 04 120
<u>23</u>	DL_TFC23,	UL_TFC23,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC53	UL TFC47	UL TFC0, UL TFC24	UL TFC1, UL TFC2,	RB6: 103 bits RB7: 60 bits	RB6: 103 bits RB7: 60 bits
				UL_TFC3, UL_TFC4,	RB8: 1272 bits	RB8: 952 bits
				UL TFC4,		
				UL TFC6,		
				UL TFC18,		
				UL TFC16,		
				UL TFC23,		
				UL TFC24,		
				UL TFC42,		
				UL TFC47		
<u>24</u>	DL TFC24,	UL TFC18,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL TFC54	UL TFC42	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
	22 11 304	<u> </u>	<u></u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,	1.20. 1212 516	<u> </u>
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL TFC24,		
				UL TFC42		
<u>25</u>	DL TFC25,	UL TFC19,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC55	UL_TFC43	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL_TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC18,		
				UL TFC19,		
				UL_TFC24,		
				UL TFC25,		
				UL TFC42,		
00	DI TECCO	III TEOOO	DI TEON DI TEONS	UL_TFC43	DD5: 40 530	DD5: 40 1:10
<u>26</u>	DL_TFC26,	UL_TFC20,	DL_TFC0, DL_TFC30,	UL_TFC0, UL_TFC1,	RB5: 42 bits	RB5: 42 bits
	DL TFC56	UL TFC44	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC3,	RB7: 60 bits RB8: 1272 bits	RB7: No data
				UL TFC4,	KDO. 12/2 DIES	RB8: 1272 bits
				UL TFC5.		
				UL TFC6,		
				UL TFC18,		
				UL TFC10,		
				UL TFC24,		
				UL TFC26,		
				UL TFC42,		
				UL TFC44		
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27	DL_TFC27, DL_TFC57	UL_TFC21, UL_TFC45	DL_TFC0, DL_TFC30, UL TFC0, UL TFC24	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC4, UL_TFC5, UL_TFC6, UL_TFC18, UL_TFC21, UL_TFC21, UL_TFC24, UL_TFC27,	RB5: 55 bits RB6: 63 bits RB7: 60 bits RB8: 1272 bits	RB5: 55 bits RB6: 63 bits RB7: No data RB8: 1272 bits
28	DL_TFC28, DL_TFC58	UL_TFC22, UL_TFC46	DL_TFC0, DL_TFC30, UL_TFC0, UL_TFC24	UL TFC42, UL TFC45 UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5,	RB5: 75 bits RB6: 84 bits RB7: 60 bits RB8: 1272 bits	RB5: 75 bits RB6: 84 bits RB7: No data RB8: 1272 bits
				UL TFC6, UL TFC18, UL TFC22, UL TFC24, UL TFC28, UL TFC42, UL TFC46		
29	DL_TFC29, DL_TFC59	UL_TFC23, UL_TFC47	DL_TFC0, DL_TFC30, UL_TFC0, UL_TFC24	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC5, UL TFC6, UL TFC18, UL TFC23, UL TFC24, UL TFC24, UL TFC42, UL TFC47	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 1272 bits	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 1272 bits

NOTE 1: UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6 and UL TFC24 are part of minimum set of TFC1s.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size parameter has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38i.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2,3 and 4: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 5: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.

- for sub-test 6: RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
- for sub-test 8,9 and 10: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB7.
- for sub-test 11: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink.
- for sub-test 12: RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 14,15 and 16: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB7.
- for sub-test 17: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS.
- for sub-test 18: RLC SDUs on RB8 having the same content as 1 times plus 320 lsb's of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6, and RB7.
- for sub-test 19: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as 1 times plus 320 lsb's of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6, and RB7.
- for sub-test 20,21 and 22: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as 1 times plus 320 lsb's of the test data sent by the SS in downlink; and no data shall be received on RB7.
- for sub-test 23: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the same content as 1 times plus 320 lsb's of the test data sent by the SS in downlink.
- for sub-test 24: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 25: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 26,27 and 28: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 29: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.38j Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

18.2.2.38j.1 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320.

18.2.2.38j.1.1 Conformance requirement

See clause 18.2.2.4.1.

18.2.2.38j.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38j for the uplink payload 320 case.

18.2.2.38j.1.3 Method of test

See clause 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps, 20 ms TTI)	DCCH
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	<u>2x336</u>	N/A
113	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	3x336	N/A
	TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	<u>4x336</u>	N/A
	TF5, bits	<u>1x81</u>	N/A	N/A	N/A	N/A

TFCI	(RB5, RB6, RB7,RB8,DCCH)
UL TFC0	(TF0,TF0,TF0,TF0,TF0)
UL TFC1	(TF1,TF0,TF0,TF0,TF0)
UL TFC2	(TF2,TF1,TF0,TF0,TF0)
UL TFC3	(TF3,TF2,TF0,TF0,TF0)
UL TFC4	(TF4,TF3,TF0,TF0,TF0)
UL TFC5	(TF5,TF4,TF1,TF0,TF0)
UL TFC6	(TF0,TF0,TF0,TF1,TF0)
UL TFC7	(TF1,TF0,TF0,TF1,TF0)
UL TFC8	(TF2,TF1,TF0,TF1,TF0)
UL TFC9	(TF3,TF2,TF0,TF1,TF0)
UL TFC10	(TF4,TF3,TF0,TF1,TF0)
UL TFC11	(TF5,TF4,TF1,TF1,TF0)
UL TFC12	(TF0,TF0,TF0,TF2,TF0)
UL TFC13	(TF1,TF0,TF0,TF2,TF0)
UL TFC14	(TF2,TF1,TF0,TF2,TF0)
UL TFC15	(TF3,TF2,TF0,TF2,TF0)
UL TFC16	(TF4,TF3,TF0,TF2,TF0)
UL TFC17	(TF5,TF4,TF1,TF2,TF0)
UL TFC18	(TF0,TF0,TF0,TF4,TF0)
UL TFC19	(TF1,TF0,TF0,TF4,TF0)
UL TFC20	(TF2,TF1,TF0,TF4,TF0)
UL TFC21	(TF3,TF2,TF0,TF4,TF0)
UL TFC22	(TF4,TF3,TF0,TF4,TF0)
UL TFC23	(TF5,TF4,TF1,TF4,TF0)
UL TFC24	(TF0,TF0,TF0,TF1)
UL TFC25	(TF1,TF0,TF0,TF1)
UL TFC26	(TF2,TF1,TF0,TF0,TF1)
UL_TFC27	(TF3,TF2,TF0,TF0,TF1)
UL_TFC28	(TF4,TF3,TF0,TF0,TF1)
UL TFC29	(TF5,TF4,TF1,TF0,TF1)
UL_TFC30	(TF0,TF0,TF1,TF1)
UL TFC31	(TF1,TF0,TF0,TF1,TF1)
UL TFC32	(TF2,TF1,TF0,TF1,TF1)
UL TFC33	(TF3,TF2,TF0,TF1,TF1)
UL TFC34	(TF4,TF3,TF0,TF1,TF1)
UL_TFC35	(TF5,TF4,TF1,TF1,TF1)
UL TFC36	(TF0,TF0,TF0,TF2,TF1)
UL_TFC37	(TF1,TF0,TF0,TF2,TF1)
UL_TFC38	(TF2,TF1,TF0,TF2,TF1)
UL TFC39	(TF3,TF2,TF0,TF2,TF1)
UL_TFC40	(TF4,TF3,TF0,TF2,TF1)
UL TFC41	(TF5,TF4,TF1,TF2,TF1)
UL TFC42	(TF0,TF0,TF0,TF4,TF1)
UL_TFC43	(TF1,TF0,TF0,TF4,TF1)
UL TFC44	(TF2,TF1,TF0,TF4,TF1)
UL_TFC45	(TF3,TF2,TF0,TF4,TF1)
UL_TFC46	(TF4,TF3,TF0,TF4,TF1)
UL TFC47	(TF5,TF4,TF1,TF4,TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (128 kbps, 20 ms TTI)	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	2x336	<u>N/A</u>
11 3	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	<u>4x336</u>	<u>N/A</u>
	TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	8x336	<u>N/A</u>
	TF5, bits	<u>1x81</u>	<u>N/A</u>	N/A	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0.TF0.TF0.TF0)
DL TFC1	(TF1,TF0,TF0,TF0,TF0)
DL TFC2	(TF2,TF1,TF0,TF0,TF0)
DL TFC3	(TF3,TF2,TF0,TF0,TF0)
DL TFC4	(TF4,TF3,TF0,TF0,TF0)
DL TFC5	(TF5,TF4,TF1,TF0,TF0)
DL TFC6	(TF0,TF0,TF0,TF1,TF0)
DL TFC7	(TF1,TF0,TF1,TF0)
DL TFC8	(TF2,TF1,TF0,TF1,TF0)
DL TFC9	(TF3,TF2,TF0,TF1,TF0)
DL TFC10	(TF4,TF3,TF0,TF1,TF0)
DL TFC11	(TF5,TF4,TF1,TF1,TF0)
DL TFC12	(TF0,TF0,TF0,TF2,TF0)
DL TFC13	(TF1,TF0,TF0,TF2,TF0)
DL TFC14	(TF2,TF1,TF0,TF2,TF0)
DL TFC15	(TF3,TF2,TF0,TF2,TF0)
DL TFC16	(TF4,TF3,TF0,TF2,TF0)
DL TFC17	(TF5,TF4,TF1,TF2,TF0)
DL_TFC18	(TF0,TF0,TF0,TF3,TF0)
DL_TFC19	(TF1,TF0,TF0,TF3,TF0)
DL_TFC20	(TF2,TF1,TF0,TF3,TF0)
DL_TFC21	(TF3,TF2,TF0,TF3,TF0)
DL TFC22	(TF4,TF3,TF0,TF3,TF0)
DL_TFC23	(TF5,TF4,TF1,TF3,TF0)
DL TFC24	(TF0,TF0,TF0,TF4,TF0)
DL TFC25	(TF1,TF0,TF0,TF4,TF0)
DL_TFC26	(TF2,TF1,TF0,TF4,TF0)
DL TFC27	(TF3,TF2,TF0,TF4,TF0)
DL_TFC28	(TF4,TF3,TF0,TF4,TF0)
DL_TFC29	(TF5,TF4,TF1,TF4,TF0) (TF0,TF0,TF0,TF0,TF1)
DL TFC30 DL TFC31	(TF1,TF0,TF0,TF0,TF1)
DL TFC31	(TF2,TF1,TF0,TF0,TF1)
DL TFC33	(TF3,TF2,TF0,TF0,TF1)
DL TFC34	(TF4,TF3,TF0,TF0,TF1)
DL TFC35	(TF5,TF4,TF1,TF0,TF1)
DL TFC36	(TF0,TF0,TF1,TF1)
DL TFC37	(TF1,TF0,TF0,TF1,TF1)
DL TFC38	(TF2,TF1,TF0,TF1,TF1)
DL TFC39	(TF3,TF2,TF0,TF1,TF1)
DL TFC40	(TF4,TF3,TF0,TF1,TF1)
DL_TFC41	(TF5,TF4,TF1,TF1)
DL TFC42	(TF0,TF0,TF0,TF2,TF1)
DL TFC43	(TF1,TF0,TF0,TF2,TF1)
DL_TFC44	(TF2,TF1,TF0,TF2,TF1)
DL TFC45	(TF3,TF2,TF0,TF2,TF1)
DL_TFC46	(TF4,TF3,TF0,TF2,TF1)
DL TFC47	(TF5,TF4,TF1,TF2,TF1)
DL TFC48	(TF0,TF0,TF0,TF3,TF1)
DL_TFC49	(TF1,TF0,TF0,TF3,TF1)
DL TFC50	(TF2,TF1,TF0,TF3,TF1)
DL_TFC51	(TF3,TF2,TF0,TF3,TF1)
DL TFC52	(TF4,TF3,TF0,TF3,TF1)
DL_TFC53	(TF5,TF4,TF1,TF3,TF1)
DL_TFC54 DL_TFC55	(TF0,TF0,TF0,TF4,TF1) (TF1,TF0,TF0,TF4,TF1)
DL TFC55 DL TFC56	(TF2,TF1,TF0,TF4,TF1)
DL_TFC56 DL_TFC57	(TF3,TF2,TF0,TF4,TF1)
DL TFC58	(TF4,TF3,TF0,TF4,TF1)
DL TFC59	(TF5,TF4,TF1,TF4,TF1)
<u>DL 11 000</u>	<u> </u>

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC SDU	Test data size
test	TFCS	TFCS	implicitely tested	TFCIs	size	rest data size
1001	under test	Under test		<u></u>	<u> </u>	
				(note 1)	(note 2)	(note 2)
1	DL TFC1,	UL TFC1,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC31	UL_TFC25	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: No data
				UL_TFC4,		
				UL TFC5, UL TFC6,		
				UL TFC24.		
				UL TFC25		
2	DL TFC2,	UL TFC2,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
=	DL TFC32	UL TFC26	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: No data
				UL_TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC24,		
	DL TFC3,	LII TECO	DL TFC0, DL TFC30,	UL_TFC26	DDE: EE bito	DDE, EE bite
<u>3</u>	DL TFC3, DL TFC33	UL TFC3, UL TFC27	UL TFC0, UL TFC30,	UL TFC0, UL TFC1,	RB5: 55 bits RB6: 63 bits	RB5: 55 bits RB6: 63 bits
	DL_IFC33	UL_IFC21	UL_IFC0, UL_IFC24	UL TFC1,	RB6: 63 bits	RB0: 63 bits RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: No data
				UL TFC4,	INDO. O12 DIG	NDO: 140 data
				UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL_TFC27		
4	DL_TFC4,	UL_TFC4,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC34	UL TFC28	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL TFC2, UL TFC3,	RB7: 60 bits RB8: 312 bits	RB7: No data RB8: No data
				UL TFC4,	RDO. 312 DILS	RDO. NO Gala
				UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL_TFC28		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC35	UL TFC29	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3, UL TFC4,	RB8: 312 bits	RB8: No data
				UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL TFC29		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL_TFC36	UL_TFC30	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL_TFC4,		
				UL TFC5, UL TFC6,		
[]				UL TFC24,		
[]				UL TFC30		
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<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC37	UL TFC31	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,	1.20.0.2.0.0	1,201012010
				UL TFC5,		
				UL TFC6,		
				UL TFC7,		
				UL_TFC24,		
				UL TFC25,		
				UL_TFC30,		
				UL TFC31		
<u>8</u>	DL TFC8,	UL TFC8,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC38	UL TFC32	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,	TOO. O12 DIG	INDO. O12 DIG
				UL TFC5,		
				UL_TFC6,		
				UL_TFC8,		
				UL TFC24,		
				UL_TFC26,		
				UL TFC30,		
				UL TFC32		
9	DL TFC9,	UL TFC9,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
_	DL TFC39	UL TFC33	UL TFC0, UL TFC24	UL TFC1,	RB6: 63 bits	RB6: 63 bits
	<u>DL 11 000</u>	<u> </u>	<u>0L 11 00, 0L 11 024</u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 312 bits	RB8: 312 bits
				UL TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL TFC9,		
				UL TFC24,		
				UL TFC27,		
				UL TFC30,		
				UL TFC33		
10	DL TFC10,	UL TFC10,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
10	DL TFC40	UL TFC34	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
	DL_TFC40	OL_IFC34	OL_IFCO, OL_IFC24			
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 312 bits	RB8: 312 bits
				UL_TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC10,		
				UL TFC24,		
				UL TFC28,		
				UL TFC30,		
				UL TFC34		
<u>11</u>	DL TFC11,	UL TFC11,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
 	DL TFC11,		UL TFC0, UL TFC24		RB6: 103 bits	
	DL_IFC41	UL_TFC35	UL_IFCU, UL_IFC24	UL_TFC1,		RB6: 103 bits
				UL TFC2,	RB7: 60 bits	RB7: 60 bits
				UL_TFC3,	RB8: 312 bits	RB8: 312 bits
				UL_TFC4,		
				UL_TFC5,		
				UL_TFC6,		
				UL TFC11,		
				UL TFC24,		
				UL TFC29,		
				UL TFC30,		
				UL TFC35		
11				UL IFU35	L	

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<u>12</u>	DL_TFC12,	UL_TFC12,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 81 bits	RB5: No data
	DL TFC42	UL TFC36	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6.		
				UL TFC12,		
				UL TFC24,		
		====.		UL TFC36		
<u>13</u>	DL_TFC13,	UL_TFC13,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC43	UL_TFC37	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC12,		
				UL TFC13,		
[]				UL TFC13,		
				UL TFC25,		
				UL_TFC36,		
] [UL TFC37		
<u>14</u>	DL TFC14,	UL TFC14,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
[]	DL TFC44	UL TFC38	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC12,		
				UL TFC14,		
				UL_TFC24,		
				UL TFC26,		
				UL_TFC36,		
				UL_TFC38		
<u>15</u>	DL TFC15,	UL TFC15,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL TFC45	UL TFC39	UL TFC0, UL TFC24	UL TFC1,	RB6: 63 bits	RB6: 63 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
11				UL TFC4,		
[]				UL TFC5,		
	1			UL TFC6,		
	1					
				UL_TFC12,		
	1			UL TFC15,		
				UL_TFC24,		
				UL TFC27,		
				UL TFC36,		
				UL TFC39		
<u>16</u>	DL TFC16,	UL TFC16,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC46	UL TFC40	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
	22 0 .0	32 0.0	= 55, 52 52.	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 632 bits	RB8: 632 bits
					INDO. USZ DILS	1XD0. 032 DILS
	1			UL_TFC4,		
				UL_TFC5,		
				UL TFC6,		
				UL_TFC12,		
				UL TFC16,		
				UL TFC24,		
				UL TFC28,		
				UL TFC36,		
				UL TFC40		
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<u>17</u>	DL_TFC17,	UL_TFC17,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC47	UL TFC41	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL_TFC3,	RB8: 632 bits	RB8: 632 bits
				UL TFC4,		
				UL_TFC5, UL_TFC6,		
				UL TFC6,		
				UL TFC12,		
				UL TFC17,		
				UL TFC29,		
				UL TFC36,		
	<u></u>			UL TFC41	<u></u>	
<u>18</u>	DL_TFC18,	UL_TFC18,	DL_TFC0, DL_TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL TFC48	UL TFC42	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,		
				UL_TFC5, UL_TFC6,		
				UL_TFC6, UL_TFC18,		
				UL TFC18,		
				UL TFC42		
<u>19</u>	DL TFC19,	UL TFC19,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC49	UL TFC43	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC18,		
				UL TFC19,		
				UL_TFC24,		
				UL TFC25, UL TFC42,		
				UL_TFC42, UL_TFC43		
20	DL TFC20,	UL TFC20,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
===	DL TFC50	UL TFC44	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC18,		
				UL TFC20,		
				UL_TFC24,		
				UL TFC26, UL TFC42,		
				UL TFC42, UL TFC44		
<u>21</u>	DL TFC21,	UL TFC21,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL_TFC21,	UL TFC45	UL TFC0, UL TFC30,	UL TFC1,	RB6: 63 bits	RB6: 63 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC18,		
				UL TFC21,		
				UL TFC24,		
				UL_TFC27,		
				UL TFC42,		
		1		UL TFC45	I	1

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<u>22</u>	DL_TFC22,	UL_TFC22,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC52	UL TFC46	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,		
				UL TFC5.		
				UL TFC6,		
				UL TFC18,		
				UL TFC22,		
				UL TFC24,		
				UL TFC28,		
				UL TFC42,		
				UL TFC46		
22	DL TFC23,	UL TFC23,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
<u>23</u>	DL_TFC23,	UL TFC47	UL TFC0, UL TFC30,	UL TFC1,	RB6: 103 bits	RB6: 103 bits
	DL IFC55	UL IFC47	UL TFC0, UL TFC24			
				UL TFC2,	RB7: 60 bits	RB7: 60 bits
				UL_TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,		
				UL_TFC5,		
				UL_TFC6,		
				UL TFC18,		
				UL_TFC23,		
				UL TFC24,		
				UL TFC29,		
				UL TFC42,		
				UL TFC47		
<u>24</u>	DL TFC24,	UL TFC18,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL TFC54	UL TFC42	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
	<u> </u>	<u> </u>	<u></u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 2552 bits
				UL TFC4,	TOO. 1272 DIG	TOO. ZOOZ DIO
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL TFC24,		
				UL TFC42		
25	DI TECOE	III TECAO	DI TECO DI TECOO		DDE: 20 bits	DDC: 20 bits
<u>25</u>	DL TFC25, DL TFC55	UL TFC19, UL TFC43	DL TFC0, DL TFC30, UL TFC0, UL TFC24	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_IFC55	<u>UL_1FC43</u>	UL_IFCU, UL_IFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 2552 bits
[[UL_TFC4,		
				UL TFC5,		
[[UL TFC6,		
				UL_TFC18,		
				UL TFC19,		
				UL_TFC24,		
				UL TFC25,		
				UL TFC42,		
				UL_TFC43		
<u>26</u>	DL_TFC26,	UL_TFC20,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC56	UL TFC44	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 2552 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL TFC20,		
				UL TFC24,		
				UL TFC26,		
				UL TFC42,		
[[UL TFC42,		
11		1		<u>UL_1FU44</u>	1	

27	DL_TFC27, DL_TFC57	UL_TFC21, UL_TFC45	DL_TFC0, DL_TFC30, UL TFC0, UL TFC24	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC4, UL_TFC5, UL_TFC6, UL_TFC18, UL_TFC21, UL_TFC24, UL_TFC24, UL_TFC27, UL_TFC42, UL_TFC42, UL_TFC45	RB5: 55 bits RB6: 63 bits RB7: 60 bits RB8: 1272 bits	RB5: 55 bits RB6: 63 bits RB7: No data RB8: 2552 bits
28	DL_TFC28, DL_TFC58	UL_TFC22, UL TFC46	DL_TFC0, DL_TFC30, UL_TFC0, UL_TFC24	UL_TFC0, UL TFC1, UL TFC2, UL_TFC3, UL TFC4, UL_TFC5, UL_TFC6, UL_TFC18, UL_TFC22, UL_TFC24, UL_TFC24, UL_TFC24, UL_TFC46	RB5: 75 bits RB6: 84 bits RB7: 60 bits RB8: 1272 bits	RB5: 75 bits RB6: 84 bits RB7: No data RB8: 2552 bits
<u>29</u>	DL_TFC29, DL_TFC59	UL_TFC23, UL_TFC47	DL_TFC0, DL_TFC30, UL_TFC0, UL_TFC24	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC18, UL TFC23, UL TFC24, UL TFC29, UL TFC42, UL TFC47	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 1272 bits	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 2552 bits

NOTE 1: UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6 and UL TFC24 are part of minimum set of TFC1s.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size parameter has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38j.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2,3 and 4: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 5: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.

- for sub-test 6: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 8,9 and 10: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 11: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- for sub-test 12: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 14,15 and 16: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 17: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- for sub-test 18: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 19: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 20,21 and 22: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 23: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- for sub-test 24: RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 25: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
- for sub-test 26,27 and 28: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB7.
- for sub-test 29: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.38j.2 Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL:(12.2 7.95 5.9 4.75) kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128.

18.2.2.38j.2.1 Conformance requirement

See clause 18.2.2.4.1.

18.2.2.38j.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.38j for the uplink payload 128 case.

18.2.2.38j.2.3 Method of test

See clause 18.2.1.2 for test procedure.

Uplink TFS:

		<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps, 20 ms TTI)	<u>DCCH</u>
		TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
		TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
TES	,	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	<u>3x144</u>	<u>N/A</u>
115	2	TF3, bits	<u>1x55</u>	<u>1x84</u>	<u>N/A</u>	<u>7x144</u>	<u>N/A</u>
		TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	<u>10x144</u>	N/A
		TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

Uplink TFCS:

TFCI	(RB5, RB6, RB7,RB8,DCCH)
UL TFC0	(TF0,TF0,TF0,TF0)
UL TFC1	(TF1,TF0,TF0,TF0)
UL TFC2	(TF2,TF1,TF0,TF0,TF0)
UL TFC3	(TF3,TF2,TF0,TF0,TF0)
UL TFC4	(TF4,TF3,TF0,TF0,TF0)
UL TFC5	(TF5,TF4,TF1,TF0,TF0)
UL TFC6	(TF0,TF0,TF1,TF0)
UL TFC7	(TF1,TF0,TF0,TF1,TF0)
UL TFC8	(TF2,TF1,TF0,TF1,TF0)
UL TFC9	(TF3,TF2,TF0,TF1,TF0)
UL TFC10	(TF4,TF3,TF0,TF1,TF0)
UL TFC11	(TF5,TF4,TF1,TF1,TF0)
UL TFC12	(TF0,TF0,TF0,TF2,TF0)
UL_TFC13	(TF1,TF0,TF0,TF2,TF0)
UL TFC14	(TF2,TF1,TF0,TF2,TF0)
UL_TFC15	(TF3,TF2,TF0,TF2,TF0)
UL TFC16	(TF4,TF3,TF0,TF2,TF0)
UL TFC17	(TF5,TF4,TF1,TF2,TF0)
UL_TFC18	<u>(TF0,TF0,TF0,TF4,TF0)</u>
UL TFC19	(TF1,TF0,TF0,TF4,TF0)
UL_TFC20	(TF2,TF1,TF0,TF4,TF0)
UL TFC21	(TF3,TF2,TF0,TF4,TF0)
UL_TFC22	<u>(TF4,TF3,TF0,TF4,TF0)</u>
UL TFC23	(TF5,TF4,TF1,TF4,TF0)
UL TFC24	(TF0,TF0,TF0,TF1)
UL_TFC25	(TF1,TF0,TF0,TF1)
UL TFC26	(TF2,TF1,TF0,TF0,TF1)
UL_TFC27	(TF3,TF2,TF0,TF0,TF1)
UL_TFC28	(TF4,TF3,TF0,TF0,TF1)
UL TFC29	(TF5,TF4,TF1,TF0,TF1)
UL_TFC30	(TF0,TF0,TF0,TF1,TF1)
UL TFC31	(TF1,TF0,TF0,TF1,TF1)
UL TFC32	(TF2,TF1,TF0,TF1,TF1)
UL_TFC33 UL_TFC34	(TF3,TF2,TF0,TF1,TF1) (TF4,TF3,TF0,TF1,TF1)
UL TFC35	(TF5,TF4,TF1,TF1)
UL TFC36	(TF0,TF0,TF0,TF2,TF1)
UL TFC37	(TF1,TF0,TF0,TF2,TF1)
UL TFC38	(TF2.TF1.TF0.TF2.TF1)
UL TFC39	(TF3,TF2,TF0,TF2,TF1)
UL TFC40	(TF4,TF3,TF0,TF2,TF1)
UL TFC41	(TF5,TF4,TF1,TF2,TF1)
UL TFC42	(TF0,TF0,TF4,TF1)
UL TFC43	(TF1,TF0,TF0,TF4,TF1)
UL TFC44	(TF2,TF1,TF0,TF4,TF1)
UL TFC45	(TF3,TF2,TF0,TF4,TF1)
UL TFC46	(TF4,TF3,TF0,TF4,TF1)
UL TFC47	(TF5,TF4,TF1,TF4,TF1)
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		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (128 kbps, 20 ms TTI)	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x42</u>	<u>1x63</u>	<u>N/A</u>	2x336	<u>N/A</u>
11 3	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	<u>4x336</u>	<u>N/A</u>
	TF4, bits	<u>1x75</u>	<u>1x103</u>	<u>N/A</u>	8x336	<u>N/A</u>
	TF5, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0,TF0,TF0,TF0,TF0)
DL TFC1	(TF1,TF0,TF0,TF0)
	(TF2,TF1,TF0,TF0,TF0)
DL_TFC3	(TF3,TF2,TF0,TF0,TF0)
DL TFC4	(TF4,TF3,TF0,TF0,TF0)
DL TFC5	(TF5,TF4,TF1,TF0,TF0)
DL TFC6	(TF0,TF0,TF0,TF1,TF0)
DL TFC7	(TF1,TF0,TF0,TF1,TF0)
DL_TFC8	(TF2,TF1,TF0,TF1,TF0)
DL TFC9	(TF3,TF2,TF0,TF1,TF0)
DL TFC10	(TF4,TF3,TF0,TF1,TF0)
DL_TFC11	(TF5,TF4,TF1,TF1,TF0)
DL TFC12	(TF0,TF0,TF0,TF2,TF0)
DL TFC13	(TF1,TF0,TF0,TF2,TF0)
DL TFC14	(TF2,TF1,TF0,TF2,TF0)
DL TFC15	(TF3,TF2,TF0,TF2,TF0)
	+
DL_TFC16	(TF4,TF3,TF0,TF2,TF0)
DL TFC17	(TF5,TF4,TF1,TF2,TF0)
DL TFC18	(TF0,TF0,TF0,TF3,TF0)
DL TFC19	(TF1,TF0,TF0,TF3,TF0)
DL TFC20	(TF2,TF1,TF0,TF3,TF0)
DL_TFC21	(TF3,TF2,TF0,TF3,TF0)
DL TFC22	(TF4,TF3,TF0,TF3,TF0)
DL TFC23	(TF5,TF4,TF1,TF3,TF0)
DL TFC24	(TF0,TF0,TF0,TF4,TF0)
DL TFC25	(TF1,TF0,TF0,TF4,TF0)
	+
DL_TFC26	(TF2,TF1,TF0,TF4,TF0)
DL TFC27	(TF3,TF2,TF0,TF4,TF0)
DL TFC28	(TF4,TF3,TF0,TF4,TF0)
DL TFC29	(TF5.TF4.TF1.TF4.TF0)
DL TFC30	
	(TF0,TF0,TF0,TF1)
DL_TFC31	(TF1,TF0,TF0,TF1)
DL TFC32	(TF2,TF1,TF0,TF0,TF1)
DL TFC33	(TF3,TF2,TF0,TF0,TF1)
DL TFC34	(TF4,TF3,TF0,TF0,TF1)
DL TFC35	(TF5,TF4,TF1,TF0,TF1)
DL_TFC36	(TF0,TF0,TF1,TF1)
DL_TFC37	(TF1,TF0,TF0,TF1,TF1)
DL TFC38	(TF2,TF1,TF0,TF1,TF1)
DL TFC39	(TF3,TF2,TF0,TF1,TF1)
DL TFC40	(TF4,TF3,TF0,TF1,TF1)
DL_TFC41	(TF5,TF4,TF1,TF1,TF1)
DL TFC42	(TF0,TF0,TF0,TF2,TF1)
DL TFC43	(TF1,TF0,TF0,TF2,TF1)
DL TFC44	(TF2,TF1,TF0,TF2,TF1)
DL TFC45	(TF3,TF2,TF0,TF2,TF1)
DL_TFC46	(TF4,TF3,TF0,TF2,TF1)
DL TFC47	(TF5,TF4,TF1,TF2,TF1)
DL TFC48	(TF0,TF0,TF3,TF1)
DL TFC49	(TF1,TF0,TF0,TF3,TF1)
DL TFC50	(TF2,TF1,TF0,TF3,TF1)
DL TFC51	
	(TF3,TF2,TF0,TF3,TF1)
DL_TFC52	(TF4,TF3,TF0,TF3,TF1)
DL_TFC53	(TF5,TF4,TF1,TF3,TF1)
DL TFC54	(TF0,TF0,TF0,TF4,TF1)
DL TFC55	(TF1,TF0,TF0,TF4,TF1)
DL TFC56	(TF2,TF1,TF0,TF4,TF1)
DL TFC57	(TF3,TF2,TF0,TF4,TF1)
DL TFC58	(TF4,TF3,TF0,TF4,TF1)
DL TFC59	(TF5,TF4,TF1,TF4,TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC SDU	Test data size
test	TFCS	TFCS	implicitely tested	TFCIs	size	Test data size
1001	under test	Under test		<u></u>	<u> </u>	
				(note 1)	(note 2)	(note 2)
1	DL TFC1,	UL TFC1,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_TFC31	UL_TFC25	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL_TFC4,		
				UL TFC5, UL TFC6,		
				UL TFC24.		
				UL TFC25		
2	DL TFC2,	UL TFC2,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
=	DL TFC32	UL TFC26	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL_TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC24,		
-	DL TFC3,	UL TFC3,	DL TFC0, DL TFC30,	UL TFC26 UL TFC0,	RB5: 55 bits	RB5: 55 bits
<u>3</u>	DL TFC3, DL TFC33	UL TFC3,	UL TFC0, UL TFC24	UL TFC0,	RB6: 63 bits	RB6: 63 bits
	DL_TFC33	OL_IFG21	OL TECO, OL TEC24	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL TFC4,	TABO. 120 BRO	rtbo. Ho data
				UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL_TFC27		
4	DL_TFC4,	UL_TFC4,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC34	UL TFC28	UL TFC0, UL TFC24	UL TFC1, UL TFC2,	RB6: 84 bits RB7: 60 bits	RB6: 84 bits RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: No data
				UL TFC4,	100. 120 bits	NDO. NO data
				UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL_TFC28		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC35	UL TFC29	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3, UL TFC4,	RB8: 120 bits	RB8: No data
				UL TFC5,		
				UL TFC6,		
				UL TFC24,		
				UL TFC29		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL_TFC36	UL_TFC30	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL_TFC4, UL_TFC5,		
				UL TFC5,		
				UL TFC24,		
[]				UL TFC30		
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<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC37	UL TFC31	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC7,		
				UL TFC24,		
				UL TFC25,		
				UL TFC30,		
				UL TFC31		
8	DL TFC8,	UL TFC8,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC38	UL TFC32	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC8,		
				UL TFC24,		
				UL TFC26,		
				UL TFC30,		
				UL TFC32		
9	DL TFC9,	UL TFC9,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL TFC39	UL TFC33	UL TFC0, UL TFC24	UL TFC1,	RB6: 63 bits	RB6: 63 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC9,		
				UL TFC24,		
				UL TFC27,		
				UL TFC30,		
				UL TFC33		
10	DL TFC10,	UL TFC10,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC40	UL TFC34	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
	<u> </u>	<u> </u>	<u></u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC10.		
				UL TFC24,		
				UL TFC28,		
				UL TFC30,		
				UL TFC34		
11	DL TFC11,	UL TFC11,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC41	UL TFC35	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: 103 bits
	22_1.011	32	<u></u>	UL TFC2,	RB7: 60 bits	RB7: 60 bits
				UL TFC3,	RB8: 120 bits	RB8: 312 bits
				UL TFC4,	. 120. 120 010	
				UL TFC5,		
				UL TFC6,		
				UL TFC11,		
				UL TFC24,		
				UL TFC29,		
				UL TFC30,		
				UL TFC35		
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<u>12</u>	DL_TFC12,	UL_TFC12,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 81 bits	RB5: No data
	DL TFC42	UL TFC36	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 376 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC12,		
				UL_TFC24,		
				UL TFC36		
<u>13</u>	DL_TFC13,	UL_TFC13,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC43	UL TFC37	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 376 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC12,		
				UL_TFC13,		
				UL_TFC24,		
				UL TFC25,		
				UL TFC36,		
				UL TFC37		
14	DL TFC14,	UL TFC14,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC14,	UL TFC38	UL TFC0, UL TFC30,	UL TFC1,	RB6: 53 bits	RB6: 53 bits
	DL_IFC44	UL_IFC36	UL_IFCU, UL_IFC24			
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 376 bits	RB8: 632 bits
				UL_TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC12,		
				UL TFC14,		
				UL TFC24,		
				UL TFC26,		
				UL_TFC36,		
ļ <u>.</u>		== 0.1=		UL_TFC38		
<u>15</u>	DL TFC15,	UL TFC15,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL_TFC45	UL_TFC39	UL_TFC0, UL_TFC24	UL_TFC1,	RB6: 63 bits	RB6: 63 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 376 bits	RB8: 632 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC12,		
				UL TFC12,		
				UL_TFC24,		
				UL TFC27,		
				UL TFC36,		
				UL_TFC39		
<u>16</u>	DL TFC16,	UL TFC16,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC46	UL TFC40	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 376 bits	RB8: 632 bits
				UL TFC4,	INDO. OTO DILO	ואטט. טטב טונס
				UL_TFC5,		
				UL TFC6,		
				UL_TFC12,		
				UL TFC16,		
				UL TFC24,		
				UL TFC28,		
				UL TFC36,		
				UL TFC40		
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<u>17</u>	DL_TFC17,	UL_TFC17,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 81 bits	RB5: 81 bits
	DL TFC47	UL TFC41	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: 103 bits
				UL_TFC2,	RB7: 60 bits	RB7: 60 bits
				UL_TFC3,	RB8: 376 bits	RB8: 632 bits
				UL TFC4,		
				UL_TFC5, UL_TFC6,		
				UL TFC6,		
				UL TFC12,		
				UL TFC17,		
				UL TFC29,		
				UL TFC36,		
	<u></u>	<u> </u>		UL TFC41	<u></u>	
<u>18</u>	DL_TFC18,	UL_TFC18,	DL_TFC0, DL_TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL TFC48	UL TFC42	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,		
				UL_TFC5, UL_TFC6,		
				UL_TFC6, UL_TFC18,		
				<u>UL TFC18,</u> <u>UL TFC24,</u>		
				UL TFC42		
19	DL TFC19,	UL TFC19,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL TFC49	UL TFC43	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL_TFC4,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC18,		
				UL TFC19,		
				UL_TFC24, UL_TFC25,		
				UL TFC25, UL TFC42,		
				UL TFC42,		
20	DL TFC20,	UL TFC20,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC50	UL TFC44	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 1272 bits
1				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC18,		
1				UL TFC20,		
				UL_TFC24, UL_TFC26,		
1				UL TFC26,		
1				UL TFC42,		
<u>21</u>	DL TFC21,	UL TFC21,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 55 bits	RB5: 55 bits
	DL TFC51	UL TFC45	UL TFC0, UL TFC24	UL TFC1,	RB6: 63 bits	RB6: 63 bits
1				UL_TFC2,	RB7: 60 bits	RB7: No data
1				UL_TFC3,	RB8: 1272 bits	RB8: 1272 bits
1				UL_TFC4,		
1				UL_TFC5,		
				UL TFC6,		
1				UL_TFC18,		
				UL TFC21,		
1				UL TFC24,		
				UL_TFC27, UL_TFC42,		
				UL TFC42, UL TFC45		
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<u>22</u>	DL_TFC22,	UL_TFC22,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 75 bits	RB5: 75 bits
	DL TFC52	UL TFC46	UL TFC0, UL TFC24	UL TFC1,	RB6: 84 bits	RB6: 84 bits
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL_TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,		
				UL TFC5.		
				UL TFC6,		
				UL TFC18,		
				UL TFC22,		
				UL TFC24,		
				UL TFC28,		
				UL TFC42,		
				UL TFC46		
22	DL TFC23,	UL TFC23,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: 81 bits
<u>23</u>	DL_TFC23,	UL TFC47	UL TFC0, UL TFC30,	UL TFC1,	RB6: 103 bits	RB6: 103 bits
	DL IFC55	UL IFC47	UL TFC0, UL TFC24			
				UL TFC2,	RB7: 60 bits	RB7: 60 bits
				UL_TFC3,	RB8: 1272 bits	RB8: 1272 bits
				UL TFC4,		
				UL_TFC5,		
				UL_TFC6,		
				UL TFC18,		
				UL_TFC23,		
				UL TFC24,		
				UL TFC29,		
				UL TFC42,		
				UL TFC47		
<u>24</u>	DL TFC24,	UL TFC18,	DL TFC0, DL TFC30,	UL TFC0,	RB5: 81 bits	RB5: No data
	DL TFC54	UL TFC42	UL TFC0, UL TFC24	UL TFC1,	RB6: 103 bits	RB6: No data
	<u> </u>	<u> </u>	<u></u>	UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 2552 bits
				UL TFC4,	TOO. 1272 DIG	TOO. ZOOZ DIO
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL TFC24,		
				UL TFC42		
25	DI TECOE	III TECAO	DI TECO DI TECOO		DDE: 20 bits	DDC: 20 bits
<u>25</u>	DL TFC25, DL TFC55	UL TFC19, UL TFC43	DL TFC0, DL TFC30, UL TFC0, UL TFC24	UL TFC0,	RB5: 39 bits	RB5: 39 bits
	DL_IFC55	<u>UL_1FC43</u>	UL_IFCU, UL_IFC24	UL_TFC1,	RB6: 103 bits	RB6: No data
				UL_TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 2552 bits
[[UL_TFC4,		
				UL TFC5,		
[[UL TFC6,		
				UL_TFC18,		
				UL TFC19,		
				UL_TFC24,		
				UL TFC25,		
				UL TFC42,		
				UL_TFC43		
<u>26</u>	DL_TFC26,	UL_TFC20,	DL_TFC0, DL_TFC30,	UL_TFC0,	RB5: 42 bits	RB5: 42 bits
	DL TFC56	UL TFC44	UL TFC0, UL TFC24	UL TFC1,	RB6: 53 bits	RB6: 53 bits
				UL TFC2,	RB7: 60 bits	RB7: No data
				UL TFC3,	RB8: 1272 bits	RB8: 2552 bits
				UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL TFC18,		
				UL TFC20,		
				UL TFC24,		
				UL TFC26,		
				UL TFC42,		
[[UL TFC42,		
11		1		<u>UL_1FU44</u>	1	

27	DL_TFC27, DL_TFC57	UL_TFC21, UL_TFC45	DL_TFC0, DL_TFC30, UL TFC0, UL TFC24	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC4, UL_TFC5, UL_TFC6, UL_TFC18, UL_TFC21, UL_TFC24, UL_TFC24, UL_TFC27, UL_TFC42, UL_TFC42, UL_TFC45	RB5: 55 bits RB6: 63 bits RB7: 60 bits RB8: 1272 bits	RB5: 55 bits RB6: 63 bits RB7: No data RB8: 2552 bits
28	DL_TFC28, DL_TFC58	UL_TFC22, UL TFC46	DL_TFC0, DL_TFC30, UL_TFC0, UL_TFC24	UL_TFC0, UL TFC1, UL TFC2, UL_TFC3, UL TFC4, UL_TFC5, UL_TFC6, UL_TFC18, UL_TFC22, UL_TFC24, UL_TFC24, UL_TFC24, UL_TFC46	RB5: 75 bits RB6: 84 bits RB7: 60 bits RB8: 1272 bits	RB5: 75 bits RB6: 84 bits RB7: No data RB8: 2552 bits
<u>29</u>	DL_TFC29, DL_TFC59	UL_TFC23, UL_TFC47	DL_TFC0, DL_TFC30, UL_TFC0, UL_TFC24	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC18, UL TFC23, UL TFC24, UL TFC29, UL TFC42, UL TFC47	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 1272 bits	RB5: 81 bits RB6: 103 bits RB7: 60 bits RB8: 2552 bits

NOTE 1: UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6 and UL TFC24 are part of minimum set of TFC1s.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size parameter has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.38j.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2,3 and 4: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; and no data shall be received on RB7 and RB8.
 - for sub-test 5: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.

- for sub-test 6: RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
- for sub-test 8,9 and 10: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB7.
- for sub-test 11: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink.
- for sub-test 12: RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 14,15 and 16: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB7.
- for sub-test 17: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS.
- for sub-test 18: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 19: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
- for sub-test 20,21 and 22: RLC SDUs on RB5, RB6 and RB8 having the same content as sent by the SS; and no data shall be received on RB7.
- for sub-test 23: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- for sub-test 24: RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 25: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
- for sub-test 26,27 and 28: RLC SDUs on RB5 and RB6 having the same content as sent by the SS; RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB7.
- for sub-test 29: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.39 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH
- 18.2.2.39.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB / Pavload 320
- 18.2.2.39.1.1 Conformance requirement

See 18.2.2.4.1.

<u>18.2.2.39.1.2</u> Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.39 for the uplink payload 320 case.

18.2.2.39.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (32 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	1x81	N/A	N/A	2x336	N/A

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0, TF0)
UL_TFC2	(TF2, TF1, TF1, TF0, TF0)
UL TFC3	(TF0, TF0, TF0, TF1, TF0)
<u>UL_TFC4</u>	(TF1, TF0, TF0, TF1, TF0)
<u>UL TFC5</u>	(TF2, TF1, TF1, TF1, TF0)
<u>UL_TFC6</u>	(TF0, TF0, TF0, TF2, TF0)
<u>UL_TFC7</u>	(TF1, TF0, TF0, TF2, TF0)
<u>UL TFC8</u>	(TF2, TF1, TF1, TF2, TF0)
UL_TFC9	(TF0, TF0, TF0, TF1)
UL TFC10	(TF1, TF0, TF0, TF1)
UL TFC11	(TF2, TF1, TF1, TF0, TF1)
UL_TFC12	(TF0, TF0, TF1, TF1)
UL TFC13	(TF1, TF0, TF0, TF1, TF1)
UL_TFC14	(TF2, TF1, TF1, TF1, TF1)
UL_TFC15	(TF0, TF0, TF0, TF2, TF1)
UL_TFC16	(TF1, TF0, TF0, TF2, TF1)
UL_TFC17	(TF2, TF1, TF1, TF2, TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps)	<u>DCCH</u>
	TF0, bits	1x0	0x103	<u>0x60</u>	0x336	<u>0x148</u>
	TF1, bits	1x39	1x103	1x60	1x336	1x148
<u>TFS</u>	TF2, bits	1x81	N/A	N/A	2x336	N/A
	TF3, bits	N/A	N/A	N/A	3x336	N/A
	TF4, bits	N/A	N/A	N/A	4x336	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL TFC11	(TF2, TF1, TF1, TF3, TF0)
DL_TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL_TFC15	(TF0, TF0, TF0, TF1)
DL TFC16	(TF1, TF0, TF0, TF1)
DL TFC17	(TF2, TF1, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF1, TF1, TF1)
DL TFC21	(TF0, TF0, TF0, TF2, TF1)
DL_TFC22	(TF1, TF0, TF0, TF2, TF1)
DL TFC23	(TF2, TF1, TF1, TF2, TF1)
DL TFC24	(TF0, TF0, TF0, TF3, TF1)
DL_TFC25	(TF1, TF0, TF0, TF3, TF1)
DL TFC26	(TF2, TF1, TF1, TF3, TF1)
DL_TFC27	(TF0, TF0, TF4, TF1)
DL_TFC28	(TF1, TF0, TF0, TF4, TF1)
DL TFC29	(TF2, TF1, TF1, TF4, TF1)

Sub-tests:

Sub-	<u>Downlink</u>	<u>Uplink</u>	Implicitely tested	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	TFCS Under	TFCS Under test		TFCIs	size (bits)	(bits)
	Test	Officer test			(note)	(note)
1	DL TFC1,	UL TFC1,	DL TFC0, DL TFC15,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC16	UL_TFC10	UL_TFC0, UL_TFC9	UL_TFC1, UL_TFC9,	RB6: 103 RB7: 60	RB6: No data RB7: No data
				UL TFC10	RB8: 312	RB8: No data
2	DL_TFC2,	UL_TFC2,	DL_TFC0, DL_TFC15,	UL_TFC0,	RB5: 81	RB5: 81
	DL TFC17	UL TFC11	UL TFC0, UL TFC9	UL TFC2, UL TFC9,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
				UL TFC11	RB8: 312	RB8: No data
<u>3</u>	DL_TFC3,	UL_TFC3,	DL_TFC0, DL_TFC15,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC18	UL TFC12	UL TFC0, UL TFC9	UL TFC3,	RB6: 103	RB6: No data
				UL_TFC9, UL_TFC12	RB7: 60 RB8: 312	RB7: No data RB8: 312
4	DL TFC4,	UL TFC4,	DL TFC0, DL TFC15,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC19	UL_TFC13	UL_TFC0, UL_TFC9	UL_TFC1,	RB6: 103	RB6: No data
				UL_TFC3, UL_TFC4,	RB7: 60 RB8: 312	RB7: No data RB8: 312
				UL TFC9,	100.012	100.012
				UL TFC10,		
				UL TFC12, UL TFC13		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0, DL TFC15,	UL TFC0,	RB5: 81	RB5: 81
	DL TFC20	UL TFC14	UL TFC0, UL TFC9	UL TFC2,	RB6: 103	RB6: 103
				UL_TFC3, UL_TFC5,	RB7: 60 RB8: 312	RB7: 60 RB8: 312
				UL TFC9,	100. 312	<u>KB0. 312</u>
				UL_TFC11,		
				UL TFC12, UL TFC14		
6	DL TFC6,	UL TFC6,	DL TFC0, DL TFC15,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC21	UL TFC15	UL TFC0, UL TFC9	UL TFC6,	RB6: 103	RB6: No data
				UL_TFC9, UL_TFC15	RB7: 60 RB8: 632	RB7: No data RB8: 632
7	DL TFC7,	UL TFC7,	DL TFC0, DL TFC15,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC22	UL TFC16	UL TFC0, UL TFC9	UL TFC1,	RB6: 103	RB6: No data
				UL_TFC6, UL_TFC7,	RB7: 60 RB8: 632	RB7: No data RB8: 632
				UL TFC9,	1130. 002	1130.002
				UL_TFC10,		
				UL TFC15, UL TFC16		
8	DL_TFC8,	UL_TFC8,	DL_TFC0, DL_TFC15,	UL TFC0,	RB5: 81	RB5: 81
	DL TFC23	UL TFC17	UL TFC0, UL TFC9	UL TFC2,	RB6: 103	RB6: 103
				UL_TFC6, UL_TFC8,	RB7: 60 RB8: 632	RB7: 60 RB8: 632
				UL TFC9,		
				UL_TFC11,		
				UL TFC15, UL TFC17		
9	DL_TFC9,	UL_TFC6,	DL_TFC0, DL_TFC15,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC24	UL TFC15	UL TFC0, UL TFC9	UL TFC6,	RB6: 103	RB6: No data
				UL_TFC9, UL_TFC15	RB7: 60 RB8: 632	RB7: No data RB8: 952
<u>10</u>	DL_TFC10,	UL_TFC7,	DL_TFC0, DL_TFC15,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC25	UL TFC16	UL TFC0, UL TFC9	UL TFC1,	RB6: 103	RB6: No data
				UL_TFC6, UL_TFC7,	RB7: 60 RB8: 632	RB7: No data RB8: 952
				UL TFC9,		<u> </u>
				UL_TFC10,		
				UL TFC15, UL TFC16		
Щ	1	1			1	1

DL TFC26 UL TFC17 UL TFC0, UL TFC9 UL TFC2, UL TFC2, UL TFC6, UL TFC8, UL TFC8, UL TFC9, UL TFC11, UL TFC11, UL TFC11, UL TFC15, UL TFC17 12 DL TFC12, DL TFC15, UL TFC0, UL TFC15, UL TFC0, UL TFC9, UL TFC9, UL TFC9, RB6: 103, RB6: 103, RB7: 60	Test data size
Test	(bits)
DL TFC11, DL TFC26 UL TFC3, UL TFC0, UL TFC15, UL TFC2, UL TFC2, UL TFC2, UL TFC3, UL TFC3, UL TFC3, UL TFC3, UL TFC3, UL TFC11, UL TFC11, UL TFC15, UL TFC15, UL TFC17 UL TFC27 UL TFC3, UL TFC3, UL TFC4, UL TFC4, UL TFC5, UL TFC5, UL TFC5, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC9, RB6: 103 RB7: 60 UL TFC9, RB7: 60	
DL_TFC26 UL_TFC17 UL_TFC0, UL_TFC9 UL_TFC2, UL_TFC2, UL_TFC6, UL_TFC6, UL_TFC8, UL_TFC9, UL_TFC11, UL_TFC11, UL_TFC15, UL_TFC15, UL_TFC17 QL_TFC15, UL_TFC17 12 DL_TFC12, DL_TFC15, UL_TFC15, UL_TFC0, UL_TFC9, UL_TFC0, UL_TFC9, UL_TFC9, UL_TFC9, UL_TFC9, RB6: 103, RB7: 60 QL_TFC15, RB6: 103, RB7: 60	<u>(note)</u>
UL_TFC6, UL_TFC8, UL_TFC9, UL_TFC11, UL_TFC15, UL_TFC17	<u>RB5: 81</u>
UL TFC8, UL TFC9, UL TFC11, UL TFC15, UL TFC17 UL TFC17 UL TFC15, UL TFC17 UL TFC15, UL TFC0, UL TFC0, UL TFC0, UL TFC0, UL TFC6, UL TFC6, UL TFC9, UL TFC9, RB6: 103 RB7: 60 UL TFC9, RB7: 60 UL TFC9, RB7: 60 RB7:	RB6: 103
UL_TFC9, UL_TFC11, UL_TFC15, UL_TFC17	RB7: 60
UL TFC11, UL TFC15, UL TFC15, UL TFC17 UL TFC27 UL TFC15 UL TFC9, UL TFC9, UL TFC9, RB5: 39 UL TFC9, RB6: 103 RB7: 60 UL TFC9, RB7: 60	RB8: 952
DL TFC12, DL TFC6, DL TFC0, DL TFC15, UL TFC0, DL TFC16, DL TFC0, UL TFC9, DL TFC9, DL TFC9, DL TFC9, DL TFC9, RB5: 39 RB6: 103 RB7: 60	
12 DL TFC12, UL TFC6, DL TFC0, DL TFC15, UL TFC6, UL TFC9 UL TFC6, UL TFC9, RB6: 103 UL TFC9, RB7: 60	
12 DL_TFC12, UL_TFC6, UL_TFC0, DL_TFC15, UL_TFC0, UL_TFC6, UL_TFC9 UL_TFC6, UL_TFC9, RB6: 103 RB7: 60	
DL TFC27 UL TFC15 UL TFC0, UL TFC9 UL TFC6, UL TFC9, UL TFC9, RB6: 103 RB7: 60	DDC: No data
<u>UL TFC9,</u> <u>RB7: 60</u>	RB5: No data RB6: No data
	RB7: No data
	RB8: 1272
	RB5: 39
	RB6: No data
	RB7: No data
	RB8: 1272
UL TFC9,	
UL TFC10,	
UL TFC15,	
UL_TFC16	
	<u>RB5: 81</u>
	RB6: 103
	RB7: 60
	RB8: 1272
UL_TFC9,	
UL_TFC11,	
UL TFC15, UL TFC17	İ

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB8 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit).

18.2.2.39.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3: an RLC SDU on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: an RLC SDU on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 5: an RLC SDU on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
 - for sub-test 6: an RLC SDU on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.

- for sub-test 7: an RLC SDU on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 8: an RLC SDU on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
- for sub-test 9: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 10: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 11: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 12: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 14: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.39.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:32 DL:64 kbps / PS RAB / Payload 128

18.2.2.39.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.39.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.39 for the uplink payload 128 case.

18.2.2.39.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (32 kbps)	DCCH
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
	TF2, bits	1x81	N/A	N/A	5x144	N/A

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL_TFC0	(TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0, TF0)
UL_TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF1, TF0)
UL_TFC4	(TF1, TF0, TF0, TF1, TF0)
UL_TFC5	(TF2, TF1, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL_TFC7	(TF1, TF0, TF0, TF2, TF0)
UL TFC8	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF1)
UL_TFC10	(TF1, TF0, TF0, TF1)
UL TFC11	(TF2, TF1, TF1, TF0, TF1)
UL_TFC12	(TF0, TF0, TF1, TF1)
UL_TFC13	(TF1, TF0, TF0, TF1, TF1)
UL TFC14	(TF2, TF1, TF1, TF1, TF1)
UL_TFC15	(TF0, TF0, TF0, TF2, TF1)
UL TFC16	(TF1, TF0, TF0, TF2, TF1)
UL TFC17	(TF2, TF1, TF1, TF2, TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (64 kbps)	DCCH
	TF0, bits	1x0	0x103	0x60	0x336	0x148
	TF1, bits	1x39	1x103	1x60	1x336	1x148
<u>TFS</u>	TF2, bits	1x81	N/A	N/A	2x336	N/A
	TF3, bits	N/A	N/A	N/A	3x336	N/A
	TF4, bits	N/A	N/A	N/A	4x336	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL TFC11	(TF2, TF1, TF1, TF3, TF0)
DL_TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL_TFC15	(TF0, TF0, TF0, TF1)
DL TFC16	(TF1, TF0, TF0, TF1)
DL TFC17	(TF2, TF1, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF1, TF1)
DL TFC21	(TF0, TF0, TF0, TF2, TF1)
DL_TFC22	(TF1, TF0, TF0, TF2, TF1)
DL TFC23	(TF2, TF1, TF1, TF2, TF1)
DL TFC24	(TF0, TF0, TF0, TF3, TF1)
DL_TFC25	(TF1, TF0, TF0, TF3, TF1)
DL TFC26	(TF2, TF1, TF1, TF3, TF1)
DL_TFC27	(TF0, TF0, TF0, TF4, TF1)
DL_TFC28	(TF1, TF0, TF0, TF4, TF1)
DL TFC29	(TF2, TF1, TF1, TF4, TF1)

Sub-tests:

Sub- test	Downlink TFCS Under	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)
	Test				(note)	(note)
<u>1</u>	DL TFC1, DL_TFC16	UL_TFC1, UL_TFC10	DL TFC0, DL TFC15, UL TFC0, UL TFC9	UL TFC0, UL TFC1, UL TFC9, UL TFC10	RB5: 39 RB6: 103 RB7: 60 RB8: 120	RB5: 39 RB6: No data RB7: No data RB8: No data
2	DL_TFC2, DL_TFC17	UL_TFC2, UL_TFC11	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC9	UL_TFC0, UL_TFC2, UL_TFC9, UL_TFC11	RB5: 81 RB6: 103 RB7: 60 RB8: 120	RB5: 81 RB6: 103 RB7: 60 RB8: No data
3	DL_TFC3, DL_TFC18	UL_TFC3, UL_TFC12	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC9	UL_TFC0, UL_TFC3, UL_TFC9, UL_TFC12	RB5: 39 RB6: 103 RB7: 60 RB8: 120	RB5: No data RB6: No data RB7: No data RB8: 312
4	DL TFC4, DL TFC19	UL TFC4, UL TFC13	DL TFC0, DL TFC15, UL TFC0, UL TFC9	UL TFC0, UL TFC1, UL TFC3, UL TFC4, UL TFC9, UL TFC10, UL TFC12, UL TFC13	RB5: 39 RB6: 103 RB7: 60 RB8: 120	RB5: 39 RB6: No data RB7: No data RB8: 312
5	DL TFC5, DL TFC20	UL TFC5, UL TFC14	DL TFC0, DL TFC15, UL TFC0, UL TFC9	UL TFC0, UL TFC2, UL_TFC3, UL TFC5, UL_TFC9, UL_TFC11, UL TFC12, UL_TFC14	RB5: 81 RB6: 103 RB7: 60 RB8: 120	RB5: 81 RB6: 103 RB7: 60 RB8: 312
<u>6</u>	DL_TFC6, DL_TFC21	UL_TFC6, UL_TFC15	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC9	UL TFC0, UL TFC6, UL TFC9, UL TFC15	RB5: 39 RB6: 103 RB7: 60 RB8: 632	RB5: No data RB6: No data RB7: No data RB8: 632
7	DL TFC7, DL TFC22	UL TFC7, UL TFC16	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC9	UL_TFC0, UL_TFC1, UL_TFC6, UL_TFC7, UL_TFC9, UL_TFC10, UL_TFC15, UL_TFC16	RB5: 39 RB6: 103 RB7: 60 RB8: 632	RB5: 39 RB6: No data RB7: No data RB8: 632
8	DL_TFC8, DL TFC23	UL TFC8, UL TFC17	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC9	UL TFC0, UL TFC2, UL TFC6, UL TFC8, UL TFC9, UL TFC11, UL TFC15, UL TFC17	RB5: 81 RB6: 103 RB7: 60 RB8: 632	RB5: 81 RB6: 103 RB7: 60 RB8: 632
9	DL_TFC9, DL_TFC24	UL_TFC6, UL_TFC15	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC9	UL TFC0, UL TFC6, UL TFC9, UL TFC15	RB5: 39 RB6: 103 RB7: 60 RB8: 632	RB5: No data RB6: No data RB7: No data RB8: 952
10	DL_TFC10, DL_TFC25	UL TFC7, UL TFC16	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC9	UL TFC0, UL TFC1, UL TFC6, UL TFC7, UL TFC9, UL TFC10, UL TFC15, UL TFC16	RB5: 39 RB6: 103 RB7: 60 RB8: 632	RB5: 39 RB6: No data RB7: No data RB8: 952

DL TFC26 UL TFC17 UL TFC0, UL TFC9 UL TFC2, UL TFC2, UL TFC6, UL TFC8, UL TFC8, UL TFC9, UL TFC11, UL TFC11, UL TFC11, UL TFC15, UL TFC17 12 DL TFC12, DL TFC15, UL TFC0, UL TFC15, UL TFC0, UL TFC9, UL TFC9, UL TFC9, RB6: 103, RB6: 103, RB7: 60	Test data size
Test	(bits)
DL TFC11, DL TFC26 UL TFC3, UL TFC0, UL TFC15, UL TFC2, UL TFC2, UL TFC2, UL TFC3, UL TFC3, UL TFC3, UL TFC3, UL TFC3, UL TFC11, UL TFC11, UL TFC15, UL TFC15, UL TFC17 UL TFC27 UL TFC3, UL TFC3, UL TFC4, UL TFC4, UL TFC5, UL TFC5, UL TFC5, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC6, UL TFC9, RB6: 103 RB7: 60 UL TFC9, RB7: 60	
DL_TFC26 UL_TFC17 UL_TFC0, UL_TFC9 UL_TFC2, UL_TFC2, UL_TFC6, UL_TFC6, UL_TFC8, UL_TFC9, UL_TFC11, UL_TFC11, UL_TFC15, UL_TFC15, UL_TFC17 QL_TFC15, UL_TFC17 12 DL_TFC12, DL_TFC15, UL_TFC15, UL_TFC0, UL_TFC9, UL_TFC0, UL_TFC9, UL_TFC9, UL_TFC9, UL_TFC9, RB6: 103, RB7: 60 QL_TFC15, RB6: 103, RB7: 60	<u>(note)</u>
UL_TFC6, UL_TFC8, UL_TFC9, UL_TFC11, UL_TFC15, UL_TFC17	<u>RB5: 81</u>
UL TFC8, UL TFC9, UL TFC11, UL TFC15, UL TFC17 UL TFC17 UL TFC15, UL TFC17 UL TFC15, UL TFC0, UL TFC0, UL TFC0, UL TFC0, UL TFC6, UL TFC6, UL TFC9, UL TFC9, RB6: 103 RB7: 60 UL TFC9, RB7: 60 UL TFC9, RB7: 60 RB7:	RB6: 103
UL_TFC9, UL_TFC11, UL_TFC15, UL_TFC17	RB7: 60
UL TFC11, UL TFC15, UL TFC15, UL TFC17 UL TFC27 UL TFC15 UL TFC9, UL TFC9, UL TFC9, RB5: 39 UL TFC9, RB6: 103 RB7: 60 UL TFC9, RB7: 60	RB8: 952
DL TFC12, DL TFC6, DL TFC0, DL TFC15, UL TFC0, DL TFC16, DL TFC0, UL TFC9, DL TFC9, DL TFC9, DL TFC9, DL TFC9, RB5: 39 RB6: 103 RB7: 60	
12 DL TFC12, UL TFC6, DL TFC0, DL TFC15, UL TFC6, UL TFC9 UL TFC6, UL TFC9, RB6: 103 UL TFC9, RB7: 60	
12 DL_TFC12, UL_TFC6, UL_TFC0, DL_TFC15, UL_TFC0, UL_TFC6, UL_TFC9 UL_TFC6, UL_TFC9, RB6: 103 RB7: 60	
DL TFC27 UL TFC15 UL TFC0, UL TFC9 UL TFC6, UL TFC9, UL TFC9, RB6: 103 RB7: 60	DDC: No data
<u>UL TFC9,</u> <u>RB7: 60</u>	RB5: No data RB6: No data
	RB7: No data
	RB8: 1272
	RB5: 39
	RB6: No data
	RB7: No data
	RB8: 1272
UL TFC9,	
UL TFC10,	
UL TFC15,	
UL_TFC16	
	<u>RB5: 81</u>
	RB6: 103
	RB7: 60
	RB8: 1272
UL_TFC9,	
UL_TFC11,	
UL TFC15, UL TFC17	İ

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB8 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit).

18.2.2.39.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3: RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
 - for sub-test 5: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink.

- for sub-test 6: an RLC SDU on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: an RLC SDU on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 8: an RLC SDU on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
- for sub-test 9: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 10: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 11: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 12: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 14: an RLC SDU on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.40 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH
- 18.2.2.40.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / Payload 320, 1 CCTrCH

18.2.2.40.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.40.1.2 Test purpose

<u>Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.40 for uplink payload 320 and 1 CCTrCH configuration case.</u>

<u>18.2.2.40.1.3</u> Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (RAB subflow #1)	RB6 (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	RB8 (64 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	<u>N/A</u>
	TF3, bits	N/A	N/A	N/A	3x336	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	4x336	N/A

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
UL_TFC8	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF3, TF0)
UL_TFC10	(TF1, TF0, TF0, TF3, TF0)
UL_TFC11	(TF2, TF1, TF1, TF3, TF0)
UL TFC12	(TF0, TF0, TF0, TF4, TF0)
UL_TFC13	(TF1, TF0, TF0, TF4, TF0)
UL TFC14	(TF2, TF1, TF1, TF4, TF0)
UL TFC15	(TF0, TF0, TF0, TF1)
UL_TFC16	(TF1, TF0, TF0, TF1)
UL TFC17	(TF2, TF1, TF1, TF0, TF1)
UL_TFC18	(TF0, TF0, TF1, TF1)
UL_TFC19	(TF1, TF0, TF0, TF1, TF1)
UL_TFC20	(TF2, TF1, TF1, TF1)
UL_TFC21	(TF0, TF0, TF0, TF2, TF1)
UL TFC22	(TF1, TF0, TF0, TF2, TF1)
UL_TFC23	(TF2, TF1, TF1, TF2, TF1)
UL TFC24	(TF0, TF0, TF0, TF3, TF1)
UL TFC25	(TF1, TF0, TF0, TF3, TF1)
UL_TFC26	(TF2, TF1, TF1, TF3, TF1)
UL TFC27	(TF0, TF0, TF0, TF4, TF1)
UL_TFC28	(TF1, TF0, TF0, TF4, TF1)
UL_TFC29	(TF2, TF1, TF1, TF4, TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (64 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	0x148
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	1x336	1x148
<u>TFS</u>	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	N/A
	TF3, bits	N/A	N/A	N/A	3x336	N/A
	TF4, bits	N/A	N/A	N/A	4x336	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF1, TF0, TF0)
DL TFC3	(TF0, TF0, TF0, TF1, TF0)
DL TFC4	(TF1, TF0, TF0, TF1, TF0)
DL TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL TFC7	(TF1, TF0, TF0, TF2, TF0)
DL_TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL_TFC11	(TF2, TF1, TF1, TF3, TF0)
DL TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL TFC15	(TF0, TF0, TF0, TF1)
DL_TFC16	(TF1, TF0, TF0, TF1)
DL TFC17	(TF2, TF1, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL_TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF1, TF1)
DL_TFC21	(TF0, TF0, TF0, TF2, TF1)
DL TFC22	(TF1, TF0, TF0, TF2, TF1)
DL_TFC23	(TF2, TF1, TF1, TF2, TF1)
DL TFC24	(TF0, TF0, TF0, TF3, TF1)
DL TFC25	(TF1, TF0, TF0, TF3, TF1)
DL_TFC26	(TF2, TF1, TF1, TF3, TF1)
DL TFC27	(TF0, TF0, TF0, TF4, TF1)
DL_TFC28	(TF1, TF0, TF0, TF4, TF1)
DL_TFC29	(TF2, TF1, TF1, TF4, TF1)

Sub-tests:

Sub- test	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
lest	<u>Under</u>	Under test			(bits)	
1	Test DL TFC1,	UL TFC1,	DL TFC0,	(note 1) UL TFC0,	(note 2) RB5: 39	(note 2) RB5: 39
	DL_TFC16	UL_TFC16	DL_TFC15,	UL_TFC1,	RB6: 103	RB6: No data
			UL TFC0, UL TFC15	UL TFC2, UL TFC3,	RB7: 60 RB8: 312	RB7: No data RB8: No data
			<u>02 11 0 10</u>	UL_TFC15,	1120.012	MBO. NO data
2	DL TFC2,	UL TFC2,	DL TFC0,	UL TFC16 UL TFC0,	RB5: 81	RB5: 81
	DL_TFC17	UL_TFC17	DL TFC15,	UL_TFC1,	RB6: 103	RB6: 103
			UL TFC0, UL TFC15	UL TFC2, UL TFC3,	RB7: 60 RB8: 312	RB7: 60 RB8: No data
			OL_IFC15	UL TFC15,	KB0. 312	NDO. NO data
	DL TFC3,	UL TFC3,	DL TFC0,	UL TFC17 UL TFC0,	RB5: 39	RB5: No data
<u>3</u>	DL TFC3,	UL TFC3,	DL TFC0, DL TFC15,	UL TFC0,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC3, UL_TFC15,	RB8: 312	RB8: 312
<u> </u>		===		UL_TFC18		
4	DL TFC4, DL TFC19	UL TFC4, UL TFC19	DL TFC0, DL TFC15,	UL TFC0, UL TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
			DUL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC3, UL_TFC4,	RB8: 312	RB8: 312
				UL TFC15,		
				UL_TFC16, UL_TFC18,		
				UL_TFC19		
<u>5</u>	DL_TFC5, DL_TFC20	UL_TFC5, UL_TFC20	DL_TFC0, DL_TFC15,	UL_TFC0, UL_TFC1,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	<u>DE 11 020</u>	<u> </u>	UL_TFC0,	UL_TFC2,	RB7: 60	RB7: 60
			UL_TFC15	UL_TFC3, UL_TFC5,	RB8: 312	RB8: 312
				UL_TFC15,		
				UL TFC17, UL TFC18,		
				UL_TFC20		
<u>6</u>	DL_TFC6, DL_TFC21	UL_TFC6, UL_TFC21	DL_TFC0, DL_TFC15,	UL_TFC0, UL_TFC1,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL IIIOZI	OL IIIOZI	UL TFC0,	UL_TFC2,	RB7: 60	RB7: No data
			UL TFC15	UL TFC3, UL TFC6,	RB8: 632	RB8: 632
				UL TFC15,		
7	DI TEC7	UL TFC7,	DL TFC0,	UL TFC21 UL TFC0,	RB5: 39	RB5: 39
<u> </u>	DL_TFC22	UL_TFC22	DL_TFC15,	UL_TFC1,	RB6: 103	RB6: No data
			UL TFC0, UL TFC15	UL TFC2, UL TFC3,	RB7: 60 RB8: 632	RB7: No data RB8: 632
			UL_IFUID	UL TFC6,	KD0. 032	KD0. 032
				UL TFC7,		
				UL_TFC15, UL_TFC16,		
				UL_TFC21,		
				UL_TFC22		

Sub-	Downlink	<u>Uplink</u>	Implicitely tested	Restricted UL	UL RLC	Test data size
test	TFCS Under	TFCS Under test		TFCIs	SDU size (bits)	(bits)
	Test			(note 1)	(note 2)	(note 2)
8	DL TFC8, DL TFC23	UL TFC8, UL TFC23	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC6, UL TFC8, UL TFC15, UL TFC17, UL TFC21,	RB5: 81 RB6: 103 RB7: 60 RB8: 632	RB5: 81 RB6: 103 RB7: 60 RB8: 632
9	DL_TFC9, DL_TFC24	UL_TFC9, UL_TFC24	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL_TFC23 UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC9, UL_TFC15, UL_TFC24	RB5: 39 RB6: 103 RB7: 60 RB8: 952	RB5: No data RB6: No data RB7: No data RB8: 952
10	DL TFC10, DL TFC25	UL TFC10, UL TFC25	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC9, UL TFC10, UL TFC16, UL TFC16, UL TFC24, UL TFC25	RB5: 39 RB6: 103 RB7: 60 RB8: 952	RB5: 39 RB6: No data RB7: No data RB8: 952
11	DL TFC11, DL TFC26	UL TFC11, UL TFC26	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC1, UL_TFC3, UL_TFC2, UL_TFC9, UL_TFC11, UL_TFC15, UL_TFC17, UL_TFC24, UL_TFC26	RB5: 81 RB6: 103 RB7: 60 RB8: 952	RB5: 81 RB6: 103 RB7: 60 RB8: 952
12	DL TFC12, DL_TFC27	UL TFC12, UL TFC27	DL TFC0, DL TFC15, UL TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC12, UL TFC15, UL TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: No data RB6: No data RB7: No data RB8: 1272
13	DL_TFC13, DL_TFC28	UL_TFC13, UL_TFC28	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC12, UL TFC13, UL TFC15, UL TFC16, UL TFC27, UL TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: 39 RB6: No data RB7: No data RB8: 1272
14	DL TFC14, DL TFC29	UL TFC14, UL TFC29	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 1272

Sub-	Downlink	<u>Uplink</u>	Implicitely tested	Restricted UL	UL RLC	Test data size
test	<u>TFCS</u>	<u>TFCS</u>		<u>TFCIs</u>	SDU size	(bits)
	<u>Under</u>	Under test			(bits)	
	<u>Test</u>			(note 1)	(note 2)	(note 2)
NOTE 1	NOTE 1: UL TFC0, UL TFC1, UL TFC2, UL TFC3 and UL TFC15 are part of minimum set of TFCIs.					TFCIs.
NOTE 2	2: See TS 34.1	09 [10] clause 5	.3.2.6.2 for details reg	arding loopback of	RLC SDUs.	
	RB8: Test da	ata size has bee	n set to the payload s	ize of the DL TF und	der test minus 8	bits (size of 7 bit
	length indicator and expansion bit). As the TTI for RB8 is the same for both downlink and uplink then					
	UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size					
	has been set equal to the the payload size of the UL TF under test minus 8 bits (size of 7 bit length					
	indicator and	l expansion bit).	•			

18.2.2.40.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3, 6, 9 and 12: RLC SDUs on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4, 7, 10 and 13: RLC SDUs on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 5, 8, 11 and 14: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.40.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH / Payload 128, 2 CCTrCHs

18.2.2.40.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.40.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.40 for uplink payload 128 and 2 CCTrCHs configuration case.

18.2.2.40.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>3x144</u>	<u>N/A</u>
	TF3, bits	<u>N/A</u>	N/A	N/A	<u>7x144</u>	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	<u>10x144</u>	<u>N/A</u>

<u>Uplink TFCS (conversational + SRB):</u>

<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
UL Conv TFC0	(TF0, TF0, TF0, TF0, TF0)
UL Conv TFC1	(TF1, TF0, TF0, TF0, TF0)
UL Conv TFC2	(TF2, TF1, TF1, TF0, TF0)
UL Conv TFC3	(TF0, TF0, TF0, TF1)
UL Conv TFC4	(TF1, TF0, TF0, TF1)
UL Conv TFC5	(TF2, TF1, TF1, TF0, TF1)

<u>Uplink TFCS (Interactive or background):</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL Inter TFC0	(TF0, TF0, TF0, TF0)
UL Inter TFC1	(TF0, TF0, TF1, TF0)
UL Inter TFC2	(TF0, TF0, TF0, TF2, TF0)
UL Inter TFC3	(TF0, TF0, TF0, TF3, TF0)
UL Inter TFC4	(TF0, TF0, TF0, TF4, TF0)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	<u>RB8</u> (64 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	<u>N/A</u>
	TF3, bits	N/A	N/A	N/A	3x336	N/A
	TF4, bits	N/A	N/A	N/A	4x336	<u>N/A</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF1, TF0, TF0)
DL TFC3	(TF0, TF0, TF0, TF1, TF0)
DL TFC4	(TF1, TF0, TF0, TF1, TF0)
DL TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL TFC7	(TF1, TF0, TF0, TF2, TF0)
DL_TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL_TFC11	(TF2, TF1, TF1, TF3, TF0)
DL TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL TFC15	(TF0, TF0, TF0, TF1)
DL_TFC16	(TF1, TF0, TF0, TF1)
DL TFC17	(TF2, TF1, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL_TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF1, TF1)
DL_TFC21	(TF0, TF0, TF0, TF2, TF1)
DL TFC22	(TF1, TF0, TF0, TF2, TF1)
DL_TFC23	(TF2, TF1, TF1, TF2, TF1)
DL TFC24	(TF0, TF0, TF0, TF3, TF1)
DL TFC25	(TF1, TF0, TF0, TF3, TF1)
DL_TFC26	(TF2, TF1, TF1, TF3, TF1)
DL TFC27	(TF0, TF0, TF0, TF4, TF1)
DL_TFC28	(TF1, TF0, TF0, TF4, TF1)
DL_TFC29	(TF2, TF1, TF1, TF4, TF1)

Sub-tests:

Sub- test	Downlink TFCS	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
	<u>Under</u> <u>Test</u>			(note 1)	(bits) (note 2)	(note 2)
1	DL TFC1, DL TFC16	UL Conv TFC1, UL Conv TFC4, UL Inter TFC0	DL TFC0, DL TFC15, UL Conv TFC0, UL Conv TFC3	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, UL Inter TFC1	RB5: 39 RB6: 103 RB7: 60 RB8: 120	RB5: 39 RB6: No data RB7: No data RB8: No data
2	DL_TFC2, DL_TFC17	UL Conv TFC2, UL Conv TFC5, UL Inter TFC0	DL_TFC0, DL_TFC15, UL_Conv_TFC0, UL_Conv_TFC3	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1	RB5: 81 RB6: 103 RB7: 60 RB8: 120	RB5: 81 RB6: 103 RB7: 60 RB8: No data
3	DL_TFC18	UL Conv TFC0, UL Conv TFC3, UL Inter TFC1	DL TFC0, DL TFC15, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, UL Inter TFC1	RB5: 39 RB6: 103 RB7: 60 RB8: 120	RB5: No data RB6: No data RB7: No data RB8: 312
4	DL TFC4, DL_TFC19	UL Conv TFC1, UL Conv TFC4, UL Inter TFC1	DL TFC0, DL_TFC15, UL_Conv_TFC0, UL_Conv_TFC3, UL_Inter_TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, UL Inter TFC1	RB5: 39 RB6: 103 RB7: 60 RB8: 120	RB5: 39 RB6: No data RB7: No data RB8: 312
5	DL_TFC5, DL_TFC20	UL Conv TFC2, UL Conv TFC5, UL Inter TFC1	DL TFC0, DL TFC15, UL Conv TFC0, UL Conv TFC3, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC2, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1	RB5: 81 RB6: 103 RB7: 60 RB8: 120	RB5: 81 RB6: 103 RB7: 60 RB8: 312
6	DL_TFC6, DL_TFC21	UL Conv TFC0, UL Conv TFC3, UL Inter TFC2	DL TFC0, DL TFC15, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, UL Inter TFC1, UL Inter TFC2	RB5: 39 RB6: 103 RB7: 60 RB8: 376	RB5: No data RB6: No data RB7: No data RB8: 632
7	DL TFC7, DL TFC22	UL Conv TFC1, UL Conv TFC4, UL Inter TFC2	DL TFC0, DL TFC15, UL Conv TFC0, UL Conv TFC3, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, UL Inter TFC1, UL Inter TFC2	RB5: 39 RB6: 103 RB7: 60 RB8: 376	RB5: 39 RB6: No data RB7: No data RB8: 632
<u>8</u>	DL_TFC8, DL_TFC23	UL Conv TFC2, UL Conv TFC5, UL Inter TFC2	DL TFC0, DL TFC15, UL Conv TFC0, UL Conv TFC3, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC2, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1, UL Inter TFC2	RB5: 81 RB6: 103 RB7: 60 RB8: 376	RB5: 81 RB6: 103 RB7: 60 RB8: 632

Sub-	Downlink	Uplink TFCS	Implicitely	Restricted UL	UL RLC	Test data size
<u>test</u>	<u>TFCS</u> Under	<u>Under test</u>	<u>tested</u>	TFCIs	SDU size (bits)	(bits)
	Test			<u>(note 1)</u>	(note 2)	<u>(note 2)</u>
9	DL TFC9,	UL Conv TFC0,	DL TFC0,	UL Conv TFC0,	RB5: 39	RB5: No data
	DL_TFC24	UL Conv TFC3, UL Inter TFC3	DL_TFC15, UL_Inter_TFC0	UL Conv TFC1, UL Conv TFC3,	RB6: 103 RB7: 60	RB6: No data RB7: No data
		<u>OL_IIICI_II OO</u>	<u>OZ_IIICI_II OO</u>	UL Conv TFC4,	RB8: 888	RB8: 952
				UL Inter TFC0,		
				UL Inter TFC1, UL Inter TFC3		
10	DL TFC10,	UL Conv TFC1,	DL TFC0,	UL Conv TFC0,	RB5: 39	RB5: 39
	DL_TFC25	UL Conv TFC4,	DL_TFC15,	UL Conv TFC1,	RB6: 103	RB6: No data
		UL Inter TFC3	UL Conv TFC0,	UL Conv TFC3,	RB7: 60	RB7: No data
			UL Conv TFC3, UL Inter TFC0	UL Conv TFC4, UL Inter TFC0,	RB8: 888	RB8: 952
			OL_IIICI_II OO	UL Inter TFC1,		
				UL Inter TFC3		
<u>11</u>	DL_TFC11, DL_TFC26	UL Conv TFC2, UL Conv TFC5,	DL_TFC0, DL_TFC15,	UL Conv TFC0, UL Conv TFC1,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	DL TFC20	UL Inter TFC3	UL Conv TFC0,	UL Conv TFC1,	RB7: 60	RB7: 60
		<u></u>	UL Conv TFC3,	UL Conv TFC3,	RB8: 888	RB8: 952
			UL Inter TFC0	UL Conv TFC4,		
				UL Conv TFC5, UL Inter TFC0,		
				UL Inter TFC1,		
				UL Inter TFC3		
<u>12</u>	DL TFC12, DL TFC27	UL Conv TFC0,	DL TFC0, DL TFC15,	UL Conv TFC0,	RB5: 39	RB5: No data
	DL_IFC21	UL Conv TFC3, UL Inter TFC4	UL Inter TFC0	UL Conv TFC1, UL Conv TFC3,	RB6: 103 RB7: 60	RB6: No data RB7: No data
		<u>OL_IIIOI_II OI</u>	<u> </u>	UL Conv TFC4,	RB8: 1272	RB8: 1272
				UL Inter TFC0,		
				UL Inter TFC1, UL Inter TFC4		
13	DL TFC13,	UL Conv TFC1,	DL TFC0,	UL Conv TFC0,	RB5: 39	RB5: 39
	DL_TFC28	UL Conv TFC4,	DL_TFC15,	UL Conv TFC1,	RB6: 103	RB6: No data
		UL Inter TFC4	UL Conv TFC0, UL Conv TFC3,	UL Conv TFC3, UL Conv TFC4,	RB7: 60 RB8: 1272	RB7: No data RB8: 1272
			UL Inter TFC0	UL Inter TFC0,	KB0. 1212	ND0. 1212
				UL Inter TFC1,		
	DI TEOM	III. Com: TECC	DI TECC	UL Inter TFC4	DDE: 04	DDE: 04
<u>14</u>	DL_TFC14, DL_TFC29	UL Conv TFC2, UL Conv TFC5,	DL_TFC0, DL_TFC15,	UL Conv TFC0, UL Conv TFC1,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	<u> </u>	UL Inter TFC4	UL_Conv_TFC0,	UL Conv TFC2,	RB7: 60	RB7: 60
			UL Conv TFC3,	UL Conv TFC3,	RB8: 1272	RB8: 1272
			UL Inter TFC0	UL Conv TFC4, UL Conv TFC5,		
				UL Inter TFC0,		
				UL Inter TFC1,		
				UL Inter TFC4		

NOTE 1: UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, and UL Inter TFC1 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB8 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the the payload size of the UL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit).

18.2.2.40.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.

- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 3: RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
 - for sub-test 5: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink.
 - for sub-test 6: RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 8: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS.
 - for sub-test 9: RLC SDUs on RB8 having the same content as the first 888 bits of the test data sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 10: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 888 bits of the test data sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 11: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the same content as the first 888 bits of the test data sent by the SS.
 - for sub-test 12: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 13: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 14: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.41 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
- 18.2.2.41.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320, 1 CCTrCH
- 18.2.2.41.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.41.1.2 <u>Test purpose</u>

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.41 for uplink payload 320 and 1 CCTrCH configuration case.

18.2.2.41.1.3 Method of test

See 18.2.1.2 for test procedure.

<u>Uplink TFS:</u>

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps, 20 ms TTI)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	N/A
	TF3, bits	N/A	N/A	<u>N/A</u>	3x336	N/A
	TF4, bits	N/A	N/A	N/A	4x336	N/A

Uplink TFCS:

TFCI	(DDE DDC DDZ DD0 DCCU)
	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL TFC3	(TF0, TF0, TF0, TF1, TF0)
UL_TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF0)
UL_TFC6	(TF0, TF0, TF0, TF2, TF0)
UL_TFC7	(TF1, TF0, TF0, TF2, TF0)
UL_TFC8	(TF2, TF1, TF1, TF2, TF0)
UL_TFC9	(TF0, TF0, TF0, TF3, TF0)
UL TFC10	(TF1, TF0, TF0, TF3, TF0)
UL_TFC11	(TF2, TF1, TF1, TF3, TF0)
UL TFC12	(TF0, TF0, TF0, TF4, TF0)
UL TFC13	(TF1, TF0, TF0, TF4, TF0)
UL_TFC14	(TF2, TF1, TF1, TF4, TF0)
UL TFC15	(TF0, TF0, TF0, TF1)
UL_TFC16	(TF1, TF0, TF0, TF1)
UL_TFC17	(TF2, TF1, TF1, TF0, TF1)
UL TFC18	(TF0, TF0, TF1, TF1)
UL_TFC19	(TF1, TF0, TF0, TF1, TF1)
UL TFC20	(TF2, TF1, TF1, TF1)
UL_TFC21	(TF0, TF0, TF0, TF2, TF1)
UL TFC22	(TF1, TF0, TF0, TF2, TF1)
UL_TFC23	(TF2, TF1, TF1, TF2, TF1)
UL TFC24	(TF0, TF0, TF0, TF3, TF1)
UL TFC25	(TF1, TF0, TF0, TF3, TF1)
UL_TFC26	(TF2, TF1, TF1, TF3, TF1)
UL TFC27	(TF0, TF0, TF0, TF4, TF1)
UL TFC28	(TF1, TF0, TF0, TF4, TF1)
UL_TFC29	(TF2, TF1, TF1, TF4, TF1)

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (128 kbps, 20 ms TTI)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	N/A
	TF3, bits	N/A	N/A	N/A	4x336	N/A
	TF4, bits	N/A	N/A	N/A	8x336	N/A

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL TFC11	(TF2, TF1, TF1, TF3, TF0)
DL_TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL_TFC15	(TF0, TF0, TF0, TF1)
DL TFC16	(TF1, TF0, TF0, TF1)
DL TFC17	(TF2, TF1, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF1, TF1, TF1)
DL TFC21	(TF0, TF0, TF0, TF2, TF1)
DL_TFC22	(TF1, TF0, TF0, TF2, TF1)
DL TFC23	(TF2, TF1, TF1, TF2, TF1)
DL TFC24	(TF0, TF0, TF0, TF3, TF1)
DL_TFC25	(TF1, TF0, TF0, TF3, TF1)
DL TFC26	(TF2, TF1, TF1, TF3, TF1)
DL_TFC27	(TF0, TF0, TF0, TF4, TF1)
DL_TFC28	(TF1, TF0, TF0, TF4, TF1)
DL TFC29	(TF2, TF1, TF1, TF4, TF1)

Sub-	<u>Downlink</u>	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	TFCS Under	TFCS Under test	<u>tested</u>	TFCIs	<u>size</u> (bits)	(bits)
	Test			(note 1)	(note 2)	(note 2)
1 1	DL TFC1, DL TFC16	UL TFC1, UL TFC16	DL TFC0, DL TFC15,	UL TFC0, UL TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DL_II C IO	OL_II CIO	UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL TFC15	UL TFC3,	RB8: 312	RB8: No data
				UL_TFC15, UL_TFC16		
2	DL_TFC2,	UL_TFC2,	DL_TFC0,	UL_TFC0,	RB5: 81	RB5: 81
	DL_TFC17	UL_TFC17	DL_TFC15, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
			UL TFC15	UL TFC3,	RB8: 312	RB8: No data
			_	UL TFC15,		
3	DL TFC3,	UL TFC3,	DL TFC0,	UL TFC17 UL TFC0,	RB5: 39	RB5: No data
	DL TFC18	UL TFC18	DL TFC15,	UL TFC1,	RB6: 103	RB6: No data
		_	UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC3, UL_TFC15,	RB8: 312	RB8: 312
				UL_TFC18		
4	DL TFC4, DL TFC19	UL TFC4,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC19	UL_TFC19	DL_TFC15, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL_TFC15	UL_TFC3	RB8: 312	RB8: 312
				UL_TFC4, UL_TFC15,		
				UL TFC16,		
				UL TFC18,		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL_TFC19 UL_TFC0,	RB5: 81	RB5: 81
	DL TFC20	UL TFC20	DL TFC15,	UL TFC1,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC2,	RB7: 60	RB7: 60
			UL_TFC15	UL_TFC3, UL_TFC5,	RB8: 312	RB8: 312
				UL_TFC15,		
				UL TFC17, UL TCF18,		
				UL TFC20		
<u>6</u>	DL_TFC6,	UL_TFC6,	DL_TFC0,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC21	UL TFC21	DL TFC15, UL TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC3,	RB8: 632	RB8: 632
				UL_TFC6,		
				UL_TFC15, UL_TFC21		
7	DL TFC7,	UL TFC7,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC22	UL_TFC22	DL_TFC15, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC3,	RB8: 632	RB8: 632
				UL_TFC6,		
				UL TFC7, UL TFC15,		
				UL TFC16,		
				UL_TFC21,		
Ш				UL_TFC22		

Sub-	Downlink	Uplink	Implicitely	Restricted UL	UL RLC SDU	Test data size
test	TFCS	TFCS	tested	TFCIs	size (bits)	(bits)
	<u>Under</u> <u>Test</u>	<u>Under test</u>		(note 1)	(note 2)	(note 2)
8	DL TFC8, DL TFC23	UL TFC8, UL TFC23	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC6, UL TFC8, UL TFC15, UL TFC17, UL TFC21, UL TFC23	RB5: 81 RB6: 103 RB7: 60 RB8: 632	RB5: 81 RB6: 103 RB7: 60 RB8: 632
9	DL_TFC9, DL_TFC24	UL_TFC9, UL_TFC24	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC9, UL TFC15, UL TFC24	RB5: 39 RB6: 103 RB7: 60 RB8: 952	RB5: No data RB6: No data RB7: No data RB8: 1272
10	DL TFC10, DL TFC25	UL TFC10, UL TFC25	DL TFC0, DL TFC15, UL_TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC9, UL TFC10, UL TFC16, UL TFC16, UL TFC24, UL TFC25	RB5: 39 RB6: 103 RB7: 60 RB8: 952	RB5: 39 RB6: No data RB7: No data RB8: 1272
11	DL TFC11, DL TFC26	UL TFC11, UL TFC26	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC9, UL_TFC11, UL_TFC15, UL_TFC17, UL_TFC24, UL_TFC26	RB5: 81 RB6: 103 RB7: 60 RB8: 952	RB5: 81 RB6: 103 RB7: 60 RB8: 1272
12	DL TFC12, DL TFC27	UL TFC12, UL TFC27	DL TFC0, DL TFC15, UL TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC12, UL TFC15, UL TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: No data RB6: No data RB7: No data RB8: 2552
13	DL_TFC13, DL_TFC28	UL_TFC13, UL_TFC28	DL_TFC0, DL_TFC15,, UL_TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC12, UL TFC13, UL TFC15, UL TFC16, UL TFC27, UL TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: 39 RB6: No data RB7: No data RB8: 2552
14	DL TFC14, DL TFC29	UL TFC14, UL_TFC29	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC3, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 2552

Sub- test	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)	
300	Under	Under test	<u></u>	<u></u>	(bits)	<u>(13165)</u>	
	Test			(note 1)	(note 2)	(note 2)	
NOTE 1:	NOTE 1: UL TFC0, UL TFC1, UL TFC2, UL TFC3 and UL TFC15 are part of minimum set of TFCIs.						
NOTE 2:	See TS 34.1	09 [10] clause 5	.3.2.6.2 for details re	egarding loopback	of RLC SDUs.		
	RB8: Test da	ıta size has beei	n set to the payload	size of the DL TF	under test minus	8 bits (size of 7	
	bit length ind	icator and expar	nsion bit). As the TT	I for RB8 is the sa	me for both down	link and uplink	
	then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU						
	size has been set equal to the the payload size of the UL TF under test minus 8 bits (size of 7 bit						
	length indica	tor and expansion	on bit).				

18.2.2.41.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3: RLC SDUs on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: RLC SDUs on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 5: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
 - for sub-test 6: RLC SDUs on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: RLC SDUs on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 8: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
 - for sub-test 9: RLC SDUs on RB8 having the content equal to the first 952 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 10: RLC SDUs on RB8 having the content equal to the first 952 bits of the test data sent by the SS in downlink; RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 11: RLC SDUs on RB8 having the content equal to the first 952 bits of the test data sent by the SS in downlink; RLC SDUs on RB5, RB6 and RB7 having the same content as sent by SS.
 - for sub-test 12: RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 13: RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 14: RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; RLC SDUs on RB5, RB6 and RB7 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.41.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128, 2 CCTrCHs

18.2.2.41.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.41.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.41 for uplink payload 128 and 2 CCTrCHs configuration case.

18.2.2.41.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	RB8 (64 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x144</u>	1x148
<u>TFS</u>	TF2, bits	<u>1x81</u>	<u>N/A</u>	N/A	<u>3x144</u>	<u>N/A</u>
	TF3, bits	N/A	N/A	N/A	<u>7x144</u>	N/A
	TF4, bits	N/A	N/A	N/A	<u>10x144</u>	N/A

<u>Uplink TFCS (conversational + SRB):</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL Conv TFC0	(TF0, TF0, TF0, TF0, TF0)
UL Conv TFC1	(TF1, TF0, TF0, TF0, TF0)
UL Conv TFC2	(TF2, TF1, TF1, TF0, TF0)
UL Conv TFC3	(TF0, TF0, TF0, TF1)
UL Conv TFC4	(TF1, TF0, TF0, TF0, TF1)
UL Conv TFC5	(TF2, TF1, TF1, TF0, TF1)

Uplink TFCS (Interactive or background):

<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
UL Inter TFC0	(TF0, TF0, TF0, TF0, TF0)
UL Inter TFC1	(TF0, TF0, TF1, TF0)
UL Inter TFC2	(TF0, TF0, TF0, TF2, TF0)
UL Inter TFC3	(TF0, TF0, TF0, TF3, TF0)
UL Inter TFC4	(TF0, TF0, TF0, TF4, TF0)

Downlink TFS:

		RB5 (RAB subflow #1)	<u>RB6</u> (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	<u>RB8</u> (128 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	1x336	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	2x336	<u>N/A</u>
	TF3, bits	N/A	N/A	N/A	4x336	N/A
	TF4, bits	N/A	N/A	N/A	8x336	N/A

Downlink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL TFC11	(TF2, TF1, TF1, TF3, TF0)
DL_TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL_TFC15	(TF0, TF0, TF0, TF1)
DL TFC16	(TF1, TF0, TF0, TF1)
DL TFC17	(TF2, TF1, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF1, TF1, TF1)
DL TFC21	(TF0, TF0, TF0, TF2, TF1)
DL_TFC22	(TF1, TF0, TF0, TF2, TF1)
DL TFC23	(TF2, TF1, TF1, TF2, TF1)
DL TFC24	(TF0, TF0, TF0, TF3, TF1)
DL_TFC25	(TF1, TF0, TF0, TF3, TF1)
DL TFC26	(TF2, TF1, TF1, TF3, TF1)
DL_TFC27	(TF0, TF0, TF0, TF4, TF1)
DL_TFC28	(TF1, TF0, TF0, TF4, TF1)
DL TFC29	(TF2, TF1, TF1, TF4, TF1)

Sub- test	Downlink TFCS Under Test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs (note 1)	UL RLC SDU size (bits) (note 2)	Test data size (bits)
1	DL TFC1, DL TFC16	UL Conv TFC1, UL Conv TFC4, UL Inter TFC0	DL_TFC0, DL_TFC15, UL_Conv_TFC0, UL_Conv_TFC3	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, UL Inter TFC1	RB5: 39 RB6: 103 RB7: 60 RB8: 120	RB5: 39 RB6: No data RB7: No data RB8: No data
2	DL TFC2, DL TFC17	UL Conv TFC2, UL Conv TFC5, UL Inter TFC0	DL_TFC0, DL_TFC15, UL_Conv_TFC0, UL_Conv_TFC3	UL Conv TFC0, UL Conv TFC1, UL Conv TFC2, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1	RB5: 81 RB6: 103 RB7: 60 RB8: 120	RB5: 81 RB6: 103 RB7: 60 RB8: No data
3	DL_TFC3, DL_TFC18	UL_Conv_TFC0, UL_Conv_TFC3, UL_Inter_TFC1	DL_TFC0, DL_TFC15, UL_Inter_TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, UL Inter TFC1	RB5: 39 RB6: 103 RB7: 60 RB8:120	RB5: No data RB6: No data RB7: No data RB8: 312
4	DL_TFC4, DL_TFC19	UL Conv TFC1, UL Conv TFC4, UL Inter TFC1	DL_TFC0, DL_TFC15, UL_Conv_TFC0, UL_Conv_TFC3, UL_Inter_TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, UL Inter TFC1	RB5: 39 RB6: 103 RB7: 60 RB8: 120	RB5: 39 RB6: No data RB7: No data RB8: 312
5	DL TFC5, DL TFC20	UL_Conv_TFC2, UL_Conv_TFC5, UL_Inter_TFC1	DL_TFC0, DL_TFC15, UL_Conv_TFC0, UL_Conv_TFC3, UL_Inter_TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC2, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1	RB5: 81 RB6: 103 RB7: 60 RB8: 120	RB5: 81 RB6: 103 RB7: 60 RB8: 312
6	DL_TFC6, DL_TFC21	UL Conv TFC0, UL Conv TFC3, UL Inter TFC2	DL_TFC0, DL_TFC15, UL_Inter_TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, UL Inter TFC1, UL Inter TFC2	RB5: 39 RB6: 103 RB7: 60 RB8: 376	RB5: No data RB6: No data RB7: No data RB8: 632
7	DL TFC7, DL TFC22	UL Conv TFC1, UL Conv TFC4, UL Inter TFC2	DL_TFC0, DL_TFC15, UL_Conv_TFC0, UL_Conv_TFC3, UL_Inter_TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, UL Inter TFC1, UL Inter TFC2	RB5: 39 RB6: 103 RB7: 60 RB8: 376	RB5: 39 RB6: No data RB7: No data RB8: 632
8	DL TFC8, DL TFC23	UL Conv TFC2, UL Conv TFC5, UL Inter TFC2	DL TFC0, DL_TFC15, UL Conv TFC0, UL Conv TFC3, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1, UL Inter TFC2	RB5: 81 RB6: 103 RB7: 60 RB8: 376	RB5: 81 RB6: 103 RB7: 60 RB8: 632

Sub-	Downlink	Uplink TFCS Under test	Implicitely	Restricted UL	UL RLC SDU size	Test data
<u>test</u>	TFCS Under	<u>Under test</u>	<u>tested</u>	<u>TFCIs</u>	(bits)	<u>size</u> (bits)
	Test			(note 1)	(note 2)	
	DI TEGO		DI TEOO	111 O TEOO	DD5 00	(note 2)
9	DL_TFC9, DL_TFC24	UL Conv TFC0, UL Conv TFC3,	DL_TFC0, DL_TFC15,	UL Conv TFC0, UL Conv TFC1,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL_TFC24	UL Inter TFC3	UL Inter TFC0	UL Conv TFC3,	RB7: 60	RB7: No data
				UL Conv TFC4,	RB8: 888	RB8: 1272
				UL Inter TFC0,		
				UL Inter TFC1, UL Inter TFC3		
10	DL TFC10	UL Conv TFC1,	DL TFC0,	UL Conv TFC0,	RB5: 39	RB5: 39
10	<u>DL_11 010</u>	UL Conv TFC4,	DL TFC15,	UL Conv TFC1,	RB6: 103	RB6: No data
	DL_TFC25	UL_Inter_TFC3	UL Conv TFC0,	UL Conv TFC3,	RB7: 60	RB7: No data
			UL Conv TFC3,	UL Conv TFC4,	RB8: 888	RB8: 1272
			UL Inter TFC0	UL Inter TFC0, UL Inter TFC1,		
				UL Inter TFC3		
11	DL TFC11	UL Conv TFC2,	DL TFC0,	UL Conv TFC0,	RB5: 81	RB5: 81
	1	UL_Conv_TFC5,	DL_TFC15,	UL_Conv_TFC1,	RB6: 103	RB6: 103
	DL TFC26	UL Inter TFC3	UL Conv TFC0,	UL Conv TFC2,	RB7: 60	RB7: 60
			UL Conv TFC3, UL Inter TFC0	UL Conv TFC3, UL Conv TFC4,	RB8: 888	RB8: 1272
			OL IIICI II CO	UL Conv TFC5,		
				UL Inter TFC0,		
				UL_Inter_TFC1,		
12	DL TFC12	UL Conv TFC0,	DL TFC0,	UL Inter TFC3 UL Conv TFC0,	RB5: 39	RB5: No data
12	<u>DL_11 012</u>	UL Conv TFC3,	DL TFC15,	UL Conv TFC1,	RB6: 103	RB6: No data
	DL TFC27	UL Inter TFC4	UL Inter TFC0	UL Conv TFC3,	RB7: 60	RB7: No data
				UL Conv TFC4,	RB8: 1272	RB8: 2552
				UL Inter TFC0, UL Inter TFC1,		
				UL Inter TFC4		
<u>13</u>	DL_TFC13	UL Conv TFC1,	DL_TFC0,	UL Conv TFC0,	RB5: 39	RB5: 39
	1	UL Conv TFC4,	DL TFC15,	UL Conv TFC1,	RB6: 103	RB6: No data
	DL_TFC28	UL_Inter_TFC4	UL Conv TFC0, UL Conv TFC3,	UL Conv TFC3, UL Conv TFC4,	RB7: 60 RB8: 1272	RB7: No data RB8: 2552
			UL Inter TFC0	UL Inter TFC0,	KD0. 1212	KD0. 2552
			<u>GE_IIIIGI_II GG</u>	UL Inter TFC1,		
Ц				UL Inter TFC4		
<u>14</u>	DL TFC14	UL Conv TFC2,	DL TFC0,	UL Conv TFC0,	RB5: 81	RB5: 81
	DL TFC29	UL Conv TFC5, UL Inter TFC4	DL_TFC15, UL Conv TFC0,	UL Conv TFC1, UL Conv TFC2,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
	<u> </u>	<u>52 moi 11 04</u>	UL Conv TFC3,	UL Conv TFC3,	RB8: 1272	RB8: 2552
			UL_Inter_TFC0	UL Conv TFC4,		
				UL Conv TFC5,		
				UL Inter TFC0, UL Inter TFC1,		
				UL Inter TFC4		

NOTE 1: UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Inter TFC0, and UL Inter TFC1 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB8 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the the payload size of the UL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit).

18.2.2.41.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.

- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 3: RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
 - for sub-test 5: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink.
 - for sub-test 6: RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 8: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS.
 - for sub-test 9: RLC SDUs on RB8 having the same content as the first 888 bits of the test data sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 10: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 888 bits of the test data sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 11: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the same content as the first 888 bits of the test data sent by the SS.
 - for sub-test 12: RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 13: RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 14: RLC SDUs on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; RLC SDUs on RB5, RB6 and RB7 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.42 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
- 18.2.2.42.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB / Payload 320. 10 ms TTI
- 18.2.2.42.1.1 Conformance requirement

See 18.2.2.4.1.

<u>18.2.2.42.1.2</u> Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.42 for the uplink payload 320 and downlink 10 ms TTI case.

18.2.2.42.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	<u>RB6</u> (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	<u>RB8</u> (64 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	2x336	<u>N/A</u>
	TF3, bits	N/A	<u>N/A</u>	<u>N/A</u>	3x336	N/A
	TF4, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	4x336	<u>N/A</u>

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF0, TF0)
UL TFC3	(TF0, TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
UL TFC8	
UL TFC9	(TF2, TF1, TF1, TF2, TF0) (TF0, TF0, TF0, TF3, TF0)
UL TFC10	
UL TFC10	(TF1, TF0, TF0, TF3, TF0)
	(TF2, TF1, TF1, TF3, TF0)
UL_TFC12	(TF0, TF0, TF0, TF4, TF0)
UL_TFC13	(TF1, TF0, TF0, TF4, TF0)
UL_TFC14	(TF2, TF1, TF1, TF4, TF0)
UL_TFC15	(TF0, TF0, TF0, TF1)
UL TFC16	(TF1, TF0, TF0, TF1)
UL_TFC17	(TF2, TF1, TF1, TF0, TF1)
UL TFC18	(TF0, TF0, TF1, TF1)
UL TFC19	(TF1, TF0, TF0, TF1, TF1)
UL_TFC20	(TF2, TF1, TF1, TF1, TF1)
UL TFC21	(TF0, TF0, TF0, TF2, TF1)
UL_TFC22	(TF1, TF0, TF0, TF2, TF1)
UL_TFC23	(TF2, TF1, TF1, TF2, TF1)
UL TFC24	(TF0, TF0, TF0, TF3, TF1)
UL_TFC25	(TF1, TF0, TF0, TF3, TF1)
UL TFC26	(TF2, TF1, TF1, TF3, TF1)
UL TFC27	(TF0, TF0, TF0, TF4, TF1)
UL_TFC28	(TF1, TF0, TF0, TF4, TF1)
UL TFC29	(TF2, TF1, TF1, TF4, TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (256 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	N/A
	TF3, bits	N/A	N/A	N/A	4x336	N/A
	TF4, bits	N/A	N/A	N/A	8x336	N/A

Downlink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL TFC3	(TF0, TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL TFC11	(TF2, TF1, TF1, TF3, TF0)
DL_TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL_TFC15	(TF0, TF0, TF0, TF1)
DL TFC16	(TF1, TF0, TF0, TF1)
DL TFC17	(TF2, TF1, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF1, TF1)
DL TFC21	(TF0, TF0, TF0, TF2, TF1)
DL_TFC22	(TF1, TF0, TF0, TF2, TF1)
DL TFC23	(TF2, TF1, TF1, TF2, TF1)
DL TFC24	(TF0, TF0, TF0, TF3, TF1)
DL_TFC25	(TF1, TF0, TF0, TF3, TF1)
DL TFC26	(TF2, TF1, TF1, TF3, TF1)
DL_TFC27	(TF0, TF0, TF0, TF4, TF1)
DL_TFC28	(TF1, TF0, TF0, TF4, TF1)
DL TFC29	(TF2, TF1, TF1, TF4, TF1)

Sub- test	Downlink TFCS Under	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)
	<u>Test</u>				<u>(note)</u>	<u>(note)</u>
1	DL TFC1, DL_TFC16	UL TFC1, DL_TFC16	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC15, UL TFC16	RB5: 39 RB6: 103 RB7: 60 RB8: 152	RB5: 39 RB6: No data RB7: No data RB8: No data
2	DL_TFC2, DL_TFC17	UL_TFC2, DL_TFC17	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL_TFC0, UL_TFC2, UL_TFC15, UL_TFC17	RB5: 81 RB6: 103 RB7: 60 RB8: 152	RB5: 81 RB6: 103 RB7: 60 RB8: No data
3	DL_TFC3, DL_TFC18	UL_TFC3, DL_TFC18	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL_TFC0, UL_TFC3, UL_TFC15, UL_TFC18	RB5: 39 RB6: 103 RB7: 60 RB8: 152	RB5: No data RB6: No data RB7: No data RB8: 312
4	DL TFC4, DL TFC19	UL TFC4, DL TFC19	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC3, UL TFC4, UL TFC16, UL TFC18, UL TFC19	RB5: 39 RB6: 103 RB7: 60 RB8: 152	RB5: 39 RB6: No data RB7: No data RB8: 312
51	DL TFC5, DL TFC20	UL TFC5, DL TFC20	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC2, UL TFC3, UL TFC5, UL TFC15, UL TFC17, UL TFC18, UL TFC20	RB5: 81 RB6: 103 RB7: 60 RB8: 152	RB5: 81 RB6: 103 RB7: 60 RB8: 312
<u>6</u>	DL_TFC6, DL_TFC21	UL_TFC6, DL_TFC21	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL TFC0, UL TFC6, UL TFC15, UL TFC21	RB5: 39 RB6: 103 RB7: 60 RB8: 312	RB5: No data RB6: No data RB7: No data RB8: 632
7	DL_TFC7, DL_TFC22	UL_TFC7, DL_TFC22	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC6, UL TFC7, UL TFC15, UL TFC16, UL TFC21, UL TFC22	RB5: 39 RB6: 103 RB7: 60 RB8: 312	RB5: 39 RB6: No data RB7: No data RB8: 632
8	DL_TFC8, DL TFC23	UL_TFC8, DL_TFC23	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL TFC0, UL TFC2, UL TFC6, UL TFC8, UL TFC15, UL TFC17, UL TFC21, UL TFC23	RB5: 81 RB6: 103 RB7: 60 RB8: 312	RB5: 81 RB6: 103 RB7: 60 RB8: 632
9	DL_TFC9, DL_TFC24	UL_TFC9, DL_TFC24	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL TFC0, UL TFC9, UL TFC15, UL TFC24	RB5: 39 RB6: 103 RB7: 60 RB8: 472	RB5: No data RB6: No data RB7: No data RB8: 1272
<u>10</u>	DL_TFC10, DL_TFC25	UL_TFC10, DL_TFC25	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC1, UL_TFC9, UL_TFC10, UL_TFC15, UL_TFC16, UL_TFC24, UL_TFC25	RB5: 39 RB6: 103 RB7: 60 RB8: 472	RB5: 39 RB6: No data RB7: No data RB8: 1272

Sub- test	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
	<u>Under</u> Test	Under test			(bits) (note)	(note)
11	DL TFC11, DL_TFC26	UL TFC11, DL_TFC26	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC2, UL TFC9, UL TFC11, UL TFC15, UL TFC17,	RB5: 81 RB6: 103 RB7: 60 RB8: 472	RB5: 81 RB6: 103 RB7: 60 RB8: 1272
				UL_TFC24, UL_TFC26		
<u>12</u>	DL_TFC12, DL_TFC27	UL_TFC12, DL_TFC27	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC12, UL_TFC15, UL_TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 632	RB5: No data RB6: No data RB7: No data RB8: 2552
13	DL TFC13, DL TFC28	UL TFC13, DL TFC28	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC12, UL TFC13, UL TFC15, UL TFC16, UL TFC27, UL TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 632	RB5: 39 RB6: No data RB7: No data RB8: 2552
14	DL TFC14, DL TFC29	UL TFC14, DL TFC29	DL TFC0, DL TFC15, UL_TFC0, UL TFC15	UL TFC0, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 632	RB5: 81 RB6: 103 RB7: 60 RB8: 2552

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the uplink TTI for RB8 is 20 ms while the downlink TTI is 10 ms then, to achieve continous data transmission in uplink the size of the uplink RLC SDU has been set such that it will be transmitted over each TTIs, i.e. UL RLC SDU SIZE has been set to the uplink TFS size under test divided by 2 minus 8 (the size of a 7 bit length indicator and expansion bit).

18.2.2.42.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3: the 2 RLC SDUs on RB8 having the first 152 bits equal to the content of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: the 2 RLC SDUs on RB8 having the first 152 bits equal to the content of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 5: the 2 RLC SDUs on RB8 having the first 152 bits equal to the content of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.

- for sub-test 6: the 2 RLC SDUs on RB8 having the first 312 bits equal to the content of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: the 2 RLC SDUs on RB8 having the first 312 bits equal to the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 8: the 2 RLC SDUs on RB8 having the first 312 bits equal to the content of the test data sent by the SS in downlink; and an RLC SDU on RB5, RB6, and RB7 having the same content as sent by SS.
- for sub-test 9: the 2 RLC SDUs on RB8 having the content equal to the first 472 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 10: the 2 RLC SDUs on RB8 having the content equal to the first 472 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 11: the 2 RLC SDUs on RB8 having the content equal to the first 472 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 12: the 2 RLC SDUs on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: the 2 RLC SDUs on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 14: the 2 RLC SDUs on RB8 having the content equal to the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.42.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:256 kbps / PS RAB / Payload 128, 20 ms TTI

18.2.2.42.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.42.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.42 for the uplink payload 128 and downlink 20 ms TTI case.

18.2.2.42.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u>	RB6	RB7	<u>RB8</u>	<u>DCCH</u>
	<u></u>	(RAB subflow #1)	(RAB subflow #2)	(RAB subflow #3)	<u>(64 kbps)</u>	
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	<u>3x144</u>	N/A
	TF3, bits	N/A	N/A	N/A	<u>7x144</u>	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	<u>10x144</u>	N/A

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL_TFC0	(TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
UL_TFC8	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF3, TF0)
UL_TFC10	(TF1, TF0, TF0, TF3, TF0)
UL_TFC11	(TF2, TF1, TF1, TF3, TF0)
UL TFC12	(TF0, TF0, TF0, TF4, TF0)
UL_TFC13	(TF1, TF0, TF0, TF4, TF0)
UL TFC14	(TF2, TF1, TF1, TF4, TF0)
UL TFC15	(TF0, TF0, TF0, TF1)
UL_TFC16	(TF1, TF0, TF0, TF1)
UL TFC17	(TF2, TF1, TF1, TF0, TF1)
UL_TFC18	(TF0, TF0, TF1, TF1)
UL_TFC19	(TF1, TF0, TF0, TF1, TF1)
UL_TFC20	(TF2, TF1, TF1, TF1)
UL_TFC21	(TF0, TF0, TF0, TF2, TF1)
UL TFC22	(TF1, TF0, TF0, TF2, TF1)
UL_TFC23	(TF2, TF1, TF1, TF2, TF1)
UL TFC24	(TF0, TF0, TF0, TF3, TF1)
UL TFC25	(TF1, TF0, TF0, TF3, TF1)
UL_TFC26	(TF2, TF1, TF1, TF3, TF1)
UL TFC27	(TF0, TF0, TF0, TF4, TF1)
UL_TFC28	(TF1, TF0, TF0, TF4, TF1)
UL_TFC29	(TF2, TF1, TF1, TF4, TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (256 kbps, 20 ms)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	<u>N/A</u>
<u>TFS</u>	TF3, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	4x336	<u>N/A</u>
	TF4, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>8x336</u>	<u>N/A</u>
	TF5, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>12x336</u>	<u>N/A</u>
	TF6, bits	N/A	N/A	N/A	<u>16x336</u>	<u>N/A</u>

Downlink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF1, TF0, TF0)
DL TFC3	(TF0, TF0, TF0, TF1, TF0)
DL TFC4	(TF1, TF0, TF0, TF1, TF0)
DL TFC5	(TF2, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL TFC11	(TF2, TF1, TF1, TF3, TF0)
DL_TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL_TFC15	(TF0, TF0, TF0, TF5, TF0)
DL TFC16	(TF1, TF0, TF0, TF5, TF0)
DL TFC17	(TF2, TF1, TF1, TF5, TF0)
DL_TFC18	(TF0, TF0, TF0, TF6, TF0)
DL TFC19	(TF1, TF0, TF0, TF6, TF0)
DL_TFC20	(TF2, TF1, TF1, TF6, TF0)
DL TFC21	(TF0, TF0, TF0, TF1)
DL_TFC22	(TF1, TF0, TF0, TF1)
DL TFC23	(TF2, TF1, TF1, TF0, TF1)
DL TFC24	(TF0, TF0, TF1, TF1)
DL_TFC25	(TF1, TF0, TF0, TF1, TF1)
DL TFC26	(TF2, TF1, TF1, TF1, TF1)
DL_TFC27	(TF0, TF0, TF0, TF2, TF1)
DL_TFC28 DL_TFC29	(TF1, TF0, TF0, TF2, TF1) (TF2, TF1, TF1, TF2, TF1)
DL TFC29	(TF0, TF0, TF0, TF3, TF1)
DL TFC30	(TF1, TF0, TF0, TF3, TF1)
DL TFC31	(TF2, TF1, TF1, TF3, TF1)
DL TFC32	(TF0. TF0. TF0. TF4. TF1)
DL TFC33	(TF1, TF0, TF0, TF4, TF1)
DL TFC35	(TF2, TF1, TF1, TF4, TF1)
DL TFC36	(TF0, TF0, TF5, TF1)
DL TFC37	(TF1, TF0, TF0, TF5, TF1)
DL TFC38	(TF2, TF1, TF1, TF5, TF1)
DL TFC39	(TF0, TF0, TF6, TF1)
DL TFC40	(TF1, TF0, TF0, TF6, TF1)
DL TFC41	(TF2, TF1, TF1, TF6, TF1)
	<u> </u>

Sub-	Downlink	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	TFCS Under	TFCS Under test	<u>tested</u>	<u>TFCIs</u>	<u>size</u> (bits)	(bits)
	Test	<u>Under test</u>			(note)	(note)
1	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC22	UL_TFC16	DL_TFC21,	UL_TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
2	DL TFC2,	UL TFC2,	UL TFC15 DL TFC0,	UL TFC16 UL TFC0,	RB8: 120 RB5: 81	RB8: No data RB5: 81
<u> </u>	DL TFC23	UL TFC17	DL TFC21,	UL TFC2,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC15,	RB7: 60	RB7: 60
		====	UL_TFC15	UL_TFC17	RB8: 120	RB8: No data
<u>3</u>	DL_TFC3, DL_TFC24	UL_TFC3, UL_TFC18	DL_TFC0, DL_TFC21,	UL_TFC0, UL_TFC3,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DE 11 OZ4	<u> </u>	UL TFC0,	<u>UL_TFC15,</u>	RB7: 60	RB7: No data
			UL TFC15	UL TFC18	RB8: 120	RB8: 312
<u>4</u>	DL TFC4,	UL TFC4,	DL TFCO,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC25	UL_TFC19	DL_TFC21, UL_TFC0,	UL_TFC1, UL_TFC3,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC4,	RB8: 120	RB8: 312
				UL TFC15,		
				UL_TFC16,		
				UL TFC18, UL TFC19		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
_	DL TFC26	UL TFC20	DL TFC21,	UL TFC2,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC3,	RB7: 60	RB7: 60
			UL TFC15	UL TFC5, UL TFC15,	RB8: 120	RB8: 312
				UL TFC15,		
				UL TFC18,		
				UL_TFC20		
<u>6</u>	DL_TFC6, DL_TFC27	UL_TFC6, UL_TFC21	DL_TFC0, DL_TFC21,	UL_TFC0, UL_TFC6,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL IFO21	OL TECZI	UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC21	RB8: 376	RB8: 632
<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC28	UL TFC22	DL TFC21, UL TFC0,	UL TFC1, UL TFC6,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC7,	RB8: 376	RB8: 632
				UL TFC15,		
				UL_TFC16,		
				UL TFC21, UL TFC22		
8	DL TFC8,	UL TFC8,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL TFC29	UL TFC23	DL TFC21,	UL TFC2,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC6,	RB7: 60	RB7: 60
			UL TFC15	UL TFC8, UL TFC15,	RB8: 376	RB8: 632
				UL TFC17,		
				UL TFC21		
	DI TEON	LII TECC	DI TECO	UL_TFC23	DD5: 20	DDE: No dete
<u>9</u>	DL_TFC9, DL_TFC30	UL_TFC9, UL_TFC24	DL_TFC0, DL_TFC21,	UL_TFC0, UL_TFC9,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	<u>DL 11 000</u>	<u> </u>	UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC24	RB8: 888	RB8: 1272
<u>10</u>	DL_TFC10,	UL_TFC10,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC31	UL TFC25	DL TFC21, UL TFC0,	UL TFC1, UL TFC9,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC10,	RB8: 888	RB8: 1272
				UL TFC15,		
				UL_TFC16,		
				UL TFC24, UL TFC25		
		1		OL_IFUZO	l	1

Sub-	Downlink	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	<u>TFCS</u> Under	TFCS Under test	<u>tested</u>	<u>TFCIs</u>	<u>size</u> (bits)	(bits)
	Test	<u>Onder test</u>			(note)	(note)
<u>11</u>	DL TFC11,	UL TFC11,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC32	UL_TFC26	DL_TFC21,	UL_TFC2,	RB6: 103	RB6: 103
			UL_TFC0, UL_TFC15	UL_TFC9, UL_TFC11,	RB7: 60 RB8: 888	RB7: 60 RB8: 1272
			<u>0L 11 013</u>	UL TFC15,	<u>KB0. 000</u>	ND0. 1212
				UL TFC17,		
				UL_TFC24, UL_TFC26		
12	DL TFC12,	UL TFC12,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
12	DL TFC33	UL TFC27	DL TFC21,	UL TFC12,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
13	DL TFC13,	UL TFC13,	UL TFC15 DL TFC0,	UL TFC27 UL TFC0,	RB8: 1272 RB5: 39	RB8: 2552 RB5: 39
13	DL TFC13,	UL TFC13,	DL TFC0,	UL TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC12,	RB7: 60	RB7: No data
			UL TFC15	UL TFC13,	RB8: 1272	RB8: 2552
				UL_TFC15, UL_TFC16,		
				UL TFC27		
				UL_TFC28		
<u>14</u>	DL TFC14,	UL TFC14, UL TFC29	DL TFC0,	UL TFC0, UL TFC2,	RB5: 81	RB5: 81
	DL TFC35	UL TFC29	DL TFC21, UL TFC0,	UL TFC2, UL TFC12,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
			UL TFC15	UL TFC14,	RB8: 1272	RB8: 2552
				UL_TFC15,		
				UL_TFC17,		
				UL TFC27, UL TFC29		
<u>15</u>	DL TFC15,	UL TFC12,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC36	UL TFC27	DL TFC21,	UL_TFC12,	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC15	UL_TFC15, UL_TFC27	RB7: 60 RB8: 1272	RB7: No data RB8: 3832
16	DL TFC16,	UL TFC13,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC37	UL TFC28	DL TFC21,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC12,	RB7: 60	RB7: No data
			UL TFC15	UL TFC13, UL TFC15,	RB8: 1272	RB8: 3832
				<u>UL_TFC16,</u>		
				UL TFC27		
47	DI TEO47	LII TEO44	DI TECO	UL_TFC28	DD5: 04	DD5: 04
<u>17</u>	DL_TFC17, DL_TFC38	UL_TFC14, UL_TFC29	DL_TFC0, DL_TFC21,	UL_TFC0, UL_TFC2,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	22 000	32 11 020	UL_TFC0,	<u>UL_TFC12,</u>	RB7: 60	RB7: 60
			UL TFC15	UL TFC14,	RB8: 1272	RB8: 3832
				UL TFC15, UL TFC17,		
				UL TFC27,		
				UL_TFC29		
<u>18</u>	DL_TFC18,	UL_TFC12,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: No data
	DL TFC39	UL TFC27	DL TFC21, UL TFC0,	UL TFC12, UL TFC15,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC27	RB8: 1272	RB8: 5112
<u>19</u>	DL_TFC19,	UL_TFC13,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC40	UL TFC28	DL TFC21,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC15	UL_TFC12, UL_TFC13,	RB7: 60 RB8: 1272	RB7: No data RB8: 5112
				UL TFC15,	<u> </u>	1.20.0112
				UL_TFC16,		
				UL TFC27, UL TFC28		
				UL_IFUZO		

Sub- test	Downlink TFCS Under	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)
	Test	<u>Ondor toot</u>			<u>(note)</u>	<u>(note)</u>
<u>20</u>	DL TFC20, DL TFC41	UL TFC14, UL TFC29	DL TFC0, DL TFC21, UL TFC0, UL TFC15	UL TFC0, UL TFC2, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 5112

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB8 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit).

18.2.2.42.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 3: RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
 - for sub-test 5: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 120 bits of the test data sent by the SS in downlink.
 - for sub-test 6: RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 8: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the same content as the first 376 bits of the test data sent by the SS.
 - for sub-test 9: RLC SDUs on RB8 having the same content as the first 888 bits of the test data sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 10: RLC SDUs on RB5 having the same content as sent by the SS; RLC SDUs on RB8 having the same content as the first 888 bits of the test data sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 11: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RLC SDUs on RB8 having the same content as the first 888 bits of the test data sent by the SS.

- for sub-test 12: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 14: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 15: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 16: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 17: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 18: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 19: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 20: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.43 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
- 18.2.2.43.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB / Payload 320, 10 ms TTI, 1 CCTrCH
- 18.2.2.43.1.1 Conformance requirement

See 18.2.2.4.1.

<u>18.2.2.43.1.2</u> Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.43 for the uplink payload 320, downlink 10 ms TTI, and 1 CCTrCH configuration case.

<u>18.2.2.43.1.3</u> Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps, 20 ms TTI)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	N/A
	TF3, bits	N/A	N/A	N/A	3x336	N/A
	TF4, bits	N/A	N/A	N/A	4x336	N/A

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL_TFC0	(TF0, TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0, TF0)
UL_TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF0, TF1, TF0)
UL_TFC4	(TF1, TF0, TF0, TF1, TF0)
UL_TFC5	(TF2, TF1, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL_TFC7	(TF1, TF0, TF0, TF2, TF0)
UL TFC8	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF3, TF0)
UL_TFC10	(TF1, TF0, TF0, TF3, TF0)
UL TFC11	(TF2, TF1, TF1, TF3, TF0)
UL_TFC12	(TF0, TF0, TF0, TF4, TF0)
UL_TFC13	(TF1, TF0, TF0, TF4, TF0)
UL TFC14	(TF2, TF1, TF1, TF4, TF0)
UL_TFC15	(TF0, TF0, TF0, TF1)
UL TFC16	(TF1, TF0, TF0, TF1)
UL TFC17	(TF2, TF1, TF1, TF0, TF1)
UL_TFC18	(TF0, TF0, TF1, TF1)
UL TFC19	(TF1, TF0, TF0, TF1, TF1)
UL_TFC20	(TF2, TF1, TF1, TF1)
UL TFC21	(TF0, TF0, TF0, TF2, TF1)
UL_TFC22	(TF1, TF0, TF0, TF2, TF1)
UL TFC23	(TF2, TF1, TF1, TF2, TF1)
UL TFC24	(TF0, TF0, TF0, TF3, TF1)
UL_TFC25	(TF1, TF0, TF0, TF3, TF1)
UL TFC26	(TF2, TF1, TF1, TF3, TF1)
UL_TFC27	(TF0, TF0, TF0, TF4, TF1)
UL_TFC28	(TF1, TF0, TF0, TF4, TF1)
UL TFC29	(TF2, TF1, TF1, TF4, TF1)

Downlink TFS:

_		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (384 kbps, 10 ms)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	0x336	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
TFS	TF2, bits	<u>1x81</u>	N/A	N/A	2x336	<u>N/A</u>
11-3	TF3, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	4x336	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	8x336	<u>N/A</u>
	TF5, bits	N/A	N/A	N/A	<u>12x336</u>	N/A

Downlink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF1, TF0, TF0)
DL TFC3	(TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL TFC11	(TF2, TF1, TF1, TF3, TF0)
DL_TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL_TFC15	(TF0, TF0, TF0, TF5, TF0)
DL TFC16	(TF1, TF0, TF0, TF5, TF0)
DL TFC17	(TF2, TF1, TF1, TF5, TF0)
DL_TFC18	(TF0, TF0, TF0, TF1)
DL TFC19	(TF1, TF0, TF0, TF1)
DL_TFC20	(TF2, TF1, TF1, TF0, TF1)
DL TFC21	(TF0, TF0, TF1, TF1)
DL_TFC22	(TF1, TF0, TF0, TF1, TF1)
DL TFC23	(TF2, TF1, TF1, TF1)
DL TFC24	(TF0, TF0, TF0, TF2, TF1)
DL_TFC25	(TF1, TF0, TF0, TF2, TF1)
DL TFC26	(TF2, TF1, TF1, TF2, TF1)
DL_TFC27	(TF0, TF0, TF0, TF3, TF1)
DL_TFC28	(TF1, TF0, TF0, TF3, TF1)
DL TFC29	(TF2, TF1, TF1, TF3, TF1)
DL_TFC30	(TF0, TF0, TF0, TF4, TF1)
DL TFC31	(TF1, TF0, TF0, TF4, TF1)
DL TFC32	(TF2, TF1, TF1, TF4, TF1)
DL_TFC33	(TF0, TF0, TF0, TF5, TF1)
DL TFC34	(TF1, TF0, TF0, TF5, TF1)
DL_TFC35	(TF2, TF1, TF1, TF5, TF1)

Sub-	Downlink	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	TFCS Under	TFCS Under test	<u>tested</u>	<u>TFCIs</u>	<u>size</u> (bits)	(bits)
	Test	===.		(note 3)	(note 1)	(note 1)
1	DL TFC1, DL TFC19	UL TFC1, UL TFC16	DL TFC0, DL TFC18,	UL TFC0, UL TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DL_IFC19	OL_IFC10	UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL TFC15	UL TFC3,	RB8: 152	RB8: No data
				UL_TFC15, UL_TFC16		
<u>2</u>	DL_TFC2,	UL_TFC2,	DL_TFC0,	UL_TFC0,	RB5: 81	RB5: 81
	DL_TFC20	UL_TFC17	DL_TFC18, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
			UL TFC15	UL TFC3,	RB8: 152	RB8: No data
				UL TFC15,		
	DI TEOO		DI TEOO	UL TFC17	DD5 00	DD5 N 1 1
<u>3</u>	DL TFC3, DL TFC21	UL TFC3, UL TFC18	DL TFC0, DL TFC18,	UL TFC0, UL TFC1,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL_IFG21	OL_IFC16	UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC3,	RB8: 152	RB8: 312
				UL TFC15,		
4	DL TFC4,	UL TFC4,	DL TFC0,	UL_TFC18 UL_TFC0,	RB5: 39	RB5: 39
1 -	DL TFC22	UL TFC19	DL TFC18,	UL TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC3, UL_TFC4,	RB8: 152	RB8: 312
				<u>UL_TFC4,</u> UL_TFC15,		
				UL TFC16,		
				UL TFC18,		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL_TFC19 UL_TFC0,	RB5: 81	RB5: 81
	DL TFC23	UL TFC20	DL TFC18,	UL TFC1,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC2,	RB7: 60	RB7: 60
			UL_TFC15	UL_TFC3, UL_TFC5,	RB8: 152	RB8: 312
				UL TFC17,		
				UL TFC18,		
				UL TFC15, UL TFC20		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC24	UL TFC21	DL TFC18,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC2,	RB7: 60	RB7: No data
			UL TFC15	UL TFC3, UL TFC6,	RB8: 312 (note 2)	RB8: 632
				UL TFC15,	<u> </u>	
	DI		DI TTOO	UL TFC21	DD5 00	DD5 66
<u>7</u>	DL TFC7, DL TFC25	UL TFC7, UL TFC22	DL TFC0, DL TFC18,	UL TFC0, UL TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DL_TFG25	OL_TFC22	UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC3,	RB8: 312	RB8: 632
				UL_TFC6,	(note 2)	
				UL TFC7, UL TFC15,		
				<u>UL TFC16,</u>		
				UL_TFC21,		
]		UL_TFC22		

Sub-	Downlink	Uplink	Implicitely	Restricted UL	UL RLC SDU	Test data size
test	TFCS	TFCS	tested	TFCIs	size	(bits)
	<u>Under</u> Test	<u>Under test</u>		(note 3)	(bits) (note 1)	(note 1)
8	DL TFC8,	UL TFC8,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC26	UL_TFC23	DL_TFC18,	UL_TFC1,	RB6: 103	RB6: 103
			UL_TFC0, UL_TFC15	UL_TFC2, UL_TFC3,	RB7: 60 RB8: 312	RB7: 60 RB8: 632
			<u> </u>	UL TFC6,	(note 2)	1130.002
				UL TFC8, UL TFC15,		
				<u>UL_TFC17,</u>		
				UL TFC21,		
9	DL TFC9,	UL TFC9,	DL TFC0,	UL_TFC23 UL_TFC0,	RB5: 39	RB5: No data
	DL_TFC27	UL_TFC24	DL_TFC18,	UL TFC1,	RB6: 103	RB6: No data
			UL TFC0, UL TFC15	UL TFC2, UL TFC3,	RB7: 60 RB8: 472	RB7: No data RB8: 1272
			<u>0L_11 0 10</u>	UL TFC9,	100. 472	1KBO. 1272
				UL_TFC15, UL_TFC24		
<u>10</u>	DL TFC10,	UL TFC10,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC28	UL TFC25	DL TFC18,	UL TFC1, UL TFC2.	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC15	UL_TFC2, UL_TFC3,	RB7: 60 RB8: 472	RB7: No data RB8: 1272
				UL_TFC9,		
				UL_TFC10, UL_TFC15,		
				UL TFC16,		
				UL TFC24, UL TFC25		
<u>11</u>	DL_TFC11,	UL_TFC11,	DL_TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL TFC29	UL TFC26	DL TFC18, UL TFC0,	UL TFC1, UL TFC2,	RB6: 103	RB6: 103
			UL TFC0,	UL TFC2,	RB7: 60 RB8: 472	RB7: 60 RB8: 1272
				UL TFC9,		
				UL_TFC11, UL_TFC15,		
				UL TFC17,		
				UL_TFC24, UL_TFC26		
<u>12</u>	DL TFC12,	UL TFC12,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
	DL_TFC30	UL_TFC27	DL_TFC18, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC3,	RB8: 632	RB8: 2552
				UL_TFC12,	(note 2)	
				UL TFC15, UL TFC27		
<u>13</u>	DL_TFC13,	UL_TFC13,	DL_TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC31	UL TFC28	DL TFC18, UL TFC0,	UL TFC1, UL TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL_TFC15	UL TFC3,	RB8: 632	RB8: 2552
				UL TFC12, UL TFC13,	(note 2)	
				UL TFC15,		
				UL_TFC16, UL_TFC27,		
				UL TFC28		
<u>14</u>	DL TFC14,	UL TFC14, UL TFC29	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC32	UL_IFC29	DL_TFC18, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
			UL TFC15	UL TFC3,	RB8: 632	RB8: 2552
				UL_TFC12, UL_TFC14,	(note 2)	
				UL_TFC15,		
				UL TFC17, UL TFC27,		
				UL_TFC29		

Sub-	Downlink	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC SDU	Test data size
test	<u>TFCS</u>	<u>TFCS</u>	<u>tested</u>	<u>TFCIs</u>	<u>size</u>	(bits)
	<u>Under</u>	Under test			(bits)	
	<u>Test</u>			(note 3)	(note 1)	(note 1)
<u>15</u>	DL TFC15,	UL TFC12,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
	DL_TFC33	UL_TFC27	DL_TFC18,	UL_TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC2,	RB7: 60	RB7: No data
			UL TFC15	UL TFC3,	RB8: 632	RB8: 3832
				UL_TFC12,	(note 2)	
				UL TFC15,		
				UL_TFC27		
<u>16</u>	DL TFC16,	UL TFC13,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC34	UL_TFC28	DL_TFC18,,	UL_TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC3,	RB8: 632	RB8: 3832
				UL_TFC12,	(note 2)	
				UL TFC13,		
				UL_TFC15,		
				UL TFC16,		
				UL_TFC27, UL_TFC28		
17	DL TFC17,	UL TFC14,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
17	DL TFC35	UL TFC29	DL TFC18,	UL TFC1,	RB6: 103	RB6: 103
	<u>DL 11 000</u>	<u>OL 11 023</u>	UL TFC0,	UL TFC2,	RB7: 60	RB7: 60
			UL TFC15	UL TFC3,	RB8: 632	RB8: 3832
			<u> </u>	UL TFC12,	(note 2)	1120.0002
				UL TFC14,	<u> </u>	
				UL TFC15,		
				UL TFC17,		
				UL TFC27,		
				UL TFC29		

NOTE 1: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit).

NOTE 2: RB8: For sub-tests to adopt to the difference in downlink TTI (10 ms) and uplink TTI (20ms) the UL RLC SDU size has been chosen such that 2 SDUs will be returned per uplink TTI. I.e. the UL RLC SDU size is set equal to half the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

NOTE 3: UL TFC0, UL TFC1, UL TFC2, UL TFC3 and UL TFC15 are part of minimum set of TFCIs.

18.2.2.43.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 3: RLC SDUs on RB8 having 2 SDUs equal to the content of the first 152 bits of test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: RLC SDUs on RB5 having the same content as sent by the SS; RB8 having 2 SDUs equal to the content of the first 152 bits of test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
 - for sub-test 5: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RB8 having 2 SDUs equal to the content of the first 152 bits of test data sent by the SS in downlink.

- for sub-test 6: RLC SDUs on RB8 having 2 SDUs equal to the content of the first 312 bits of test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: RLC SDUs on RB5 having the same content as sent by the SS; RB8 having 2 SDUs equal to the content of the first 312 bits of test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
- for sub-test 8: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and RB8 having 2 SDUs equal to the content of the first 312 bits of test data sent by the SS in downlink.
- for sub-test 9: RLC SDUs on RB8 having 2 SDUs equal to the content of the first 472 bits of test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 10: RLC SDUs on RB5 having the same content as sent by the SS; RB8 having 2 SDUs equal to the content of the first 472 bits of test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
- for sub-test 11: RLC SDUs on RB5, RB6, and RB7 having the same content as sent by the SS; and RB8 having 2 SDUs equal to the content of the first 472 bits of test data sent by the SS in downlink.
- for sub-test 12: RLC SDUs on RB8 having 2 SDUs equal to the content of the first 632 bits of test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: RLC SDUs on RB5 having the same content as sent by the SS; RB8 having 2 SDUs equal to the content of the first 632 bits of test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
- for sub-test 14: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and RB8 having 2 SDUs equal to the content of the first 632 bits of test data sent by the SS in downlink.
- for sub-test 15: RB8 having 2 SDUs equal to the content of the first 632 bits of test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 16: RLC SDUs on RB5 having the same content as sent by the SS; RB8 having 2 SDUs equal to the content of the first 632 bits of test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
- for sub-test 17: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the the SS; and RB8 having 2 SDUs equal to the content of the first 632 bits of test data sent by the SS in downlink.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.43.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:64 DL:384 kbps / PS RAB / Payload 128, 20 ms TTI, 2 CCTrCHs

18.2.2.43.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.43.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.43 for the uplink payload 128, downlink 20 ms TTI, and 2 CCTrCH configuration case.

18.2.2.43.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (RAB subflow #1)	RB6 (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	<u>RB8</u> (64 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	<u>N/A</u>	N/A	<u>3x144</u>	<u>N/A</u>
	TF3, bits	N/A	<u>N/A</u>	N/A	<u>7x144</u>	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	<u>10x144</u>	N/A

<u>Uplink TFCS (conversational + SRB):</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL Conv TFC0	(TF0, TF0, TF0, TF0)
UL Conv TFC1	(TF1, TF0, TF0, TF0, TF0)
UL Conv TFC2	(TF2, TF1, TF1, TF0, TF0)
UL Conv TFC3	(TF0, TF0, TF0, TF1)
UL Conv TFC4	(TF1, TF0, TF0, TF1)
UL Conv TFC5	(TF2, TF1, TF1, TF0, TF1)

<u>Uplink TFCS (Interactive or background):</u>

<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
UL Inter TFC0	(TF0, TF0, TF0, TF0, TF0)
UL Inter TFC1	(TF0, TF0, TF1, TF0)
UL Inter TFC2	(TF0, TF0, TF0, TF2, TF0)
UL Inter TFC3	(TF0, TF0, TF0, TF3, TF0)
UL Inter TFC4	(TF0, TF0, TF0, TF4, TF0)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (384 kbps, 20 ms)	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	2x336	<u>N/A</u>
	TF3, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>4x336</u>	<u>N/A</u>
<u>TFS</u>	TF4, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>8x336</u>	<u>N/A</u>
	TF5, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>12x336</u>	<u>N/A</u>
	TF6, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>16x336</u>	<u>N/A</u>
	TF7, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>20x336</u>	<u>N/A</u>
	TF8, bits	N/A	N/A	N/A	24x336	N/A

<u>Downlink TFCS (conversational + SRB):</u>

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL Conv TFC0	(TF0, TF0, TF0, TF0, TF0)
DL Conv TFC1	(TF1, TF0, TF0, TF0, TF0)
DL Conv TFC2	(TF2, TF1, TF1, TF0, TF0)
DL Conv TFC3	(TF0, TF0, TF0, TF1)
DL Conv TFC4	(TF1, TF0, TF0, TF1)
DL Conv TFC5	(TF2, TF1, TF1, TF0, TF1)

<u>Downlink TFCS (Interactive or background):</u>

<u>TFCI</u>	(RB5, RB6, RB7, RB8, DCCH)
DL Inter TFC0	(TF0, TF0, TF0, TF0)
DL Inter TFC1	(TF0, TF0, TF1, TF0)
DL Inter TFC2	(TF0, TF0, TF0, TF2, TF0)
DL Inter TFC3	(TF0, TF0, TF0, TF3, TF0)
DL Inter TFC4	(TF0, TF0, TF0, TF4, TF0)
DL Inter TFC5	(TF0, TF0, TF0, TF5, TF0)
DL Inter TFC6	(TF0, TF0, TF6, TF0)
DL Inter TFC7	(TF0, TF0, TF0, TF7, TF0)
DL Inter TFC8	(TF0, TF0, TF0, TF8, TF0)

				T =		
Sub-	<u>Downlink</u>	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	<u>TFCS</u>	<u>TFCS</u>	<u>tested</u>	<u>TFCIs</u>	<u>size</u>	(bits)
	<u>Under</u>	Under test			(bits)	
	<u>Test</u>				(note)	(note)
<u>1</u>	DL Conv T	UL Conv T	DL Conv TFC0,	UL Conv TFC0,	RB5: 39	RB5: 39
	<u>FC1,</u>	<u>FC1,</u>	DL Conv TFC3,	UL Conv TFC1,	RB6: 103	RB6: No data
	DL Inter TF	UL Inter T	UL Conv TFC0,	UL Conv TFC3,	RB7: 60	RB7: No data
	<u>C0,</u>	FC0,	UL Conv TFC3	UL Conv TFC4,	RB8: 120	RB8: No data
	DL Conv T	UL Conv T		UL Inter TFC0,		
	FC4	FC4		UL Inter TFC1		
<u>2</u>	DL Conv T	UL Conv T	DL Conv TFC0,	UL Conv TFC0,	RB5: 81	RB5: 81
	FC2,	FC2,	DL Conv TFC3,	UL Conv TFC1,	RB6: 103	RB6: 103
	DL Inter TF	UL Inter T	UL Conv TFC0,	UL Conv TFC2,	RB7: 60	RB7: 60
	<u>C0,</u>	FC0,	UL Conv TFC3	UL Conv TFC3,	RB8: 120	RB8: No data
	DL Conv T	UL Conv T		UL Conv TFC4,		
	FC5	FC5		UL Conv TFC5,		
				UL Inter TFC0,		
				<u>UL_Inter_TFC1</u>		
<u>3</u>	DL Conv T	UL_Conv_T	DL_Inter_TFC0,	UL_Conv_TFC0,	RB5: 39	RB5: No data
	<u>FC0,</u>	<u>FC0,</u>	UL Inter TFC0	UL Conv TFC1,	RB6: 103	RB6: No data
	DL_Inter_TF	<u>UL_Inter_T</u>		UL_Conv_TFC2,	RB7: 60	RB7: No data
	<u>C1,</u>	<u>FC1,</u>		UL_Conv_TFC3,	RB8: 120	RB8: 312
	DL Conv T	UL Conv T		UL Conv TFC4,		
	FC3	FC3		UL_Conv_TFC5,		
				UL Inter TFC0,		
				UL Inter TFC1		

Sub-	Downlink	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC SDU	Test data size
test	TFCS Under	TFCS Under test	tested	TFCIs	size (bits)	(bits)
	Test	Olider test			(note)	(note)
4	DL Conv T	UL Conv T	DL Conv TFC0,	UL Conv TFC0,	RB5: 39	RB5: 39
	FC1, DL Inter TF	FC1, UL Inter T	DL Conv_TFC3, DL Inter TFC0,	UL Conv TFC1, UL Conv TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
	<u>C1,</u>	FC1,	UL Conv TFC0,	UL Conv TFC3,	RB8: 120	RB8: 312
	DL_Conv_T FC4	UL_Conv_T FC4	UL Conv TFC3, UL Inter TFC0	UL Conv TFC4, UL Conv TFC5,		
	104	104	OL IIICI II CO	UL Inter TFC0,		
-	DI Ostri T	III. Oarres T	DI Como TECO	UL Inter TFC1	DDE: 04	DDE: 04
<u>5</u>	DL_Conv_T FC2,	UL_Conv_T FC2,	DL Conv TFC0, DL Conv TFC3,	UL Conv TFC0, UL Conv TFC1,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	DL Inter TF	UL Inter T	DL Inter TFC0,	UL Conv TFC2,	RB7: 60	RB7: 60
	C1, DL Conv T	FC1, UL Conv T	UL Conv TFC0, UL Conv TFC3,	UL Conv TFC3, UL Conv TFC4,	RB8: 120	RB8: 312
	FC5	FC5	UL_Inter_TFC0	UL Conv TFC5,		
				UL Inter TFC0, UL Inter TFC1		
<u>6</u>	DL_Conv_T	UL_Conv_T	DL Inter TFC0,	UL Conv TFC0,	RB5: 39	RB5: No data
	FC0, DL Inter TF	FC0, UL Inter T	UL Inter TFC0	UL Conv TFC1, UL Conv TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
	C2,	FC2,		UL Conv TFC2,	RB8: 376	RB8: 632
	DL Conv T	UL Conv T		UL Conv TFC4,		
	FC3	FC3		UL Conv TFC5, UL Inter TFC0,		
				UL Inter TFC1,		
<u>7</u>	DL Conv T	UL Conv T	DL Conv TFC0,	UL Inter TFC2 UL Conv TFC0,	RB5: 39	RB5: 39
-	FC1,	FC1,	DL Conv TFC3,	UL Conv TFC1,	RB6: 103	RB6: No data
	DL_Inter_TF C2,	UL_Inter_T FC2,	DL Inter TFC0, UL Conv TFC0,	UL Conv TFC2, UL Conv TFC3,	RB7: 60 RB8: 376	RB7: No data RB8: 632
	DL Conv T	UL Conv T	UL Conv TFC3,	UL Conv TFC4,	<u>KB0. 370</u>	<u>KB0. 032</u>
	FC4	FC4	UL_Inter_TFC0	UL Conv TFC5,		
				UL Inter TFC0, UL Inter TFC1,		
	DI O	111 O T	DI O TEOO	UL Inter TFC2	DDF 04	DD5 04
8	DL Conv T FC2,	UL Conv T FC2,	DL Conv TFC0, DL Conv TFC3,	UL Conv TFC0, UL Conv TFC1,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	DL Inter TF	UL Inter T	DL Inter TFC0,	UL Conv TFC2,	RB7: 60	RB7: 60
	C2, DL Conv T	FC2, UL Conv T	UL Conv TFC0, UL Conv TFC3,	UL Conv TFC3, UL Conv TFC4,	RB8: 376	RB8: 632
	FC5	FC5	UL Inter TFC0	UL Conv TFC5,		
				UL Inter TFC0, UL Inter TFC1,		
				UL Inter TFC2		
9	DL Conv T FC0,	UL Conv T FC0,	DL Inter TFC0, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL Inter TF	UL Inter T	OL_III(EI_IFCU	UL Conv TFC2,	RB7: 60	RB7: No data
	C3,	FC3.		UL Conv TFC3,	RB8: 888	RB8: 1272
	DL_Conv_T FC3	UL_Conv_T FC3		UL Conv TFC4, UL Conv TFC5,		
				UL Inter TFC0,		
				UL Inter TFC1, UL Inter TFC3		
<u>10</u>	DL Conv T	UL Conv T	DL Conv TFC0,	UL Conv TFC0,	RB5: 39	RB5: 39
	FC1, DL Inter TF	FC1, UL Inter T	DL Conv TFC3, DL Inter TFC0,	UL Conv TFC1, UL Conv TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
	<u>C3.</u>	FC3,	UL Conv TFC0,	UL Conv TFC3,	RB8: 888	RB8: 1272
	DL_Conv_T FC4	UL_Conv_T FC4	UL Conv TFC3, UL Inter TFC0	UL Conv TFC4, UL Conv TFC5,		
	<u> </u>		<u> </u>	UL Inter TFC0,		
				UL Inter TFC1, UL Inter TFC3		
	L		1	OL IIICI II OJ	l	

Sub-	Downlink	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	TFCS Under	TFCS Under test	<u>tested</u>	<u>TFCIs</u>	<u>size</u> (bits)	(bits)
	Test				(note)	<u>(note)</u>
<u>11</u>	DL Conv T FC2, DL Inter TF C3, DL Conv T FC5	UL Conv T FC2, UL Inter T FC3, UL Conv T FC5	DL Conv TFC0, DL Conv TFC3, DL Inter TFC0, UL Conv TFC0, UL Conv TFC3, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC2, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1,	RB5: 81 RB6: 103 RB7: 60 RB8: 888	RB5: 81 RB6: 103 RB7: 60 RB8: 1272
12	DL Conv T FCO. DL Inter TF C4. DL Conv T FC3	UL Conv T FC0, UL Inter T FC4, UL Conv T FC3	DL Inter TFC0, UL_Inter_TFC0	UL Inter TFC3 UL Conv TFC0, UL Conv TFC1, UL Conv TFC2, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1, UL Inter TFC4	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: No data RB6: No data RB7: No data RB8: 2552
13	DL Conv T FC1, DL Inter TF C4, DL Conv T FC4	UL Conv T FC1, UL Inter T FC4, UL Conv T FC4	DL Conv TFC0, DL Conv TFC3, DL Inter TFC0, UL Conv TFC0, UL Conv TFC3, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC3, UL Conv TFC4, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1, UL Inter TFC4	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: 39 RB6: No data RB7: No data RB8: 2552
<u>14</u>	DL Conv T FC2, DL Inter TF C4, DL Conv T FC5	UL Conv T FC2, UL Inter T FC4, UL Conv T FC5	DL Conv TFC0, DL Conv TFC3, DL Inter TFC0, UL Conv TFC0, UL Conv TFC3, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC2, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1, UL Inter TFC4	RB5: 81 RB6: 103 RB7: 60 RB8: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 2552
<u>15</u>	DL Conv T FCO, DL Inter TF C5, DL Conv_T FC3	UL Conv T FC0, UL Inter T FC4, UL Conv T FC3	DL Inter TFC0, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC2, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1, UL Inter TFC4	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: No data RB6: No data RB7: No data RB8: 3832
16	DL Conv T FC1, DL Inter TF C5, DL Conv T FC4	UL Conv T FC1, UL Inter T FC4, UL Conv T FC4	DL Conv TFC0, DL Conv TFC3, DL Inter TFC0, UL Conv TFC0, UL Conv TFC3, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC2, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1, UL Inter TFC4	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: 39 RB6: No data RB7: No data RB8: 3832
<u>17</u>	DL Conv T FC2. DL Inter TF C5, DL Conv T FC5	UL Conv T FC2, UL Inter T FC4, UL Conv T FC5	DL Conv TFC0, DL Conv TFC3, DL Inter TFC0, UL Conv TFC3, UL Conv TFC3, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1, UL Conv TFC2, UL Conv TFC3, UL Conv TFC4, UL Conv TFC5, UL Inter TFC0, UL Inter TFC1, UL Inter TFC4	RB5: 81 RB6: 103 RB7: 60 RB8: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 3832

Sub-	Downlink	Uplink	Implicitely	Restricted UL	UL RLC SDU	Test data size
test	TFCS	TFCS	tested	TFCIs	size	(bits)
	<u>Under</u> Test	<u>Under test</u>			(bits) (note)	(note)
<u>18</u>	DL Conv T	UL Conv T	DL Inter TFC0,	UL Conv TFC0,	RB5: 39	RB5: No data
	FCO.	FC0.	UL_Inter_TFC0	UL_Conv_TFC1,	RB6: 103	RB6: No data
	DL_Inter_TF C6,	UL_Inter_T FC4,		UL Conv TFC2, UL Conv TFC3,	RB7: 60 RB8: 1272	RB7: No data RB8: 5112
	DL Conv T	UL Conv T		UL Conv TFC4,	INDO: 1212	1100.0112
	FC3	FC3		UL Conv TFC5,		
				UL Inter TFC0, UL Inter TFC1,		
				UL Inter TFC4		
<u>19</u>	DL Conv T FC1,	UL Conv T FC1,	DL Conv TFC0, DL Conv TFC3,	UL Conv TFC0, UL Conv TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DL Inter TF	UL Inter T	DL Inter TFC0,	UL Conv TFC1,	RB7: 60	RB7: No data
	<u>C6,</u>	FC4,	UL Conv TFC0,	UL Conv TFC3,	RB8: 1272	RB8: 5112
	DL Conv T FC4	UL_Conv_T FC4	UL Conv_TFC3, UL Inter TFC0	UL Conv TFC4, UL Conv TFC5,		
	104	104	OL MICH IT GO	UL Inter TFC0,		
				UL Inter TFC1,		
20	DL Conv T	UL Conv T	DL Conv TFC0,	UL Inter TFC4 UL Conv TFC0,	RB5: 81	RB5: 81
	FC2,	FC2,	DL Conv TFC3,	UL Conv TFC1,	RB6: 103	RB6: 103
	DL Inter TF C6,	UL Inter T FC4,	DL Inter TFC0, UL Conv TFC0,	UL Conv TFC2, UL Conv TFC3,	RB7: 60 RB8: 1272	RB7: 60 RB8: 5112
	DL Conv T	UL Conv T	UL Conv TFC3,	UL Conv TFC4,	<u>100. 1272</u>	1100.0112
	FC5	FC5	UL Inter TFC0	UL Conv TFC5,		
				UL Inter TFC0, UL Inter TFC1,		
				UL Inter TFC4		
<u>21</u>	DL_Conv_T FC0.	UL_Conv_T FC0,	DL Inter TFC0, UL Inter TFC0	UL Conv TFC0, UL Conv TFC1,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL Inter TF	UL Inter T	OL IIILEI TECO	UL Conv TFC1,	RB7: 60	RB7: No data
	<u>C7,</u>	FC4,		UL Conv TFC3,	RB8: 1272	RB8: 6392
	DL Conv T FC3	UL Conv T FC3		UL Conv TFC4, UL Conv TFC5,		
	100	100		UL Inter TFC0,		
				UL Inter TFC1, UL Inter TFC4		
22	DL Conv T	UL Conv T	DL Conv TFC0,	UL Conv TFC0,	RB5: 39	RB5: 39
	FC1,	FC1,	DL Conv TFC3,	UL Conv TFC1,	RB6: 103	RB6: No data
	DL_Inter_TF C7,	UL_Inter_T FC4,	DL Inter TFC0, UL Conv TFC0,	UL Conv TFC2, UL Conv TFC3,	RB7: 60 RB8: 1272	RB7: No data RB8: 6392
	DL Conv T	UL Conv T	UL Conv TFC3,	UL Conv TFC4,	100. 1212	1100.0032
	FC4	FC4	UL Inter TFC0	UL Conv TFC5,		
				UL Inter TFC0, UL Inter TFC1,		
				UL Inter TFC4		
<u>23</u>	DL Conv T FC2,	UL Conv T FC2,	DL Conv TFC0, DL Conv TFC3,	UL Conv TFC0, UL Conv TFC1,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	DL Inter TF	UL Inter T	DL Inter TFC0,	UL Conv TFC1,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
	<u>C7,</u>	FC4,	UL Conv TFC0,	UL Conv TFC3,	RB8: 1272	RB8: 6392
	DL Conv T FC5	UL_Conv_T FC5	UL Conv TFC3, UL Inter TFC0	UL Conv TFC4, UL Conv TFC5,		
	- 5 	- 5 	22	UL Inter TFC0,		
				UL Inter TFC1, UL Inter TFC4		
24	DL Conv T	UL Conv T	DL Inter TFC0,	UL Conv TFC0,	RB5: 39	RB5: No data
	FC0,	FC0,	UL_Inter_TFC0	UL_Conv_TFC1,	RB6: 103	RB6: No data
	DL_Inter_TF C8,	UL_Inter_T FC4,		UL Conv TFC2, UL Conv TFC3,	RB7: 60 RB8: 1272	RB7: No data RB8: 7672
	DL Conv T	UL_Conv_T		UL_Conv_TFC4,		
	FC3	FC3		UL Conv TFC5,		
				UL Inter TFC0, UL Inter TFC1,		
				UL Inter TFC4		

Sub-	Downlink	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	<u>TFCS</u>	<u>TFCS</u>	<u>tested</u>	<u>TFCIs</u>	<u>size</u>	(bits)
	<u>Under</u>	Under test			(bits)	
	<u>Test</u>				<u>(note)</u>	<u>(note)</u>
<u>25</u>	DL Conv T	UL Conv T	DL Conv TFC0,	UL Conv TFC0,	RB5: 39	RB5: 39
	<u>FC1,</u>	<u>FC1,</u>	DL_Conv_TFC3,	UL Conv TFC1,	RB6: 103	RB6: No data
	DL Inter TF	UL_Inter_T	DL Inter TFC0,	UL Conv TFC2,	RB7: 60	RB7: No data
	<u>C8,</u>	<u>FC4,</u>	UL Conv TFC0,	UL Conv TFC3,	RB8: 1272	RB8: 7672
	DL_Conv_T	UL_Conv_T	UL_Conv_TFC3,	UL_Conv_TFC4,		
	FC4	FC4	UL Inter TFC0	UL Conv TFC5,		
				UL_Inter_TFC0,		
				UL_Inter_TFC1,		
				UL Inter TFC4		
<u>26</u>	DL Conv T	UL Conv T	DL Conv TFC0,	UL Conv TFC0,	RB5: 81	RB5: 81
	FC2,	FC2,	DL_Conv_TFC3,	UL Conv TFC1,	RB6: 103	RB6: 103
	DL_Inter_TF	UL_Inter_T	DL Inter TFC0,	UL_Conv_TFC2,	RB7: 60	RB7: 60
	<u>C8,</u>	<u>FC4,</u>	UL Conv TFC0,	UL Conv TFC3,	RB8: 1272	RB8: 7672
	DL_Conv_T	UL_Conv_T	UL_Conv_TFC3,	UL_Conv_TFC4,		
	FC5	FC5	UL Inter TFC0	UL Conv TFC5,		
				UL_Inter_TFC0,		
				UL Inter TFC1,		
				<u>UL Inter TFC4</u>		
NOTE:	See TS 34.1	09 [10] clause	5.3.2.6.2 for details r	egarding loopback o	f RLC SDUs.	

See 18.2.1.2 for definition of step 10 and step 15.

1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.

Test requirements

2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB8 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit).

3. At step 15 the UE shall return

18.2.2.43.2.4

- for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
- for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
- for sub-test 3: an RLC SDU on RB8 having the content of the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 4: an RLC SDU on RB5 having the content equal to the content of the test data sent by the SS in downlink; an RLC SDU on RB8 having the content of the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
- for sub-test 5: an RLC SDU on RB5, RB6, and RB7 having the same content as sent by SS; and an RLC SDU on RB8 having the content of the first 120 bits of the test data sent by the SS in downlink.
- for sub-test 6: an RLC SDU on RB8 having the content of the first 376 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: an RLC SDU on RB5 having the content equal to the content of the test data sent by the SS in downlink; an RLC SDU on RB8 having the content of the first 376 bits of the test data sent by the SS in downlink; and no data shall be received on RB6 and RB7.
- for sub-test 8: an RLC SDU on RB5, RB6, and RB7 having the same content as sent by SS; and an RLC SDU on RB8 having the content of the first 376 bits of the test data sent by the SS in downlink.

- for sub-test 9: an RLC SDU on RB8 having the content equal to the first 888 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 10: an RLC SDU on RB8 having the content equal to the first 888 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 11: an RLC SDU on RB8 having the content equal to the first 888 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 12: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 14: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 15: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 16: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 17: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 18: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 19: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 20: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 21: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 22: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 23: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 24: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 25: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 26: an RLC SDU on RB8 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.44 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

18.2.2.44.1 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB / Payload 320, 10 ms TTI

18.2.2.44.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.44.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.44 for the uplink payload 320 and downlink 10 ms TTI case.

18.2.2.44.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (128 kbps)	DCCH
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x336</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	2x336	<u>N/A</u>
	TF3, bits	N/A	<u>N/A</u>	<u>N/A</u>	4x336	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	8x336	N/A

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
UL_TFC8	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF3, TF0)
UL_TFC10	(TF1, TF0, TF0, TF3, TF0)
UL_TFC11	(TF2, TF1, TF1, TF3, TF0)
UL TFC12	(TF0, TF0, TF0, TF4, TF0)
UL_TFC13	(TF1, TF0, TF0, TF4, TF0)
UL TFC14	(TF2, TF1, TF1, TF4, TF0)
UL TFC15	(TF0, TF0, TF0, TF1)
UL_TFC16	(TF1, TF0, TF0, TF1)
UL TFC17	(TF2, TF1, TF1, TF0, TF1)
UL_TFC18	(TF0, TF0, TF1, TF1)
UL_TFC19	(TF1, TF0, TF0, TF1, TF1)
UL_TFC20	(TF2, TF1, TF1, TF1, TF1)
UL_TFC21	(TF0, TF0, TF0, TF2, TF1)
UL TFC22	(TF1, TF0, TF0, TF2, TF1)
UL_TFC23	(TF2, TF1, TF1, TF2, TF1)
UL TFC24	(TF0, TF0, TF0, TF3, TF1)
UL TFC25	(TF1, TF0, TF0, TF3, TF1)
UL_TFC26	(TF2, TF1, TF1, TF3, TF1)
UL TFC27	(TF0, TF0, TF4, TF1)
UL_TFC28	(TF1, TF0, TF0, TF4, TF1)
UL_TFC29	(TF2, TF1, TF1, TF4, TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (2048 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x656</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x656</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	2x656	<u>N/A</u>
	TF3, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	4x656	<u>N/A</u>
	TF4, bits	N/A	<u>N/A</u>	<u>N/A</u>	8x656	<u>N/A</u>
<u>TFS</u>	TF5, bits	N/A	<u>N/A</u>	N/A	<u>12x656</u>	<u>N/A</u>
	TF6, bits	N/A	<u>N/A</u>	N/A	<u>16x656</u>	<u>N/A</u>
	TF7, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>20x656</u>	<u>N/A</u>
	TF8, bits	N/A	<u>N/A</u>	N/A	24x656	<u>N/A</u>
	TF9, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	28x656	<u>N/A</u>
	TF10, bits	N/A	<u>N/A</u>	N/A	31x656	<u>N/A</u>

Downlink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0, TF0, TF0, TF0, TF0)
DL_TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL TFC3	(TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL TFC5	(TF2, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL_TFC9	(TF0, TF0, TF0, TF3, TF0)
DL TFC10	(TF1, TF0, TF0, TF3, TF0)

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC11	(TF2, TF1, TF1, TF3, TF0)
DL TFC12	(TF0, TF0, TF0, TF4, TF0)
DL TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL TFC15	(TF0, TF0, TF0, TF5, TF0)
DL TFC16	(TF1, TF0, TF0, TF5, TF0)
DL TFC17	(TF2, TF1, TF1, TF5, TF0)
DL TFC18	(TF0, TF0, TF0, TF6, TF0)
DL_TFC19	(TF1, TF0, TF0, TF6, TF0)
DL TFC20	(TF2, TF1, TF1, TF6, TF0)
DL_TFC21	(TF0, TF0, TF0, TF7, TF0)
DL_TFC22	(TF1, TF0, TF0, TF7, TF0)
DL TFC23	(TF2, TF1, TF1, TF7, TF0)
DL_TFC24	(TF0, TF0, TF0, TF8, TF0)
DL TFC25	(TF1, TF0, TF0, TF8, TF0)
DL TFC26	(TF2, TF1, TF1, TF8, TF0)
DL_TFC27	(TF0, TF0, TF0, TF0)
DL TFC28	(TF1, TF0, TF0, TF9, TF0)
DL_TFC29	(TF2, TF1, TF1, TF9, TF0)
DL_TFC30	(TF0, TF0, TF0, TF10, TF0)
DL_TFC31	(TF1, TF0, TF0, TF10, TF0) (TF2, TF1, TF1, TF10, TF0)
DL_TFC32 DL_TFC33	(TF2, TF1, TF1, TF10, TF0) (TF0, TF0, TF0, TF1)
DL TFC33	(TF1, TF0, TF0, TF0, TF1)
DL TFC35	(TF2, TF1, TF1, TF0, TF1)
DL TFC36	(TF0, TF0, TF1, TF1)
DL TFC37	(TF1, TF0, TF0, TF1, TF1)
DL TFC38	(TF2, TF1, TF1, TF1)
DL TFC39	(TF0, TF0, TF2, TF1)
DL TFC40	(TF1, TF0, TF0, TF2, TF1)
DL TFC41	(TF2, TF1, TF1, TF2, TF1)
DL TFC42	(TF0, TF0, TF3, TF1)
DL TFC43	(TF1, TF0, TF0, TF3, TF1)
DL TFC44	(TF2, TF1, TF1, TF3, TF1)
DL_TFC45	(TF0, TF0, TF0, TF4, TF1)
DL TFC46	(TF1, TF0, TF0, TF4, TF1)
DL_TFC47	(TF2, TF1, TF1, TF4, TF1)
DL_TFC48	(TF0, TF0, TF0, TF5, TF1)
DL_TFC49	(TF1, TF0, TF0, TF5, TF1)
DL_TFC50	(TF2, TF1, TF1, TF5, TF1)
DL TFC51	(TF0, TF0, TF6, TF1)
DL_TFC52	(TF1, TF0, TF0, TF6, TF1)
DL TFC53	(TF2, TF1, TF1, TF6, TF1)
DL TFC54	(TF0, TF0, TF7, TF1)
DL_TFC55	(TF1, TF0, TF0, TF7, TF1)
DL TFC56	(TF2, TF1, TF1, TF7, TF1)
DL_TFC57	(TF0, TF0, TF0, TF8, TF1)
DL TFC58 DL TFC59	(TF1, TF0, TF0, TF8, TF1) (TF2, TF1, TF1, TF8, TF1)
DL TFC59	(TF0, TF0, TF0, TF9, TF1)
DL TFC60	(TF1, TF0, TF0, TF9, TF1)
DL TFC62	(TF2, TF1, TF1, TF9, TF1)
DL_TFC62	(TF0, TF0, TF10, TF10, TF1)
DL TFC64	(TF1, TF0, TF10, TF1)
DL TFC65	(TF2, TF1, TF10, TF1)
DL 11 000	<u> </u>

Sub-	<u>Downlink</u>	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC	Test data size
test	TFCS	TFCS	tested	TFCIs	SDU size	(bits)
	under	Under test			(bits)	
	test				(note)	(note)

Sub-	Downlink	Uplink	<u>Implicitely</u>	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS under	TFCS Under test	tested	<u>TFCIs</u>	SDU size (bits)	<u>(bits)</u>
	test				<u>(note)</u>	(note)
1	DL TFC1,	UL TFC1,	DL TFC0,	UL TFCO,	RB5: 39	RB5: 39
	DL_TFC34	UL_TFC16	DL_TFC33, UL_TFC0,	UL_TFC1, UL_TFC15,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC16	RB8: 152	RB8: No data
2	DL TFC2,	UL TFC2,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC35	UL_TFC17	DL_TFC33,	UL_TFC2,	RB6: 103	RB6: 103
			UL_TFC0, UL_TFC15	UL_TFC15, UL_TFC17	RB7: 60 RB8: 152	RB7: 60 RB8: No data
3	DL TFC3,	UL TFC3,	DL TFC15	UL TFC0,	RB5: 39	RB5: No data
_	DL TFC36	UL TFC18	DL TFC33,	UL TFC3,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
4	DL TFC4,	UL TFC4,	UL_TFC15 DL_TFC0,	UL_TFC18 UL_TFC0,	RB8: 152 RB5: 39	RB8: 632 RB5: 39
4	DL_TFC4, DL_TFC37	UL TFC19	DL_TFC0,	UL TFC1,	RB6: 103	RB6: No data
	<u> </u>	<u> </u>	UL TFC0,	UL TFC3,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC4,	RB8: 152	RB8: 632
				UL TFC15, UL TFC16,		
				UL TFC18,		
				UL_TFC19		
<u>5</u>	DL_TFC5, DL_TFC38	UL_TFC5, UL_TFC20	DL_TFC0, DL_TFC33,	UL_TFC0, UL_TFC2,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	DL_TFC38	UL_TFC20	UL TFC0,	UL TFC3,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
			UL TFC15	UL TFC5,	RB8: 152	RB8: 632
				UL TFC15,		
				UL TFC17, UL TFC18,		
				UL TFC20		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
	DL_TFC39	UL_TFC21	DL_TFC33,	UL_TFC6,	RB6: 103	RB6: No data
			UL TFC0, UL TFC15	UL TFC15, UL TFC21	RB7: 60 RB8: 312	RB7: No data RB8: 1272
7	DL TFC7,	UL TFC7,	DL TFC0,	UL TFCO,	RB5: 39	RB5: 39
	DL TFC40	UL TFC22	DL TFC33,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC15	UL_TFC6, UL_TFC7.	RB7: 60 RB8: 312	RB7: No data RB8: 1272
			OL_II CIS	UL TFC15,	<u>IXD0. 312</u>	<u>IXDO. 1272</u>
				UL_TFC16,		
				UL TFC21,		
8	DL TFC8,	UL TFC8,	DL TFC0,	UL_TFC22 UL_TFC0,	RB5: 81	RB5: 81
-	DL_TFC41	UL_TFC23	DL_TFC33,	UL_TFC2,	RB6: 103	RB6: 103
		1	UL TFC0,	UL TFC6,	RB7: 60	RB7: 60
			UL_TFC15	UL_TFC8, UL_TFC15,	RB8: 312	RB8: 1272
				UL TFC15,		
				UL_TFC21,		
	DI TEOC	LII TECC	DI TEOC	UL TFC23	DDE: 00	DDE, No dete
9	DL TFC9, DL TFC42	UL TFC9, UL TFC24	DL TFC0, DL TFC33,	UL TFC0, UL TFC9,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	<u>DL_11 042</u>	<u> </u>	UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL TFC15	UL TFC24	RB8: 632	RB8: 2552
<u>10</u>	DL_TFC10, DL_TFC43	UL_TFC10, UL_TFC25	DL_TFC0, DL_TFC33,	UL_TFC0, UL_TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DL IPU43	UL IFUZO	UL TFC0,	UL TFC1,	RB6: 103 RB7: 60	RB6: No data
			UL_TFC15	UL_TFC10,	RB8: 632	RB8: 2552
				UL TFC15,		
				UL_TFC16, UL_TFC24,		
				UL TFC25		

Sub- test	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
	under test	Under test			(bits) (note)	(note)
11	DL TFC11, DL TFC44	UL TFC11, UL TFC26	DL TFC0, DL TFC33, UL TFC0, UL TFC15	UL TFC0, UL TFC2, UL TFC9, UL TFC11, UL TFC15, UL TFC17, UL TFC24, UL TFC26	RB5: 81 RB6: 103 RB7: 60 RB8: 632	RB5: 81 RB6: 103 RB7: 60 RB8: 2552
<u>12</u>	DL_TFC12, DL_TFC45	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL TFC0, UL TFC12, UL TFC15, UL TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: No data RB6: No data RB7: No data RB8: 5112
<u>13</u>	DL TFC13, DL TFC46	UL TFC13, UL TFC28	DL TFC0, DL TFC33, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC13, UL TFC15, UL TFC16, UL TFC27, UL TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: 39 RB6: No data RB7: No data RB8: 5112
<u>14</u>	DL TFC14, DL TFC47	UL TFC14, UL TFC29	DL TFC0, DL TFC33, UL TFC0, UL TFC15	UL TFC0, UL TFC2, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27 UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 5112
<u>15</u>	DL_TFC15, DL_TFC48	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC12, UL_TFC15, UL_TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: No data RB6: No data RB7: No data RB8: 7672
<u>16</u>	DL TFC16, DL TFC49	UL TFC13, UL TFC28	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC12, UL TFC13, UL TFC15, UL TFC16, UL TFC27, UL TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: 39 RB6: No data RB7: No data RB8: 7672
17	DL TFC17, DL TFC50	UL_TFC14, UL_TFC29	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL TFC0, UL TFC2, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 7672
<u>18</u>	DL_TFC18, DL_TFC51	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC12, UL_TFC15, UL_TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: No data RB6: No data RB7: No data RB8: 10232
<u>19</u>	DL_TFC19, DL_TFC52	UL_TFC13, UL_TFC28	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC1, UL_TFC12, UL_TFC13, UL_TFC15, UL_TFC16, UL_TFC27, UL_TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: 39 RB6: No data RB7: No data RB8: 10232

Sub- test	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
	under test	Under test			(bits) (note)	(note)
<u>20</u>	DL TFC20, DL TFC53	UL TFC14, UL TFC29	DL TFC0, DL TFC33, UL TFC0, UL TFC15	UL TFC0, UL TFC2, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 10232
<u>21</u>	DL_TFC21, DL_TFC54	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC12, UL_TFC15, UL_TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: No data RB6: No data RB7: No data RB8: 12792
<u>22</u>	DL TFC22, DL TFC55	UL TFC13, UL TFC28	DL TFC0, DL TFC33, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC13, UL TFC15, UL TFC16, UL TFC27, UL TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: 39 RB6: No data RB7: No data RB8: 12792
23	DL TFC23, DL TFC56	UL TFC14, UL TFC29	DL TFC0, DL TFC33, UL TFC0, UL TFC15	UL TFC0, UL TFC2, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 12792
<u>24</u>	DL_TFC24, DL_TFC57	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC12, UL_TFC15, UL_TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: No data RB6: No data RB7: No data RB8: 15352
<u>25</u>	DL TFC25, DL TFC58	UL TFC13, UL TFC28	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC1, UL_TFC12, UL_TFC13, UL_TFC15, UL_TFC16, UL_TFC27, UL_TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: 39 RB6: No data RB7: No data RB8: 15352
<u>26</u>	DL TFC26, DL TFC59	UL_TFC14, UL_TFC29	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL TFC0, UL TFC2, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 1272	RB5: 81 RB6: 103 RB7: 60 RB8: 15352
<u>27</u>	DL_TFC27, DL_TFC60	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC12, UL_TFC15, UL_TFC27	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: No data RB6: No data RB7: No data RB8: 17912
<u>28</u>	DL TFC28, DL TFC61	UL_TFC13, UL_TFC28	DL_TFC0, DL_TFC33, UL_TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC12, UL TFC13, UL TFC15, UL TFC16, UL TFC27, UL TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 1272	RB5: 39 RB6: No data RB7: No data RB8: 17912

Sub-	<u>Downlink</u>	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC	Test data size
<u>test</u>	<u>TFCS</u>	<u>TFCS</u>	<u>tested</u>	<u>TFCIs</u>	SDU size	<u>(bits)</u>
	<u>under</u>	Under test			(bits)	
	<u>test</u>				(note)	<u>(note)</u>
<u>29</u>	DL TFC29,	UL TFC14,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC62	UL_TFC29	DL_TFC33,	UL_TFC2,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC12,	RB7: 60	RB7: 60
			UL TFC15	UL TFC14,	RB8: 1272	RB8: 17912
				UL_TFC15,		
				UL TFC17,		
				UL_TFC27		
20	DI TECOO	III TECAO	DI TECO	UL_TFC29	DDE: 20	DDE: No doto
<u>30</u>	DL_TFC30, DL_TFC63	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC33,	UL_TFC0, UL_TFC12,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL IFC03	UL IFC21	UL TFC0.	UL TFC15,	RB7: 60	RB7: No data
			UL TFC15	UL TFC27	RB8: 1272	RB8: 20472
31	DL TFC31,	UL TFC13,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
<u>5 :</u>	DL TFC64	UL TFC28	DL TFC33,	UL TFC1,	RB6: 103	RB6: No data
	<u> </u>	<u> </u>	UL TFC0,	UL TFC12,	RB7: 60	RB7: No data
			UL TFC15	UL TFC13,	RB8: 1272	RB8: 20472
				UL TFC15,		
				UL TFC16,		
				UL TFC27,		
				UL_TFC28		
<u>32</u>	DL TFC32,	UL TFC14,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL TFC65	UL TFC29	DL TFC33,	UL TFC2,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC12,	RB7: 60	RB7: 60
			UL TFC15	UL TFC14,	RB8: 1272	RB8: 20472
				UL_TFC15,		
				UL_TFC17,		
				UL TFC27 UL TFC29		

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the uplink TTI for RB8 is 20 ms while the downlink TTI is 10 ms then, to achieve continous data transmission in uplink the size of the uplink RLC SDU has been set such that it will be transmitted over each TTI, ie the uplink TFS size minus 8 bits (size of 7 bit length indicator

and expansion bit) divided by 2 (20ms/10ms).

18.2.2.44.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
 - 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3: 2 RLC SDUs on RB8 equal to the content of the first 152 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: 2 RLC SDUs on RB8 equal to the content of the first 152 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 5: 2 RLC SDUs on RB8 equal to the content of the first 152 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.

- for sub-test 6: 2 RLC SDUs on RB8 equal to the content of the first 312 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 7: 2 RLC SDUs on RB8 equal to the content of the first 312 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 8: 2 RLC SDUs on RB8 equal to the content of the first 312 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 9: 2 RLC SDUs on RB8 equal to the content of the first 632 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 10: 2 RLC SDUs on RB8 equal to the content of the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 11: 2 RLC SDUs on RB8 equal to the content of the first 632 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 12: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 14: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 15: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 16: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 17: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 18: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 19: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 20: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 21: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 22: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 23: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 24: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 25: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.

- for sub-test 26: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 27: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 28: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 29: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 30: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 31: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 32: 2 RLC SDUs on RB8 equal to the content of the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.44.2 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Interactive or background / UL:128 DL:2048 kbps / PS RAB / Payload 128, 20 ms TTI

18.2.2.44.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.44.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.44 for the uplink payload 128, and the downlink 20 ms TTI case.

18.2.2.44.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5	RB6	RB7	RB8	<u>DCCH</u>
		(RAB subflow #1)	(RAB subflow #2)	(RAB subflow #3)	(128 kbps)	
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x144</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x144</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	<u>N/A</u>	N/A	<u>7x144</u>	<u>N/A</u>
	TF3, bits	N/A	N/A	N/A	<u>14x144</u>	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	20x144	<u>N/A</u>

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL TFC3	(TF0, TF0, TF0, TF1, TF0)
UL_TFC4	(TF1, TF0, TF0, TF1, TF0)
UL_TFC5	(TF2, TF1, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF2, TF0)
UL_TFC7	(TF1, TF0, TF0, TF2, TF0)
UL TFC8	(TF2, TF1, TF1, TF2, TF0)
UL TFC9	(TF0, TF0, TF0, TF3, TF0)
UL_TFC10	(TF1, TF0, TF0, TF3, TF0)
UL TFC11	(TF2, TF1, TF1, TF3, TF0)
UL_TFC12	(TF0, TF0, TF0, TF4, TF0)
UL_TFC13	(TF1, TF0, TF0, TF4, TF0)
UL TFC14	(TF2, TF1, TF1, TF4, TF0)
UL_TFC15	(TF0, TF0, TF0, TF1)
UL TFC16	(TF1, TF0, TF0, TF1)
UL TFC17	(TF2, TF1, TF1, TF0, TF1)
UL_TFC18	(TF0, TF0, TF1, TF1)
UL TFC19	(TF1, TF0, TF0, TF1, TF1)
UL_TFC20	(TF2, TF1, TF1, TF1, TF1)
UL TFC21	(TF0, TF0, TF0, TF2, TF1)
UL_TFC22	(TF1, TF0, TF0, TF2, TF1)
UL TFC23	(TF2, TF1, TF1, TF2, TF1)
UL TFC24	(TF0, TF0, TF0, TF3, TF1)
UL_TFC25	(TF1, TF0, TF0, TF3, TF1)
UL TFC26	(TF2, TF1, TF1, TF3, TF1)
UL_TFC27	(TF0, TF0, TF0, TF4, TF1)
UL_TFC28	(TF1, TF0, TF0, TF4, TF1)
UL TFC29	(TF2, TF1, TF1, TF4, TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (2048 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x656</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x656</u>	<u>1x148</u>
	TF2, bits	<u>1x81</u>	<u>N/A</u>	<u>N/A</u>	2x656	<u>N/A</u>
	TF3, bits	N/A	N/A	<u>N/A</u>	4x656	<u>N/A</u>
	TF4, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>8x656</u>	<u>N/A</u>
	TF5, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>12x656</u>	<u>N/A</u>
	TF6, bits	N/A	N/A	<u>N/A</u>	<u>16x656</u>	<u>N/A</u>
	TF7, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>20x656</u>	<u>N/A</u>
	TF8, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	24x656	<u>N/A</u>
<u>TFS</u>	TF9, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>28x656</u>	<u>N/A</u>
	TF10, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	32x656	<u>N/A</u>
	TF11, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>36x656</u>	<u>N/A</u>
	TF12, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>40x656</u>	<u>N/A</u>
	TF13, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	44x656	<u>N/A</u>
	TF14, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>48x656</u>	<u>N/A</u>
	TF15, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>52x656</u>	<u>N/A</u>
	TF16, bits	<u>N/A</u>	N/A	<u>N/A</u>	<u>56x656</u>	<u>N/A</u>
	TF17, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>60x656</u>	<u>N/A</u>
	TF18, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>64x656</u>	<u>N/A</u>

Downlink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC0	(TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF0, TF0)
DL TFC3	(TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL TEC12	(TF2, TF1, TF1, TF3, TF0) (TF0, TF0, TF0, TF4, TF0)
DL_TFC12 DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF4, TF0)
DL TFC15	(TF0, TF0, TF5, TF0)
DL TFC16	(TF1, TF0, TF0, TF5, TF0)
DL TFC17	(TF2, TF1, TF5, TF0)
DL_TFC18	(TF0, TF0, TF0, TF6, TF0)
DL TFC19	(TF1, TF0, TF0, TF6, TF0)
DL_TFC20	(TF2, TF1, TF1, TF6, TF0)
DL TFC21	(TF0, TF0, TF0, TF7, TF0)
DL_TFC22	(TF1, TF0, TF0, TF7, TF0)
DL TFC24	(TF2, TF1, TF1, TF7, TF0)
DL TFC25	(TF0, TF0, TF0, TF8, TF0)
DL TFC25 DL TFC26	(TF1, TF0, TF0, TF8, TF0) (TF2, TF1, TF1, TF8, TF0)
DL TFC26	(TF0, TF0, TF0, TF9, TF0)
DL TFC28	(TF1, TF0, TF0, TF9, TF0)
DL TFC29	(TF2, TF1, TF9, TF0)
DL TFC30	(TF0, TF0, TF10, TF0)
DL TFC31	(TF1, TF0, TF0, TF10, TF0)
DL TFC32	(TF2, TF1, TF1, TF10, TF0)
DL_TFC33	(TF0, TF0, TF1, TF0)
DL TFC34	(TF1, TF0, TF0, TF11, TF0)
DL_TFC35	(TF2, TF1, TF1, TF11, TF0)
DL TFC36	(TF0, TF0, TF0, TF12, TF0)
DL_TFC37 DL_TFC38	(TF1, TF0, TF0, TF12, TF0) (TF2, TF1, TF1, TF12, TF0)
DL TFC39	(TF0, TF0, TF13, TF13, TF0)
DL TFC40	(TF1, TF0, TF0, TF13, TF0)
DL TFC41	(TF2, TF1, TF1, TF13, TF0)
DL TFC42	(TF0, TF0, TF14, TF0)
DL_TFC43	(TF1, TF0, TF0, TF14, TF0)
DL TFC44	(TF2, TF1, TF1, TF14, TF0)
DL_TFC45	(TF0, TF0, TF15, TF0)
DL_TFC46	(TF1, TF0, TF0, TF15, TF0)
DL TFC47	(TF2, TF1, TF1, TF15, TF0)
DL_TFC48	(TF0, TF0, TF0, TF16, TF0)
DL TFC50	(TF1, TF0, TF0, TF16, TF0)
DL_TFC50 DL_TFC51	(TF2, TF1, TF1, TF16, TF0) (TF0, TF0, TF0, TF17, TF0)
DL TFC51	(TF1, TF0, TF0, TF17, TF0)
DL_TFC53	(TF2, TF1, TF1, TF17, TF0)
DL TFC54	(TF0, TF0, TF18, TF0)
DL TFC55	(TF1, TF0, TF18, TF0)
DL TFC56	(TF2, TF1, TF18, TF0)
DL TFC57	(TF0, TF0, TF0, TF1)
DL_TFC58	(TF1, TF0, TF0, TF1)
DL TFC59	(TF2, TF1, TF1, TF0, TF1)
DL TFC60	(TF0, TF0, TF1, TF1)

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL TFC61	(TF1, TF0, TF0, TF1, TF1)
DL TFC61	(TF2, TF1, TF1, TF1)
DL TFC63	(TF0, TF0, TF2, TF1)
DL TFC64	(TF1, TF0, TF0, TF2, TF1)
DL TFC65	(TF2, TF1, TF1, TF2, TF1)
DL TFC66	(TF0, TF0, TF0, TF3, TF1)
DL TFC67	(TF1, TF0, TF0, TF3, TF1)
DL TFC68	(TF2, TF1, TF1, TF3, TF1)
DL_TFC69	(TF0, TF0, TF0, TF4, TF1)
DL TFC70	(TF1, TF0, TF0, TF4, TF1)
DL_TFC71	(TF2, TF1, TF1, TF4, TF1)
DL_TFC72	(TF0, TF0, TF0, TF5, TF1)
DL TFC73	(TF1, TF0, TF0, TF5, TF1)
DL_TFC74	(TF2, TF1, TF1, TF5, TF1)
DL TFC75	(TF0, TF0, TF6, TF1)
DL TFC76	(TF1, TF0, TF0, TF6, TF1)
DL_TFC77	(TF2, TF1, TF1, TF6, TF1)
DL TFC78	(TF0, TF0, TF0, TF1)
DL_TFC79	(TF1, TF0, TF0, TF7, TF1)
DL_TFC80	(TF2, TF1, TF1, TF7, TF1)
DL_TFC81	(TF0, TF0, TF0, TF8, TF1)
DL_TFC82	(TF1, TF0, TF0, TF8, TF1)
DL TFC83	(TF2, TF1, TF1, TF8, TF1)
DL_TFC84	(TF0, TF0, TF0, TF1)
DL TFC85	(TF1, TF0, TF0, TF1)
DL TFC86	(TF2, TF1, TF1, TF9, TF1)
DL_TFC87 DL_TFC88	(TF0, TF0, TF10, TF1) (TF1, TF0, TF0, TF10, TF1)
DL TFC89	(TF2, TF1, TF10, TF10, TF1)
DL TFC90	(TF0, TF0, TF1, TF1)
DL TFC91	(TF1, TF0, TF0, TF11, TF1)
DL TFC92	(TF2, TF1, TF1, TF11, TF1)
DL TFC93	(TF0, TF0, TF12, TF1)
DL TFC94	(TF1, TF0, TF12, TF1)
DL TFC95	(TF2, TF1, TF12, TF1)
DL TFC96	(TF0, TF0, TF13, TF1)
DL TFC97	(TF1, TF0, TF0, TF13, TF1)
DL TFC98	(TF2, TF1, TF1, TF13, TF1)
DL TFC99	(TF0, TF0, TF0, TF14, TF1)
DL_TFC100	(TF1, TF0, TF0, TF14, TF1)
DL TFC101	(TF2, TF1, TF14, TF1)
DL_TFC102	(TF0, TF0, TF15, TF1)
DL TFC103	(TF1, TF0, TF0, TF15, TF1)
DL TFC104	(TF2, TF1, TF15, TF1)
DL_TFC105	(TF0, TF0, TF16, TF1)
DL TFC106	(TF1, TF0, TF0, TF16, TF1)
DL_TFC107	(TF2, TF1, TF16, TF1)
DL TFC108	(TF0, TF0, TF17, TF1)
DL TFC109	(TF1, TF0, TF0, TF17, TF1)
DL_TFC110	(TF2, TF1, TF1, TF17, TF1)
DL TFC111	(TF0, TF0, TF18, TF1)
DL_TFC112	(TF1, TF0, TF18, TF1)
DL_TFC113	(TF2, TF1, TF1, TF18, TF1)

Sub-tests:

Sub-	Downlink	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS under	TFCS Under test	tested	TFCIs	SDU size (bits)	(bits)
	test	====	DI TEOO		(note)	(note)
<u>1</u>	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC58	UL_TFC16	DL_TFC57, UL_TFC0,	UL_TFC1, UL_TFC15,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC15,	RB8: 120	RB8: No data
2	DL TFC2,	UL TFC2,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
<u>~</u>	DL TFC59	UL TFC17	DL TFC57,	UL TFC2,	RB6: 103	RB6: 103
	<u>DE 11 000</u>	<u> </u>	UL TFC0,	UL TFC15.	RB7: 60	RB7: 60
			UL TFC15	UL TFC17	RB8: 120	RB8: No data
<u>3</u>	DL TFC3,	UL TFC3,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC60	UL TFC18	DL TFC57,	UL TFC3,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
			UL TFC15	UL TFC18	RB8: 120	RB8: 632
<u>4</u>	DL TFC4,	UL TFC4,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC61	UL_TFC19	DL_TFC57,	UL_TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC3,	RB7: 60	RB7: No data
			UL TFC15	UL TFC4, UL TFC15,	RB8: 120	RB8: 632
				UL TFC16,		
				UL TFC18		
				UL TFC19		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
_	DL TFC62	UL TFC20	DL TFC57,	UL TFC2,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC3,	RB7: 60	RB7: 60
			UL TFC15	UL TFC5,	RB8: 120	RB8: 632
				UL_TFC15,		
				UL_TFC17,		
				UL TFC18, UL TFC20		
<u>6</u>	DL_TFC6,	UL TFC6,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
<u>o</u>	DL TFC63	UL TFC21	DL TFC57,	UL TFC6,	RB6: 103	RB6: No data
	<u> </u>	<u> </u>	UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL TFC15	UL TFC21	RB8: 888	RB8: 1272
<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC64	UL TFC22	DL TFC57,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC6.	RB7: 60	RB7: No data
			UL TFC15	UL TFC7,	RB8: 888	RB8: 1272
				UL TFC15, UL TFC16,		
				UL TFC21,		
				UL TFC22		
8	DL TFC8,	UL TFC8,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
_	DL TFC65	UL TFC23	DL TFC57,	UL TFC2,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC6,	RB7: 60	RB7: 60
			UL TFC15	UL TFC8,	RB8: 888	RB8: 1272
				UL TFC15,		
				UL_TFC17,		
				UL TFC21, UL TFC23		
9	DL TFC9,	UL TFC9,	DL TFC0.	UL TFC0,	RB5: 39	RB5: No data
-	DL TFC66	UL TFC24	DL TFC57,	UL TFC9,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC24	RB8: 1784	RB8: 2552
<u>10</u>	DL_TFC10,	UL_TFC10,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC67	UL TFC25	DL TFC57,	UL TFC1,	RB6: 103	RB6: No data
1			UL_TFC0,	UL_TFC9,	RB7: 60	RB7: No data
1			UL_TFC15	UL_TFC10,	RB8: 1784	RB8: 2552
				UL TFC15, UL TFC16,		
				UL TFC16,		
				UL TFC25		
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Sub-	Downlink	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC	Test data size
test	TFCS	TFCS	tested	TFCIs	SDU size	(bits)
	under test	Under test			(bits) (note)	(note)
11	DL TFC11,	UL TFC11,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
_	DL_TFC68	UL_TFC26	DL_TFC57,	UL_TFC2,	RB6: 103	RB6: 103
			UL_TFC0, UL_TFC15	UL_TFC9 UL_TFC11,	RB7: 60	RB7: 60
			UL IFCI5	UL TFC11,	RB8: 1784	RB8: 2552
				UL TFC17,		
				UL_TFC24,		
<u>12</u>	DL TFC12,	UL TFC12,	DL TFC0,	UL_TFC26 UL_TFC0,	RB5: 39	RB5: No data
12	DL TFC69	UL TFC27	DL_TFC0,	UL TFC12,	RB6: 103	RB6: No data
			UL TFC0,	UL_TFC15,	RB7: 60	RB7: No data
40	DI TEO10	III TE040	UL TFC15	UL TFC27	RB8: 2552	RB8: 5112
<u>13</u>	DL TFC13, DL TFC70	UL TFC13, UL TFC28	DL TFC0, DL TFC57,	UL TFC0, UL TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	<u>BL_11 010</u>	<u>02_11 020</u>	UL TFC0,	UL TFC12,	RB7: 60	RB7: No data
			UL TFC15	UL TFC13,	RB8: 2552	RB8: 5112
				UL_TFC15, UL_TFC16,		
				UL TFC27,		
				UL_TFC28		
<u>14</u>	DL TFC14, DL TFC71	UL TFC14, UL TFC29	DL TFC0,	UL TFC0, UL TFC2,	RB5: 81	RB5: 81
	DL IFC/1	UL TFC29	DL TFC57, UL TFC0,	UL TFC2, UL TFC12,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
			UL TFC15	UL TFC14,	RB8: 2552	RB8: 5112
				UL_TFC15,		
				UL_TFC17, UL_TFC27,		
				UL TFC29		
<u>15</u>	DL_TFC15,	UL_TFC12,	DL_TFC0,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC72	UL TFC27	DL TFC57,	UL TFC12,	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC15	UL_TFC15, UL_TFC27	RB7: 60 RB8: 2552	RB7: No data RB8: 7672
<u>16</u>	DL TFC16,	UL TFC13,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC73	UL TFC28	DL TFC57,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC15	UL_TFC12, UL_TFC13,	RB7: 60 RB8: 2552	RB7: No data RB8: 7672
			<u>0L 11 C13</u>	UL TFC15,	<u>INDO. 2002</u>	<u>INDO. 7072</u>
				UL TFC16,		
				UL TFC27,		
17	DL TFC17,	UL TFC14,	DL TFC0,	UL_TFC28 UL_TFC0,	RB5: 81	RB5: 81
'''	DL TFC74	UL TFC29	DL TFC57,	UL TFC2,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC12,	RB7: 60	RB7: 60
			UL TFC15	UL TFC14, UL TFC15,	RB8: 2552	RB8: 7672
				UL TFC15,		
				UL TFC27		
10	DI TECAO	III TEC42	DI TECO	UL_TFC29 UL_TFC0,	RB5: 39	DDE: No data
<u>18</u>	DL_TFC18, DL_TFC75	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC57,	UL_TFC0, UL_TFC12,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	22 0.0	22 02.	UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
<u> </u>		====:=	UL TFC15	UL TFC27	RB8: 2552	RB8: 10232
<u>19</u>	DL_TFC19, DL_TFC76	UL_TFC13, UL_TFC28	DL_TFC0, DL_TFC57,	UL_TFC0, UL_TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DL IFU/0	UL IFUZO	UL TFC0,	UL TFC1,	RB6: 103 RB7: 60	RB7: No data
			UL_TFC15	UL_TFC13,	RB8: 2552	RB8: 10232
				UL TFC15,		
				UL_TFC16, UL_TFC27,		
				UL TFC28		
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Sub-	Downlink	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS	TFCS	tested	<u>TFCIs</u>	SDU size	(bits)
	under test	<u>Under test</u>			(bits) (note)	(note)
<u>20</u>	DL TFC20,	UL TFC14,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC77	UL_TFC29	DL_TFC57,	UL_TFC2,	RB6: 103	RB6: 103
			UL_TFC0, UL_TFC15	UL_TFC12, UL_TFC14,	RB7: 60 RB8: 2552	RB7: 60 RB8: 10232
			<u> </u>	UL_TFC15,		<u> </u>
				UL TFC17,		
				UL_TFC27, UL_TFC29		
<u>21</u>	DL_TFC21,	UL_TFC12,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: No data
	DL TFC78	UL TFC27	DL TFC57,	UL TFC12,	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC15	UL_TFC15, UL_TFC27	RB7: 60 RB8: 2552	RB7: No data RB8: 12792
<u>22</u>	DL TFC22,	UL TFC13,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC79	UL_TFC28	DL_TFC57,	UL_TFC1,	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC15	UL_TFC12, UL_TFC13,	RB7: 60 RB8: 2552	RB7: No data RB8: 12792
				UL TFC15,		
				UL TFC16,		
				UL TFC27, UL TFC28		
<u>23</u>	DL TFC23,	UL TFC14,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL TFC80	UL TFC29	DL TFC57, UL TFC0,	UL TFC2, UL TFC12,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
			UL TFC15	UL TFC14,	RB8: 2552	RB8: 12792
				UL_TFC15,		
				UL_TFC17, UL_TFC27,		
				UL TFC27,		
<u>24</u>	DL_TFC24,	UL_TFC12,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: No data
	DL TFC81	UL TFC27	DL TFC57, UL TFC0,	UL TFC12, UL TFC15,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC27	RB8: 2552	RB8: 15352
<u>25</u>	DL_TFC25,	UL_TFC13,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC82	UL TFC28	DL TFC57, UL TFC0,	UL TFC1, UL TFC12,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC13,	RB8: 2552	RB8: 15352
				UL TFC15,		
				UL_TFC16, UL_TFC27,		
				UL TFC28		
<u>26</u>	DL_TFC26,	UL_TFC14,	DL_TFC0,	UL_TFC0,	RB5: 81	RB5: 81
	DL TFC83	UL TFC29	DL TFC57, UL TFC0,	UL TFC2, UL TFC12,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
			UL TFC15	UL TFC14,	RB8: 2552	RB8: 15352
				UL TFC15, UL TFC17,		
				UL_TFC17, UL_TFC27,		
				UL_TFC29		
<u>27</u>	DL_TFC27, DL_TFC84	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC57,	UL_TFC0, UL_TFC12,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL 11ºC04	OL 11-021	UL TFC0,	UL TFC15,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC27	RB8: 2552	RB8: 17912
<u>28</u>	DL TFC28, DL TFC85	UL_TFC13, UL_TFC28	DL_TFC0, DL_TFC57,	UL_TFC0, UL_TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DE IFC00	UL IFUZO	UL TFC0,	UL TFC1,	RB6: 103 RB7: 60	RB7: No data
			UL_TFC15	UL TFC13,	RB8: 2552	RB8: 17912
				UL TFC15, UL TFC16,		
				UL TFC27,		
				UL_TFC28		

Sub-	<u>Downlink</u>	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS under	TFCS Under test	tested	<u>TFCIs</u>	SDU size (bits)	(bits)
	test	Onder test			(note)	(note)
<u>29</u>	DL TFC29,	UL TFC14,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC86	UL_TFC29	DL_TFC57,	UL_TFC2,	RB6: 103	RB6: 103
			UL_TFC0, UL_TFC15	UL_TFC12, UL_TFC14,	RB7: 60 RB8: 2552	RB7: 60 RB8: 17912
			<u> </u>	<u>UL TFC15,</u>	<u>1100. 2002</u>	<u>KDO. 17012</u>
				UL TFC17,		
				UL_TFC27, UL_TFC29		
30	DL TFC30,	UL TFC12,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
	DL TFC87	UL TFC27	DL TFC57,	UL TFC12,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
31	DL TFC31,	UL TFC13,	UL TFC15 DL TFC0,	UL TFC27 UL TFC0,	RB8: 2552 RB5: 39	RB8: 20472 RB5: 39
<u> </u>	DL TFC88	UL TFC28	DL TFC57,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC12,	RB7: 60	RB7: No data
			UL TFC15	UL TFC13, UL TFC15,	RB8: 2552	RB8: 20472
				UL TFC16,		
				UL TFC27,		
	DI TECCO	LII TEO44	DI TECC	UL_TFC28	DDE: 04	DD5: 04
<u>32</u>	DL TFC32, DL TFC89	UL TFC14, UL TFC29	DL TFC0, DL TFC57,	UL TFC0, UL TFC2,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	<u>DE 11 000</u>	<u>02 11 025</u>	UL TFC0,	UL TFC12,	RB7: 60	RB7: 60
			UL TFC15	UL TFC14,	RB8: 2552	RB8: 20472
				UL_TFC15,		
				UL_TFC17, UL_TFC27,		
				UL_TFC29		
<u>33</u>	DL_TFC33,	UL_TFC12,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: No data
	DL TFC90	UL TFC27	DL TFC57, UL TFC0,	UL TFC12, UL TFC15,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL_TFC27	RB8: 2552	RB8: 23032
<u>34</u>	DL_TFC34,	UL_TFC13,	DL_TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL TFC91	UL TFC28	DL TFC57, UL TFC0,	UL TFC1, UL TFC12,	RB6: 103 RB7: 60	RB6: No data
			UL TFC15	UL TFC13,	RB8: 2552	RB7: No data RB8: 23032
				UL TFC15,		
				UL_TFC16,		
				UL TFC27, UL TFC28		
<u>35</u>	DL_TFC35,	UL_TFC14,	DL_TFC0,	UL_TFC0,	RB5: 81	RB5: 81
	DL TFC92	UL TFC29	DL TFC57,	UL TFC2,	RB6: 103	RB6: 103
			UL_TFC0, UL_TFC15	UL_TFC12, UL_TFC14,	RB7: 60 RB8: 2552	RB7: 60 RB8: 23032
			<u> </u>	UL TFC15,	1100. 2002	1100. 20002
				UL_TFC17,		
				UL TFC27,		
36	DL TFC36,	UL TFC12,	DL TFC0,	UL_TFC29 UL_TFC0,	RB5: 39	RB5: No data
===	DL TFC93	UL TFC27	DL TFC57,	UL TFC12,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
<u>37</u>	DL TFC37,	UL TFC13,	UL_TFC15 DL_TFC0,	UL_TFC27 UL_TFC0,	RB8: 2552 RB5: 39	RB8: 25592 RB5: 39
<u> </u>	DL_TFC37,	UL TFC13,	DL_TFC0, DL_TFC57,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC12,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC13,	RB8: 2552	RB8: 25592
				UL TFC15, UL TFC16,		
				UL TFC27,		
				UL_TFC28		

Sub-	Downlink	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC	Test data size
test	TFCS	TFCS	tested	TFCIs	SDU size	(bits)
	under test	<u>Under test</u>			(bits) (note)	(note)
38	DL TFC38,	UL TFC14,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC95	UL_TFC29	DL_TFC57,	UL_TFC2,	RB6: 103	RB6: 103
			UL_TFC0, UL_TFC15	UL_TFC12, UL_TFC14,	RB7: 60 RB8: 2552	RB7: 60 RB8: 25592
			OL TECTS	UL TFC15,	KB0. 2552	NB0. 25592
				UL TFC17,		
				UL_TFC27, UL_TFC29		
39	DL TFC39,	UL TFC12,	DL TFC0,	UL TFC0.	RB5: 39	RB5: No data
30	DL TFC96	UL TFC27	DL TFC57,	UL TFC12,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
40	DL TFC40,	UL TFC13,	UL TFC15 DL TFC0,	UL TFC27 UL TFC0,	RB8: 2552 RB5: 39	RB8: 28152 RB5: 39
10	DL TFC97	UL TFC28	DL TFC57,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC12,	RB7: 60	RB7: No data
			UL TFC15	UL TFC13, UL TFC15,	RB8: 2552	RB8: 28152
				UL TFC16,		
				UL TFC27,		
41	DL TFC41,	UL TFC14,	DL TFC0,	UL_TFC28 UL_TFC0,	RB5: 81	RB5: 81
41	DL TFC98	UL TFC29	DL TFC57,	UL TFC2,	RB6: 103	RB6: 103
			UL TFC0,	UL TFC12,	RB7: 60	RB7: 60
			UL TFC15	UL TFC14, UL TFC15,	RB8: 2552	RB8: 28152
				UL TFC15,		
				UL TFC27,		
40	DI TEO40	LII TEO40	DI TEOO	UL_TFC29	DD5: 00	DDC: No dete
<u>42</u>	DL_TFC42, DL_TFC99	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC57,	UL_TFC0, UL_TFC12,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	32 000	<u> </u>	UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
40	DI TEO10		UL_TFC15	UL_TFC27	RB8: 2552	RB8: 30712
<u>43</u>	DL_TFC43, DL_TFC100	UL_TFC13, UL_TFC28	DL_TFC0, DL_TFC57,	UL_TFC0, UL_TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	<u> </u>	<u>02 11 020</u>	UL_TFC0,	UL_TFC12,	RB7: 60	RB7: No data
			UL TFC15	UL TFC13,	RB8: 2552	RB8: 30712
				UL TFC15, UL TFC16,		
				UL TFC27,		
4.1	DI TECA	III TECAA	DI TECC	UL_TFC28	DDE 04	DD5: 04
<u>44</u>	DL_TFC44, DL_TFC101	UL_TFC14, UL_TFC29	DL_TFC0, DL_TFC57,	UL_TFC0, UL_TFC2,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	22 11 3101	<u> </u>	UL TFC0,	UL_TFC12,	RB7: 60	RB7: 60
			UL TFC15	UL TFC14,	RB8: 2552	RB8: 30712
				UL TFC15, UL TFC17,		
				UL TFC27,		
45	DI TEO45	LII TEO40	DI TECC	UL_TFC29	DDE: 00	DDC: No. 1sts
<u>45</u>	DL_TFC45, DL_TFC102	UL_TFC12, UL_TFC27	DL_TFC0, DL_TFC57,	UL_TFC0, UL_TFC12,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	22 11 0102	<u>52 11 521</u>	UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
	DI TECHO		UL TFC15	UL_TFC27	RB8: 2552	RB8: 33272
<u>46</u>	DL_TFC46, DL_TFC103	UL_TFC13, UL_TFC28	DL_TFC0, DL_TFC57,	UL_TFC0, UL_TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	<u> </u>	<u> </u>	UL TFC0,	UL TFC12,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC13,	RB8: 2552	RB8: 33272
				UL TFC15, UL TFC16,		
				UL TFC27,		
				UL_TFC28		

Sub-	<u>Downlink</u>	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS under	TFCS Under test	tested	<u>TFCIs</u>	SDU size (bits)	(bits)
	test	<u> </u>			(note)	(note)
<u>47</u>	DL TFC47,	UL TFC14,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC104	UL_TFC29	DL_TFC57,	UL_TFC2,	RB6: 103	RB6: 103
			UL_TFC0, UL_TFC15	UL_TFC12, UL_TFC14,	RB7: 60 RB8: 2552	RB7: 60 RB8: 33272
			<u>0L 11 015</u>	<u>UL TFC15,</u>	<u>INDO. 2002</u>	<u>INDO. 33212</u>
				UL TFC17,		
				UL_TFC27,		
<u>48</u>	DL TFC48,	UL TFC12,	DL TFC0,	UL_TFC29 UL_TFC0,	RB5: 39	RB5: No data
	DL TFC105	UL TFC27	DL TFC57,	UL TFC12,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
40	DL TFC49,	UL TFC13,	UL TFC15 DL TFC0,	UL TFC27 UL TFC0,	RB8: 2552	RB8: 35832
<u>49</u>	DL TFC106	UL TFC13,	DL TFC0,	UL TFC0,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	<u>BL_11 0100</u>	<u>02_11 020</u>	UL TFC0,	UL TFC12,	RB7: 60	RB7: No data
			UL TFC15	UL TFC13,	RB8: 2552	RB8: 35832
				UL_TFC15, UL_TFC16,		
				UL TFC27,		
				UL_TFC28		
<u>50</u>	DL TFC50,	UL TFC14,	DL TFC0,	UL TFCO,	RB5: 81	RB5: 81
	DL TFC107	UL TFC29	DL TFC57, UL TFC0,	UL TFC2, UL TFC12,	RB6: 103 RB7: 60	RB6: 103 RB7: 60
			UL TFC15	UL TFC14,	RB8: 2552	RB8: 35832
			<u> </u>	UL TFC15,	<u></u>	<u></u>
				UL_TFC17,		
				UL TFC27, UL TFC29		
51	DL TFC51,	UL TFC12,	DL TFC0,	UL TFC0.	RB5: 39	RB5: No data
	DL TFC108	UL TFC27	DL TFC57,	UL TFC12,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC15,	RB7: 60	RB7: No data
<u>52</u>	DL TFC52,	UL TFC13,	UL_TFC15 DL_TFC0,	UL_TFC27 UL_TFC0,	RB8: 2552 RB5: 39	RB8: 38392 RB5: 39
<u>52</u>	DL TFC109	UL TFC28	DL_TFC0,	UL TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL_TFC12,	RB7: 60	RB7: No data
			UL TFC15	UL TFC13,	RB8: 2552	RB8: 38392
				UL TFC15, UL TFC16,		
				UL TFC27,		
				UL_TFC28		
<u>53</u>	DL_TFC53, DL_TFC110	UL_TFC14, UL_TFC29	DL_TFC0, DL_TFC57,	UL_TFC0, UL_TFC2,	RB5: 81 RB6: 103	RB5: 81 RB6: 103
	DE 11-C110	OL 11-029	UL TFC0,	UL TFC12,	RB7: 60	RB7: 60
			UL TFC15	UL TFC14,	RB8: 2552	RB8: 38392
				UL TFC15,		
				UL_TFC17, UL_TFC27,		
				UL_TFC29		
<u>54</u>	DL_TFC54,	UL_TFC12,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: No data
	DL TFC111	UL TFC27	DL TFC57,	UL TFC12,	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC15	UL_TFC15, UL_TFC27	RB7: 60 RB8: 2552	RB7: No data RB8: 40952
<u>55</u>	DL_TFC55,	UL_TFC13,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC112	UL TFC28	DL TFC57,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC15	UL_TFC12, UL_TFC13,	RB7: 60	RB7: No data RB8: 40952
			UL_IFC15	UL TFC13,	RB8: 2552	ND0. 4090Z
				UL_TFC16,		
				UL TFC27,		
		1		UL_TFC28	l	

Sub- test	Downlink TFCS under test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits) (note)	Test data size (bits)
<u>56</u>	DL TFC56, DL TFC113	UL TFC14, UL TFC29	DL TFC0, DL TFC57, UL TFC0, UL TFC15	UL TFC0, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 2552	RB5: 81 RB6: 103 RB7: 60 RB8: 40952

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB8: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB8 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit).

18.2.2.44.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15 the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3: an RLC SDU on RB8 having the content equal to the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: an RLC SDU on RB8 having the content equal to the first 120 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 5: an RLC SDU on RB8 having the content equal to the first 120 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
 - for sub-test 6: an RLC SDU on RB8 having the content equal to the first 888 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: an RLC SDU on RB8 having the content equal to the first 888 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 8: an RLC SDU on RB8 having the content equal to the first 888 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
 - for sub-test 9: an RLC SDU on RB8 having the content equal to the first 1784 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 10: an RLC SDU on RB8 having the content equal to the first 1784 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 11: an RLC SDU on RB8 having the content equal to the first 1784 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.

- for sub-test 12: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 13: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 14: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 15: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 16: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 17: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 18: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 19: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 20: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 21: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 22: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 23: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 24: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 25: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 26: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 27: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 28: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 29: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 30: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 31: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.

- for sub-test 32: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 33: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 34: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 35: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 36: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 37: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 38: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 39: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 40: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 41: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 42: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 43: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 44: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 45: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 46: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 47: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 48: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.
- for sub-test 49: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 50: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 51: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; and no data shall be received on RB5, RB6 and RB7.

- for sub-test 52: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 53: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- for sub-test 54: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink: and no data shall be received on RB5. RB6 and RB7.
- for sub-test 55: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
- for sub-test 56: an RLC SDU on RB8 having the content equal to the first 2552 bits of the test data sent by the SS in downlink; an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.45 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Streaming / unknown / UL:57.6 DL:57.6 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

18.2.2.45.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.45.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.45.

18.2.2.45.3 Method of test

See 18.2.1.2 for test procedure.

Initial Conditions

The following RLC Info parameter values shall be set by the SS for the Streaming / unknown / UL:57.6 DL:57.6 kbps / CS RAB (RB8):

	T
Uplink RLC	
TM RLC	
Transmission RLC discard	
CHOICE SDU	
<u>Discard Mode</u>	
Timer based	
no explicit	
	100ms
Timer discard	<u>1001110</u>
	E41.0E
Segmentation indication	<u>FALSE</u>
Downlink RLC	
TM RLC	
Segmentation indication	FALSE
NOTE: Timer based discard without explicit sign	nalling is used in uplink to
secure that the UE will be able to return	
UE test loop function will not deliver all	-
same TTI.	

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (57.6 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x576</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	<u>1x576</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x81</u>	N/A	N/A	2x576	N/A
	TF3, bits	N/A	<u>N/A</u>	<u>N/A</u>	3x576	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	4x576	<u>N/A</u>

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL TFC3	(TF0, TF0, TF0, TF1, TF0)
UL TFC4	(TF1, TF0, TF0, TF1, TF0)
UL TFC5	(TF2, TF1, TF1, TF0)
UL_TFC6	(TF0, TF0, TF0, TF2, TF0)
UL TFC7	(TF1, TF0, TF0, TF2, TF0)
UL TFC8	(TF2, TF1, TF1, TF2, TF0)
UL_TFC9	(TF0, TF0, TF0, TF3, TF0)
UL TFC10	(TF1, TF0, TF0, TF3, TF0)
UL_TFC11	(TF2, TF1, TF1, TF3, TF0)
UL_TFC12	(TF0, TF0, TF0, TF4, TF0)
UL_TFC13	(TF1, TF0, TF0, TF4, TF0)
UL_TFC14	(TF2, TF1, TF1, TF4, TF0)
UL TFC15	(TF0, TF0, TF0, TF1)
UL_TFC16	(TF1, TF0, TF0, TF1)
UL TFC17	(TF2, TF1, TF1, TF0, TF1)
UL TFC18	(TF0, TF0, TF1, TF1)
UL_TFC19	(TF1, TF0, TF0, TF1, TF1)
UL TFC20	(TF2, TF1, TF1, TF1)
UL_TFC21	(TF0, TF0, TF0, TF2, TF1)
UL_TFC22	(TF1, TF0, TF0, TF2, TF1)
UL TFC23	(TF2, TF1, TF1, TF2, TF1)
UL_TFC24	(TF0, TF0, TF0, TF3, TF1)
UL TFC25	(TF1, TF0, TF0, TF3, TF1)
UL_TFC26	(TF2, TF1, TF1, TF3, TF1)
UL_TFC27	(TF0, TF0, TF0, TF4, TF1)
UL_TFC28	(TF1, TF0, TF0, TF4, TF1)
UL_TFC29	(TF2, TF1, TF1, TF4, TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	<u>RB8</u> (57.6 kbps)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x576</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	1x576	1x148
<u>TFS</u>	TF2, bits	<u>1x81</u>	N/A	N/A	2x576	N/A
	TF3, bits	N/A	<u>N/A</u>	N/A	<u>3x576</u>	<u>N/A</u>
	TF4, bits	N/A	N/A	N/A	4x576	N/A

Downlink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL_TFC3	(TF0, TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF2, TF0)
DL_TFC7	(TF1, TF0, TF0, TF2, TF0)
DL TFC8	(TF2, TF1, TF1, TF2, TF0)
DL TFC9	(TF0, TF0, TF0, TF3, TF0)
DL_TFC10	(TF1, TF0, TF0, TF3, TF0)
DL TFC11	(TF2, TF1, TF1, TF3, TF0)
DL_TFC12	(TF0, TF0, TF0, TF4, TF0)
DL_TFC13	(TF1, TF0, TF0, TF4, TF0)
DL TFC14	(TF2, TF1, TF1, TF4, TF0)
DL_TFC15	(TF0, TF0, TF0, TF1)
DL TFC16	(TF1, TF0, TF0, TF1)
DL TFC17	(TF2, TF1, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF1, TF1)
DL TFC21	(TF0, TF0, TF0, TF2, TF1)
DL_TFC22	(TF1, TF0, TF0, TF2, TF1)
DL TFC23	(TF2, TF1, TF1, TF2, TF1)
DL TFC24	(TF0, TF0, TF0, TF3, TF1)
DL_TFC25	(TF1, TF0, TF0, TF3, TF1)
DL TFC26	(TF2, TF1, TF1, TF3, TF1)
DL_TFC27	(TF0, TF0, TF0, TF4, TF1)
DL_TFC28	(TF1, TF0, TF0, TF4, TF1)
DL TFC29	(TF2, TF1, TF1, TF4, TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely	Restricted UL	UL RLC SDU	Test data size
<u>test</u>	TFCS Under	TFCS Under test	<u>tested</u>	<u>TFCIs</u>	<u>size</u> (bits)	(bits)
	Test			(note 1)	(note 2)	(note 2)
<u>1</u>	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC16	DL_TFC16	DL_TFC15, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL TFC15	UL TFC3,	RB8: 576	RB8: No data
				UL_TFC15, UL_TFC16		
2	DL_TFC2,	UL_TFC2,	DL_TFC0,	UL_TFC0,	RB5: 81	RB5: 81
	DL_TFC17	DL_TFC17	DL_TFC15,	UL_TFC1,	RB6: 103	RB6: 103
			UL TFC0, UL TFC15	UL TFC2, UL TFC3,	RB7: 60 RB8: 576	RB7: 60 RB8: No data
			<u> </u>	UL TFC15,	1100.010	rtbo. Ho data
				UL TFC17		
<u>3</u>	DL TFC3, DL TFC18	UL TFC3,U L TFC18	DL TFC0, DL TFC15,	UL TFC0, UL TFC1,	RB5: 39 RB6: 103	RB5: No data RB6: No data
	DL_IFC16	L_IFC16	UL TFC15,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC3,	RB8: 576	RB8: 576
				UL TFC15,		
4	DL TFC4,	UL TFC4,	DL TFC0,	UL_TFC18 UL_TFC0,	RB5: 39	RB5: 39
_ ±	DL TFC19	DL TFC19	DL TFC15,	UL TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL_TFC15	UL_TFC3	RB8: 576	RB8: 576
				UL_TFC4, UL_TFC15,		
				UL TFC16,		
				UL TFC18,		
	DL TFC5,	UL TFC5,	DL TFC0,	UL_TFC19 UL_TFC0,	RB5: 81	RB5: 81
<u>5</u>	DL_TFC5,	DL TFC3,	DL_TFC0, DL_TFC15,	UL TFC1,	RB6: 103	RB6: 103
			UL_TFC0,	UL_TFC2,	RB7: 60	RB7: 60
			UL_TFC15	UL_TFC3,	RB8: 576	RB8: 576
				UL TFC5, UL TFC15,		
				UL TFC17,		
				UL TFC18,		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0,	UL_TFC20 UL_TFC0,	RB5: 39	RB5: No data
	DL TFC21	DL TFC21	DL_TFC15,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC2,	RB7: 60	RB7: No data
			UL TFC15	UL TFC3,	RB8: 576	RB8: 1152
				UL_TFC6, UL_TFC15,		
				UL TFC21		
<u>7</u>	DL TFC7,	UL TFC7,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC22	DL_TFC22	DL_TFC15, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 103 RB7: 60	RB6: No data RB7: No data
			UL_TFC15	UL_TFC3,	RB8: 576	RB8: 2x576
				UL_TFC6,		
				UL TFC7, UL TFC15,		
				UL TFC16,		
				UL_TFC21,		
				UL_TFC22		

Sub-	Downlink	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC SDU	Test data size
test	TFCS Under	TFCS Under test	tested	TFCIs	size (bits)	(bits)
	Test	<u>Onder test</u>		(note 1)	(note 2)	(note 2)
8	DL TFC8, DL TFC23	UL TFC8, DL TFC23	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC6, UL TFC8, UL TFC15, UL TFC17, UL TFC21, UL TFC23	RB5: 81 RB6: 103 RB7: 60 RB8: 576	RB5: 81 RB6: 103 RB7: 60 RB8: 2x576
9	DL_TFC9, DL_TFC24	UL_TFC9, DL_TFC24	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC9, UL_TFC15, UL_TFC15, UL_TFC24	RB5: 39 RB6: 103 RB7: 60 RB8: 576	RB5: No data RB6: No data RB7: No data RB8: 3x576
10	DL TFC10, DL TFC25	UL TFC10, UL TFC25	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC9, UL TFC10, UL TFC16, UL TFC16, UL TFC24, UL TFC25	RB5: 39 RB6: 103 RB7: 60 RB8: 576	RB5: 39 RB6: No data RB7: No data RB8: 3x576
11	DL TFC11, DL TFC26	UL_TFC11, DL_TFC26	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC9, UL TFC11, UL TFC15, UL TFC17, UL TFC24, UL TFC26	RB5: 81 RB6: 103 RB7: 60 RB8: 576	RB5: 81 RB6: 103 RB7: 60 RB8: 3x576
12	DL TFC12, DL_TFC27	UL TFC12, DL_TFC27	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC12, UL TFC15, UL TFC26	RB5: 39 RB6: 103 RB7: 60 RB8: 576	RB5: No data RB6: No data RB7: No data RB8: 4x576
13	DL_TFC13, DL_TFC28	UL_TFC13, DL_TFC28	DL_TFC0, DL_TFC15, UL_TFC0, UL_TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC12, UL TFC13, UL TFC15, UL TFC16, UL TFC27, UL TFC28	RB5: 39 RB6: 103 RB7: 60 RB8: 576	RB5: 39 RB6: No data RB7: No data RB8: 4x576
14	DL TFC14, DL TFC29	UL TFC14, DL TFC29	DL TFC0, DL TFC15, UL TFC0, UL TFC15	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC12, UL TFC14, UL TFC15, UL TFC17, UL TFC27, UL TFC29	RB5: 81 RB6: 103 RB7: 60 RB8: 576	RB5: 81 RB6: 103 RB7: 60 RB8: 4x576

Sub-	Downlink	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC SDU	Test data size			
test	TFCS	TFCS	tested	TFCIs	size	(bits)			
	Under	Under test			(bits)				
	Test			(note 1)	(note 2)	(note 2)			
NOTE 1: UL TFC0, UL TFC1, UL TFC2, UL TFC3 and UL TFC15 are part of minimum set of TFCIs.									
NOTE:	NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.								

18.2.2.45.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified in the actual sub test.
- 3. At step 15 the UE shall return
 - for sub-test 1; an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 3, 6, 9 and 12: an RLC SDU on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4, 7, 10 and 13: an RLC SDU on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6 and RB7.
 - for sub-test 5, 8, 11 and 14: an RLC SDU on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.46 Void

18.2.2.47 Void

18.2.2.48 Void

18.2.2.49 Conversational / speech / UL:12.2 DL:12.2 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

18.2.2.49.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.49.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.49.

18.2.2.49.3 Method of test

See 18.2.1.2 for test procedure.

Initial Conditions

The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps / CS RAB (RB8):

Uplink RLC	
TM RLC	
Transmission RLC discard	
CHOICE SDU	
Discard Mode	
Timer based	
no explicit	
	<u>100ms</u>
Timer discard	
Segmentation indication	<u>FALSE</u>
Downlink RLC	
TM RLC	
Segmentation indication	FALSE
NOTE: Timer based discard without explicit sign	nalling is used in uplink to
secure that the UE will be able to return	
UE test loop function will not deliver all	the SDUs in one and the
same TTI .	

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps, 20 ms TTI)	<u>DCCH</u>
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	<u>0x640</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	2x640	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

Uplink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF1, TF0, TF0)
UL_TFC3	(TF0, TF0, TF0, TF1, TF0)
UL_TFC4	(TF1, TF0, TF0, TF1, TF0)
UL_TFC5	(TF2, TF1, TF1, TF1, TF0)
UL TFC6	(TF0, TF0, TF0, TF1)
UL TFC7	(TF1, TF0, TF0, TF1)
UL_TFC8	(TF2, TF1, TF1, TF0, TF1)
UL TFC9	(TF0, TF0, TF1, TF1)
UL TFC10	(TF1, TF0, TF0, TF1, TF1)
UL_TFC11	(TF2, TF1, TF1, TF1, TF1)

Downlink TFS:

		RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps, 20 ms TTI)	<u>DCCH</u>
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x640</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x39</u>	<u>1x103</u>	<u>1x60</u>	2x640	<u>1x148</u>
	TF2, bits	<u>1x81</u>	N/A	N/A	N/A	<u>N/A</u>

Downlink TFCS:

TFCI	(RB5, RB6, RB7, RB8, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0, TF0, TF0)
DL_TFC2	(TF2, TF1, TF1, TF0, TF0)
DL TFC3	(TF0, TF0, TF1, TF0)
DL_TFC4	(TF1, TF0, TF0, TF1, TF0)
DL_TFC5	(TF2, TF1, TF1, TF1, TF0)
DL TFC6	(TF0, TF0, TF0, TF1)
DL_TFC7	(TF1, TF0, TF0, TF1)
DL TFC8	(TF2, TF1, TF1, TF0, TF1)
DL TFC9	(TF0, TF0, TF1, TF1)
DL_TFC10	(TF1, TF0, TF0, TF1, TF1)
DL TFC11	(TF2, TF1, TF1, TF1, TF1)

Sub-tests:

Sub- test	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
	Under	Under test			(bits)	
	<u>Test</u>			(note 1)	(note 2)	(note 2)
1	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
	DL_TFC7	DL_TFC7	DL_TFC6,	UL_TFC1,	RB6: 103	RB6: No data
			UL_TFC0, UL_TFC6	UL_TFC2, UL_TFC3,	RB7: 60 RB8: 640	RB7: No data RB8: No data
			UL IFCO	UL TFC6,	KD0. 040	KDO. NO Uala
				UL TFC7		
2	DL TFC2,	UL TFC2,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC8	DL_TFC8	DL_TFC6,	UL_TFC1,	RB6: 103	RB6: 103
			UL TFC0,	UL TFC2,	RB7: 60	RB7: 60
			UL_TFC6	UL_TFC3,	RB8: 640	RB8: No data
				UL_TFC6, UL_TFC8		
3	DL TFC3,	UL TFC3,	DL TFC0,	UL TFC0,	RB5: 39	RB5: No data
=	DL TFC9	DL TFC9	DL TFC6.	UL TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL TFC6	UL TFC3,	RB8: 640	RB8: 2x640
				UL_TFC6,		
	DI TEOA	III TEO4	DI TEON	UL TFC9	DDE: 00	DDE: 00
4	DL TFC4, DL TFC10	UL TFC4, UL TFC10	DL TFC0, DL TFC6,	UL TFC0, UL TFC1,	RB5: 39 RB6: 103	RB5: 39 RB6: No data
	DL_IFC10	OL_II-CIU	UL TFC0,	UL TFC2,	RB7: 60	RB7: No data
			UL TFC6	UL TFC3,	RB8: 640	RB8: 2x640
				UL TFC4,		
				UL TFC6,		
				UL_TFC7,		
				UL_TFC9, UL_TFC10		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
=	DL TFC11	UL TFC11	DL TFC6.	UL TFC1,	RB6: 103	RB6: 103
			UL TFC0,	UL TFC2,	RB7: 60	RB7: 60
			UL_TFC6	UL TFC3,	RB8: 640	RB8: 2x640
				UL TFC5,		
				UL TFC6,		
				UL_TFC8, UL_TFC9,		
				UL TFC9,		
I NOTE	4 III TEOO	TEO4 !!!	TEC2 III TEC2			

NOTE 1: UL TFC0, UL TFC1, UL TFC2, UL TFC3 and UL TFC6 are part of minimum set of TFCIs. NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

18.2.2.49.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2: RLC SDUs on RB5, RB6 and RB7 having the same content as sent by the SS; and no data shall be received on RB8.
 - for sub-test 3: RLC SDUs on RB8 having the same content as sent by the SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 4: RLC SDUs on RB5 and RB8 having the same content as sent by the SS; and no data shall be received on RB6 and RB7.
 - for sub-test 5: RLC SDUs on RB5, RB6, RB7 and RB8 having the same content as sent by the SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.49a Conversational / speech / UL:(12.2 7.95 5.9 4.75) DL(12.2 7.95 5.9 4.75) kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB+ UL:3.4 DL: 3.4 kbps SRBs for DCCH

18.2.2.49a.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.49a.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.49a.

18.2.2.49a.3 Method of test

See 18.2.1.2 for test procedure.

Initial Conditions

The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps / CS RAB (RB8):

Uplink RLC	
TM RLC	
Segmentation indication	FALSE
Transmission RLC discard	
CHOICE SDU	
Discard Mode	
Timer based	
no explicit	
no explicit	100
	<u>100ms</u>
Timer_discard	
Downlink RLC	
TM RLC	
Segmentation indication	FALSE
NOTE: Timer based discard without explicit sig	nalling is used in uplink to
secure that the UE will be able to return	
UE test loop function will not deliver all	
same TTL.	

Uplink TFS:

	<u>TFI</u>	RB5 (RAB subflow #1)	RB6 (RAB subflow #2)	RB7 (RAB subflow #3)	RB8 (64 kbps)	DCCH
	TF0, bits	<u>0x81</u>	<u>0x103</u>	<u>0x60</u>	0x640	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	2x640	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	<u>N/A</u>	N/A
	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	N/A	N/A
	TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	N/A	<u>N/A</u>
	TF5, bits	<u>1x81</u>	N/A	N/A	<u>N/A</u>	<u>N/A</u>

Uplink TFCS:

TFCI	(RB5, RB6, RB7, 64 kbps RAB, DCCH)
UL TFC0	(TF0, TF0, TF0, TF0)
UL TFC1	(TF1, TF0, TF0, TF0)
UL TFC2	(TF2, TF1, TF0, TF0, TF0)
UL TFC3	(TF3, TF2, TF0, TF0, TF0)
UL TFC4	(TF4, TF3, TF0, TF0, TF0)
UL TFC5	(TF5, TF4, TF1, TF0, TF0)
UL TFC6	(TF0, TF0, TF1, TF0)
UL TFC7	(TF1, TF0, TF0, TF1, TF0)
UL TFC8	(TF2, TF1, TF0, TF1, TF0)
UL_TFC9	(TF3, TF2, TF0, TF1, TF0)
UL TFC10	(TF4, TF3, TF0, TF1, TF0)
UL_TFC11	(TF5, TF4, TF1, TF1, TF0)
UL TFC12	(TF0, TF0, TF0, TF1)
UL_TFC13	(TF1, TF0, TF0, TF1)
UL_TFC14	(TF2, TF1, TF0, TF0, TF1)
UL TFC15	(TF3, TF2, TF0, TF0, TF1)
UL_TFC16	(TF4, TF3, TF0, TF1)
UL TFC17	(TF5, TF4, TF1, TF0, TF1)
UL TFC18	(TF0, TF0, TF1, TF1)
UL_TFC19	(TF1, TF0, TF0, TF1, TF1)
UL TFC20	(TF2, TF1, TF0, TF1, TF1)
UL_TFC21	(TF3, TF2, TF0, TF1, TF1)
UL_TFC22	(TF4, TF3, TF0, TF1, TF1)
UL_TFC23	(TF5, TF4, TF1, TF1, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (RAB subflow #1)	RB6 (RAB subflow #2)	<u>RB7</u> (RAB subflow #3)	RB8 (64 kbps)	DCCH
	TF0, bits	<u>1x0</u>	<u>0x103</u>	<u>0x60</u>	<u>0x640</u>	<u>0x148</u>
	TF1, bits	<u>1x39</u>	<u>1x53</u>	<u>1x60</u>	<u>2x640</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>1x42</u>	<u>1x63</u>	N/A	N/A	<u>N/A</u>
	TF3, bits	<u>1x55</u>	<u>1x84</u>	N/A	N/A	N/A
	TF4, bits	<u>1x75</u>	<u>1x103</u>	N/A	N/A	<u>N/A</u>
	TF5, bits	1x81	N/A	N/A	N/A	N/A

Downlink TFCS:

<u>TFCI</u>	(RB2, RB3, RB4, 64 kbps RAB, DCCH)
DL_TFC0	(TF0, TF0, TF0, TF0, TF0)
DL_TFC1	(TF1, TF0, TF0, TF0, TF0)
DL TFC2	(TF2, TF1, TF0, TF0, TF0)
DL TFC3	(TF3, TF2, TF0, TF0, TF0)
DL TFC4	(TF4, TF3, TF0, TF0, TF0)
DL TFC5	(TF5, TF4, TF1, TF0, TF0)
DL TFC6	(TF0, TF0, TF0, TF1, TF0)
DL TFC7	(TF1, TF0, TF0, TF1, TF0)
DL_TFC8	(TF2, TF1, TF0, TF1, TF0)
DL TFC9	(TF3, TF2, TF0, TF1, TF0)
DL_TFC10	(TF4, TF3, TF0, TF1, TF0)
DL_TFC11	(TF5, TF4, TF1, TF1, TF0)
DL TFC12	(TF0, TF0, TF0, TF1)
DL_TFC13	(TF1, TF0, TF0, TF1)
DL TFC14	(TF2, TF1, TF0, TF0, TF1)
DL TFC15	(TF3, TF2, TF0, TF0, TF1)
DL_TFC16	(TF4, TF3, TF0, TF1)
DL TFC17	(TF5, TF4, TF1, TF0, TF1)
DL_TFC18	(TF0, TF0, TF1, TF1)
DL_TFC19	(TF1, TF0, TF0, TF1, TF1)
DL_TFC20	(TF2, TF1, TF0, TF1, TF1)
DL_TFC21	(TF3, TF2, TF0, TF1, TF1)
DL TFC22	(TF4, TF3, TF0, TF1, TF1)
DL_TFC23	(TF5, TF4, TF1, TF1, TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS Under	TFCS Under test		<u>TFCIs</u>	SDU size (bits)	(bits)
	Test	<u>Officer test</u>			(note)	(note)
1	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 39	RB5: 39
_	DL_TFC13	UL_TFC13	DL TFC12,	UL_TFC1,	RB6: 103	RB6: No data
			UL TFC0,	UL TFC12,	RB7: 60	RB7: No data
	DI TEOO	III TEOO	UL TFC12	UL TFC13	RB8: 640	RB8: No data
<u>2</u>	DL_TFC2, DL_TFC14	UL_TFC2, UL_TFC14	DL_TFC0, DL_TFC12,	UL_TFC0, UL_TFC2,	RB5: 42 RB6: 53	RB5: 42 RB6: 53
	<u>DL 11 014</u>	<u> </u>	UL TFC0,	UL TFC12,	RB7: 60	RB7: No data
			UL TFC12	UL TFC14	RB8: 640	RB8: No data
<u>3</u>	DL_TFC3,	UL_TFC3,	DL TFC0,	UL TFC0,	RB5: 55	RB5: 55
	DL TFC15	UL TFC15	DL TFC12,	UL TFC3,	RB6: 63	RB6: 63
			UL_TFC0,	UL_TFC12,	RB7: 60	RB7: No data
4	DL TFC4,	III TECA	UL TFC12 DL TFC0,	UL TFC15 UL TFC0,	RB8: 640	RB8: No data
<u>4</u>	DL TFC4,	UL TFC4, UL TFC16	DL TFC0, DL TFC12,	UL TFC4,	RB5: 75 RB6: 84	RB5: 75 RB6: 84
	<u>DL_11 0 10</u>	<u> </u>	UL TFC0,	UL TFC12,	RB7: 60	RB7: No data
			UL TFC12	UL TFC16	RB8: 640	RB8: No data
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	DL_TFC17	UL_TFC17	DL_TFC12,	UL_TFC5,	RB6: 103	RB6: 103
			UL TFC0,	UL TFC12,	RB7: 60	RB7: 60
6	DL TFC6,	UL TFC6,	UL_TFC12 DL_TFC0,	UL_TFC17 UL_TFC0,	RB8: 640 RB5:81	RB8: No data RB5: No data
<u>6</u>	DL_TFC6, DL_TFC18	UL TFC18	DL_TFC0, DL_TFC12,	UL TFC6.	RB6:103	RB6: No data
	<u>DL_11 0 10</u>	<u> </u>	UL TFC0,	UL TFC12,	RB7: 60	RB7: No data
			UL TFC12	UL TFC18	RB8: 1280	RB8: 1280
<u>7</u>	DL_TFC7,	UL_TFC7,	DL_TFC0,	UL_TFC0,	RB5: 39	RB5: 39
	DL TFC19	UL TFC19	DL TFC12,	UL TFC1,	RB6: 103	RB6: No data
			UL_TFC0,	UL_TFC6,	RB7: 60	RB7: No data
			UL TFC12	UL TFC7, UL TFC12,	RB8: 1280	RB8: 1280
				UL TFC13,		
				UL TFC18,		
				UL_TFC19		
<u>8</u>	DL_TFC8,	UL_TFC8,	DL_TFC0,	UL_TFC0,	RB5: 42	RB5: 42
	DL TFC20	UL TFC20	DL TFC12, UL TFC0,	UL TFC2, UL TFC6,	RB6: 53	RB6: 53 RB7: No data
			UL TFC12	UL TFC8,	RB7: 60 RB8: 1280	RB8: 1280
			OL_ITOIZ	UL TFC12,	<u>INDO. 1200</u>	<u>INDO. 1200</u>
				UL TFC14,		
				UL TFC18,		
	DI TEGO	TEOO	DI TEOO	UL_TFC20	DD5 55	DDF FF
<u>9</u>	DL TFC9, DL TFC21	UL TFC9,	DL TFC12	UL TFC0,	RB5: 55 RB6: 63	RB5: 55 RB6: 63
	DL_IFC21	UL_TFC21	DL_TFC12, UL_TFC0,	UL_TFC3, UL_TFC6,	RB5: 63	RB6: 63 RB7: No data
			UL TFC12	UL TFC9,	RB8: 1280	RB8: 1280
				UL_TFC12,		
				UL TFC15,		
				UL_TFC18,		
10	DL TFC10	UL TFC10	DL TFC0,	UL TFC21	RB5: 75	RB5: 75
<u>10</u>	DE IFCIO	UL IFCIU	DL TFC0, DL TFC12,	UL TFC0, UL TFC4,	RB6: 75	RB5: 75 RB6: 84
	DL TFC22	UL TFC22	UL TFC0,	UL TFC6,	RB7: 60	RB7: No data
			UL TFC12	UL TFC10,	RB8: 1280	RB8: 1280
				UL_TFC12,		
				UL TFC16,		
				UL_TFC18,		
	l	l		UL TFC22	<u> </u>	

Sub-	Downlink	<u>Uplink</u>	Implicitely tested	Restricted UL	UL RLC	Test data size
test	<u>TFCS</u>	<u>TFCS</u>		<u>TFCIs</u>	SDU size	<u>(bits)</u>
	<u>Under</u>	Under test			(bits)	
	<u>Test</u>				(note)	(note)
<u>11</u>	DL TFC11	UL TFC11	DL TFC0,	UL TFC0,	RB5: 81	RB5: 81
	1	1	DL_TFC12,	UL_TFC5,	RB6: 103	RB6: 103
	DL_TFC23	UL_TFC23	UL_TFC0,	UL_TFC6,	RB7: 60	RB7: 60
			UL TFC12	UL TFC11,	RB8: 1280	RB8: 1280
				UL_TFC12,		
				UL TFC17,		
				UL_TFC18,		
				UL_TFC23		
NOTE:	See TS 34	100 [10] claus	se 5 3 2 6 2 for details r	egarding loophack	of DLC SDLIe	

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

As the TTI for RB8 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the uplink TB size.

18.2.2.49a.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6, RB7 and RB8.
 - for sub-test 2, 3, 4: an RLC SDU on RB5, RB6 having the same content as sent by SS; and no data shall be received on RB7 and RB8.
 - for sub-test 5: an RLC SDU on RB5, RB6 and RB7 having the same content as sent by SS; and no data shall be received on RB8.
 - for sub-test 6: an RLC SDU on RB8 having the same content as sent by SS; and no data shall be received on RB5, RB6 and RB7.
 - for sub-test 7: an RLC SDU on RB5 and RB8 having the same content as sent by SS; and no data shall be received on RB6, RB7.
 - for sub-test 8, 9, 10: an RLC SDU on RB5, RB6 and RB8 having the same content as sent by SS; and no data shall be received on RB7.
 - for sub-test 11: an RLC SDU on RB5, RB6, RB7 and RB8 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.50 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Conversational / unknown / UL:64 DL:64 kbps / CS RAB + UL:3.4 bps SRBs for DCCH

18.2.2.50. 1 Conformance requirement

See 18.2.2.4.1.

18.2.2.50. 2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.50.

18.2.2.50. 3 Method of test

Initial Conditions

 $\frac{\text{The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps}{\text{/ CS RAB (RB5 and RB6):}}$

	RB5	RB6	
Haliah DLO	(64 kbps)	(64 kbps)	
Uplink RLC			
TM RLC			
Segmentation indication	<u>FALSE</u>	<u>FALSE</u>	
Transmission RLC discard			
CHOICE SDU			
<u>Discard Mode</u>			
Timer based			
no explicit			
	<u>100ms</u>	<u>100ms</u>	
Timer discard			
Downlink RLC			
TM RLC			
Segmentation indication	<u>FALSE</u>	<u>FALSE</u>	
NOTE: Timer based discard without explicit sign	nalling is used	l in uplink to	
secure that the UE will be able to return data for the case when			
the UE test loop function will not deliver all the SDUs in one and			
the same TTI.			

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (64 kbps)	RB6 (64 kbps)	<u>DCCH</u>
<u>TFS</u>	TF0, bits	<u>0x640</u>	<u>0x640</u>	<u>0x148</u>
	TF1, bits	2x640	2x640	<u>1x148</u>
	TF2, bits	N/A	N/A	N/A

Uplink TFCS:

<u>TFCI</u>	(RB5, RB6, DCCH)
UL TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0)
UL_TFC2	(TF0, TF1, TF0)
UL TFC3	(TF1, TF1, TF0)
UL_TFC4	(TF0, TF0, TF1)
UL TFC5	(TF1, TF0, TF1)
UL TFC6	(TF0, TF1, TF1)
UL TFC7	(TF1, TF1, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (64 kbps)	<u>RB6</u> (64 kbps)	DCCH
TFS	TF0, bits	<u>0x640</u>	<u>0x640</u>	<u>0x148</u>
	TF1, bits	2x640	2x640	<u>1x148</u>
	TF2, bits	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL_TFC0	(TF0, TF0, TF0)
DL TFC1	(TF1, TF0, TF0)
DL TFC2	(TF0, TF1, TF0)
DL_TFC3	(TF1, TF1, TF0)
DL TFC4	(TF0, TF0, TF1)
DL TFC5	(TF1, TF0, TF1)
DL TFC6	(TF0, TF1, TF1)
DL TFC7	(TF1, TF1, TF1)

Sub-tests:

Sub- test	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
1001	Under	Under test	100104	<u> </u>	(bits)	<u>(15.167)</u>
	Test				(note)	(note)
<u>1</u>	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
	DL_TFC5	DL_TFC5	DL_TFC4,	UL_TFC1,	RB6: 640	RB6: No data
			UL_TFC0,	UL_TFC4,		
_	DI TEGO		UL TFC4	UL TFC5	DD5 040	DD5 11 1 1
<u>2</u>	DL_TFC2,	UL_TFC2,	DL_TFC0,	UL_TFC0,	RB5: 640	RB5: No data
	DL_TFC6	DL_TFC6	DL_TFC4,	UL_TFC2,	RB6: 640	RB6: 2x640
			UL TFC0,	UL TFC4,		
2	DI TECS	III TEC2	UL TFC4	UL_TFC6	DDE: 640	DDE: 0v640
<u>3</u>	DL_TFC3, DL_TFC7	UL_TFC3, DL_TFC7	DL_TFC0, DL_TFC4,	UL_TFC0, UL_TFC1,	RB5: 640 RB6: 640	RB5: 2x640 RB6: 2x640
	DL IFCT	DL IFCI	UL TFC0,	UL TFC2,	KB0. 040	ND0. 2X040
			UL TFC4	UL TFC3,		
			<u> </u>	UL TFC4,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC7		
NOTE:	See TS 34	. 109 [1 <mark>0] claus</mark>	se 5 3 2 6 2 for deta	ils regarding loop	pack of RLC SD	Is

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

As the TTI for RB5 and RB6 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the uplink TB size.

18.2.2.50. 4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual subtest.
- 3. At step 15 the UE shall return
 - for sub-test 1: two RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6.
 - for sub-test 2: two RLC SDUs on RB6 having the same content as sent by SS; and no data shall be received on RB5.
 - for sub-test 3: two RLC SDUs on RB5 and RB6 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.51 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH

18.2.2.51.1 Conversational / unknown / UL:64 DL:64 kbps / CS RAB / + Interactive or background / UL:64 DL:64 kbps / PS RAB / Payload 320

18.2.2.51.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.51.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.51 for the uplink payload 320 interactive or background case.

18.2.2.51.1.3 Method of test

See 18.2.1.2 for test procedure.

Initial Conditions

The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps / CS RAB (RB5):

	RB5 (Conv. 64 kbps)
Uplink RLC	
TM RLC	
Segmentation indication	FALSE
Transmission RLC discard	
CHOICE SDU	
Discard Mode	
Timer based	
no explicit	
	100ms
Timer discard	
Downlink RLC	
TM RLC	
Segmentation indication	FALSE
NOTE: Timer based discard without explicit sign	gnalling is used
in uplink to secure that the UE will be a	ble to return
data for the case when the UE test loo	o function will
not deliver all the SDUs in one and the	same TTI.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	RB6 (I/B 64 kbpsl)	<u>DCCH</u>
<u>TFS</u>	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	2x640	<u>1x336</u>	<u>1x148</u>
	TF2, bits	N/A	2x336	N/A
	TF3, bits	<u>N/A</u>	3x336	<u>N/A</u>
	TF4, bits	N/A	4x336	N/A

Uplink TFCS:

TFCI	(RB5, RB6, DCCH)
UL_TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF0, TF1, TF0)
UL TFC2	(TF0, TF2, TF0)
UL_TFC3	(TF0, TF3, TF0)
UL TFC4	(TF0, TF4, TF0)
UL TFC5	(TF1, TF0, TF0)
UL TFC6	(TF1, TF1, TF0)
UL TFC7	(TF1, TF2, TF0)
UL_TFC8	(TF1, TF3, TF0)
UL TFC9	(TF1, TF4, TF0)
UL_TFC10	(TF0, TF0, TF1)
UL_TFC11	(TF0, TF1, TF1)
UL TFC12	(TF0, TF2, TF1)
UL_TFC13	(TF0, TF3, TF1)
UL TFC14	(TF0, TF4, TF1)
UL TFC15	(TF1, TF0, TF1)
UL_TFC16	(TF1, TF1, TF1)
UL TFC17	(TF1, TF2, TF1)
UL_TFC18	(TF1, TF3, TF1)
UL_TFC19	(TF1, TF4, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	RB6 (I/B 64 kbps)	<u>DCCH</u>
TFS	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	2x640	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>N/A</u>	2x336	<u>N/A</u>
	TF3, bits	N/A	3x336	N/A
	TF4, bits	N/A	4x336	N/A

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL TFC0	(TF0, TF0, TF0)
DL_TFC1	(TF0, TF1, TF0)
DL_TFC2	(TF0, TF2, TF0)
DL_TFC3	(TF0, TF3, TF0)
DL_TFC4	(TF0, TF4, TF0)
DL TFC5	(TF1, TF0, TF0)
DL_TFC6	(TF1, TF1, TF0)
DL TFC7	(TF1, TF2, TF0)
DL TFC8	(TF1, TF3, TF0)
DL_TFC9	(TF1, TF4, TF0)
DL TFC10	(TF0, TF0, TF1)
DL_TFC11	(TF0, TF1, TF1)
DL_TFC12	(TF0, TF2, TF1)
DL TFC13	(TF0, TF3, TF1)
DL_TFC14	(TF0, TF4, TF1)
DL TFC15	(TF1, TF0, TF1)
DL_TFC16	(TF1, TF1, TF1)
DL TFC17	(TF1, TF2, TF1)
DL TFC18	(TF1, TF3, TF1)
DL_TFC19	(TF1, TF4, TF1)

Sub-tests:

Sub-	Downlink	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS Under	TFCS Under test	<u>tested</u>	<u>TFCIs</u>	SDU size (bits)	(bits)
	<u>Test</u>				(note)	<u>(note)</u>
1	DL TFC1, DL TFC11	UL TFC1, UL TFC11	DL TFC0, DL TFC10,	UL TFC0, UL TFC1,	RB5: 640 RB6: 312	RB5: No data RB6: 312
	<u>DL_11 O11</u>	<u>OL_II OII</u>	UL TFC0,	UL_TFC5,	<u>KB0. 012</u>	<u>1100: 012</u>
			UL TFC10	UL TFC10, UL TFC11		
2	DL_TFC2,	UL_TFC2,	DL_TFC0,	UL TFC0,	RB5: 640	RB5: No data
	DL_TFC12	UL_TFC12	DL_TFC10, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 632	RB6: 632
			UL_TFC10	UL TFC5,		
				UL TFC10, UL TFC12		
<u>3</u>	DL_TFC3,	UL_TFC3,	DL_TFC0,	UL_TFC0,	RB5: 640	RB5: No data
	DL TFC13	UL TFC13	DL TFC10, UL TFC0,	UL TFC1, UL TFC3,	RB6: 952	RB6: 952
			UL_TFC10	UL_TFC5,		
				UL TFC10, UL TFC13		
4	DL_TFC4, DL_TFC14	UL_TFC4, UL_TFC14	DL_TFC0, DL_TFC10,	UL_TFC0, UL_TFC1,	RB5: 640 RB6: 1272	RB5: No data RB6: 1272
	DL IFC14	OL IFC14	UL_TFC0,	UL_TFC4,	KB0. 1212	KB0. 1212
			UL TFC10	UL TFC5, UL TFC10,		
				UL_TFC14		
<u>5</u>	DL_TFC5, DL_TFC15	UL_TFC5, UL_TFC15	DL_TFC0, DL_TFC10,	UL_TFC0, UL_TFC1,	RB5: 640 RB6: 312	RB5: 2x640 RB6: No data
	<u>DL 11 010</u>	<u> </u>	UL TFC0,	UL TFC5,	<u>KB0. 012</u>	INDO: NO data
			UL_TFC10	UL_TFC10, UL_TFC15		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
	DL_TFC16	UL_TFC16	DL_TFC10, UL_TFC0,	UL_TFC1, UL_TFC5,	RB6: 312	RB6: 312
			UL_TFC10	UL_TFC6,		
				UL_TFC10, UL_TFC11,		
				UL_TFC15, UL_TFC16		
<u>7</u>	DL TFC7,	UL TFC7,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
	DL_TFC17	UL_TFC17	DL_TFC10, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 632	RB6: 632
			UL_TFC10	UL_TFC5,		
				UL_TFC7, UL_TFC10,		
				UL_TFC12,		
				UL TFC15, UL TFC17		
<u>8</u>	DL TFC8,	UL TFC8,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
	DL_TFC18	UL_TFC18	DL_TFC10, UL_TFC0,	UL_TFC1, UL_TFC3,	RB6: 952	RB6: 952
			UL_TFC10	UL_TFC5,		
				UL_TFC8, UL_TFC10,		
				UL_TFC13, UL_TFC15,		
				UL_TFC18		
9	DL_TFC9, DL_TFC19	UL_TFC9, UL_TFC19	DL_TFC0, DL_TFC10,	UL_TFC0, UL_TFC1,	RB5: 640 RB6: 1272	RB5: 2x640 RB6: 1272
	<u>DE_11 019</u>	<u>55_11 019</u>	UL TFC0,	UL TFC4,	1100. 1212	1100. 1212
			UL_TFC10	UL_TFC5, UL_TFC9,		
				UL_TFC10,		
				UL_TFC14, UL_TFC15,		
				UL_TFC19		

Sub-	Downlink	<u>Uplink</u>	<u>Implicitely</u>	Restricted UL	UL RLC	Test data size
test	<u>TFCS</u>	<u>TFCS</u>	<u>tested</u>	<u>TFCIs</u>	SDU size	(bits)
	<u>Under</u>	Under test			(bits)	
	<u>Test</u>				(note)	(note)
NOTE '	NOTE 1: UL TFC0, UL TFC1, UL TFC5 and UL TFC10 are part of minimum set of TFCIs.					
NOTE 2	E 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.					
	RB6: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size					
	of 7 bit length indicator and expansion bit). The UL RLC SDU size parameter has been set equal					
	to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length					
	indicator a	nd expansion	bit).			

18.2.2.51.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1, 2, 3, 4: RLC SDUs on RB6 having the same content as sent by the SS; and no data shall be received on RB5.
 - for sub-test 5: RLC SDUs on RB5 having the same content as sent by the SS; and no data shall be received on RB6.
 - for sub-test 6, 7, 8 and 9: RLC SDUs on RB5 and RB6 having the same content as sent by the SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.51.2 Conversational / unknown / UL:64 DL:64 kbps / CS RAB / + Interactive or background / UL:64 DL:64 kbps / PS RAB / Payload 128

18.2.2.51.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.51.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.51 for the uplink payload 128 interactive or background case.

18.2.2.51.2.3 Method of test

Initial Conditions

The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps / CS RAB (RB5):

	RB5 (Conv.	
	64 kbps)	
Uplink RLC		
TM RLC		
Segmentation indication	<u>FALSE</u>	
Transmission RLC discard		
CHOICE SDU		
<u>Discard Mode</u>		
Timer based		
no explicit		
	<u>100ms</u>	
<u>Timer_discard</u>		
Downlink RLC		
TM RLC		
Segmentation indication	FALSE	
NOTE: Timer based discard without explicit sign	nalling is used	
in uplink to secure that the UE will be a	ble to return	
data for the case when the UE test loop function will		
not deliver all the SDUs in one and the	same TTI.	

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (Conv. 64 kbps)	RB6 (I/B 64 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x640</u>	<u>0x144</u>	<u>0x148</u>
	TF1, bits	2x640	<u>1x144</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>N/A</u>	<u>3x144</u>	<u>N/A</u>
	TF3, bits	<u>N/A</u>	<u>7x144</u>	<u>N/A</u>
	TF4, bits	N/A	10x144	N/A

Uplink TFCS:

TFCI	(RB5, RB6, DCCH)
UL_TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF0, TF1, TF0)
UL TFC2	(TF0, TF2, TF0)
UL_TFC3	(TF0, TF3, TF0)
UL TFC4	(TF0, TF4, TF0)
UL TFC5	(TF1, TF0, TF0)
UL TFC6	(TF1, TF1, TF0)
UL TFC7	(TF1, TF2, TF0)
UL_TFC8	(TF1, TF3, TF0)
UL TFC9	(TF1, TF4, TF0)
UL_TFC10	(TF0, TF0, TF1)
UL_TFC11	(TF0, TF1, TF1)
UL TFC12	(TF0, TF2, TF1)
UL_TFC13	(TF0, TF3, TF1)
UL TFC14	(TF0, TF4, TF1)
UL TFC15	(TF1, TF0, TF1)
UL_TFC16	(TF1, TF1, TF1)
UL TFC17	(TF1, TF2, TF1)
UL_TFC18	(TF1, TF3, TF1)
UL_TFC19	(TF1, TF4, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	RB6 (I/B 64 kbps)	<u>DCCH</u>
TFS	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	2x640	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>N/A</u>	2x336	<u>N/A</u>
	TF3, bits	N/A	3x336	N/A
	TF4, bits	<u>N/A</u>	4x336	<u>N/A</u>

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL TFC0	(TF0, TF0, TF0)
DL_TFC1	(TF0, TF1, TF0)
DL_TFC2	(TF0, TF2, TF0)
DL_TFC3	(TF0, TF3, TF0)
DL_TFC4	(TF0, TF4, TF0)
DL TFC5	(TF1, TF0, TF0)
DL_TFC6	(TF1, TF1, TF0)
DL TFC7	(TF1, TF2, TF0)
DL TFC8	(TF1, TF3, TF0)
DL_TFC9	(TF1, TF4, TF0)
DL TFC10	(TF0, TF0, TF1)
DL_TFC11	(TF0, TF1, TF1)
DL_TFC12	(TF0, TF2, TF1)
DL TFC13	(TF0, TF3, TF1)
DL_TFC14	(TF0, TF4, TF1)
DL TFC15	(TF1, TF0, TF1)
DL_TFC16	(TF1, TF1, TF1)
DL TFC17	(TF1, TF2, TF1)
DL TFC18	(TF1, TF3, TF1)
DL_TFC19	(TF1, TF4, TF1)

Sub-tests:

Cub	Downlink	Haliak	Implicitoly	Destricted III	III DI C CDII	Toot data size
Sub-	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
<u>test</u>		Under test	testeu	IFCIS	(bits)	(DILS)
	<u>Under</u> Test	<u>Under test</u>			(note)	(note)
4	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 640	RB5: No data
1	DL TFC1, DL TFC11	DL TFC1,		UL TFC1,		
	DL_IFCII	DL_IFCII			RB6: 120	RB6: 312
			UL TFC0, UL TFC10	UL TFC10, UL TFC11		
	DI TECO	III TECO			DDE: 040	DDE: No data
<u>2</u>	DL_TFC2,	UL_TFC2,	DL_TFC0,	UL_TFC0,	RB5: 640	RB5: No data
	DL TFC12	DL TFC12	DL TFC10,	UL TFC2,	RB6: 376	RB6: 632
			UL_TFC0,	UL_TFC10,		
			UL_TFC10	UL_TFC12		
<u>3</u>	DL_TFC3,	UL_TFC3,	DL_TFC0,	UL_TFC0,	RB5: 640	RB5: No data
	DL TFC13	DL TFC13	DL TFC10,	UL TFC3,	RB6: 888	RB6: 952
			UL_TFC0,	UL_TFC10,		
			UL_TFC10	UL TFC13		
<u>4</u>	DL TFC4,	UL TFC4,	DL TFC0,	UL TFC0,	RB5: 640	RB5: No data
	DL_TFC14	DL_TFC14	DL_TFC10,	UL_TFC4,	RB6: 1272	RB6: 1272
			UL_TFC0,	UL_TFC10,		
			UL TFC10	UL TFC14		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
_	DL TFC15	DL TFC15	DL TFC10,	UL TFC1,	RB6: 120	RB6: No data
			UL TFC0,	UL TFC5,		
			UL TFC10	UL TFC5,		
				UL TFC10,		
				UL TFC11,		
				UL TFC15,		
				UL TFC15		
<u>6</u>	DL TFC6,	UL TFC6,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
_	DL TFC16	DL TFC16	DL TFC10,	UL TFC6,	RB6: 120	RB6: 312
			UL TFC0,	UL TFC10,		<u> </u>
			UL TFC10	UL TFC16		
7	DL TFC7,	UL TFC7,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
<u> </u>	DL TFC17	DL TFC17	DL TFC10,	UL TFC2,	RB6: 376	RB6: 632
	<u> </u>	<u> </u>	UL TFC0,	UL TFC5,	1100.010	1100.002
			UL TFC10	UL TFC7,		
			<u>0L_11 0 10</u>	UL TFC10,		
				UL TFC12,		
				UL TFC15,		
				UL TFC17		
8	DL TFC8,	UL TFC8,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
=	DL TFC18	DL TFC18	DL TFC10,	UL TFC3,	RB6: 888	RB6: 952
	52_11010	<u> </u>	UL TFC0,	UL TFC5,	1.120.000	1.20.002
			UL TFC10	UL TFC8,		
			<u> </u>	UL TFC10,		
				UL TFC13,		
				UL TFC15,		
				UL TFC18		
9	DL TFC9,	UL_TFC9,	DL_TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
2	DL_TFC9, DL_TFC19	DL TFC19	DL_TFC0,	UL TFC4,	RB6: 1272	RB6: 1272
	DE ILCIA	DE IFC19	UL TFC10,	UL TFC5,	1XDU. 1212	1100. 1212
			UL TFC10	UL TFC9,		
			OL II OIU	UL TFC10,		
				UL TFC14,		
				UL TFC14,		
NOTE:	0	100 [10]	0 5 2 2 6 2 for data	UL_TFC19	ok of DLC SDUo	

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB6: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and

RB6: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB5 and RB6 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size for RB6 has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit) and the UL RLC SDU size for RB5 has been set equal to the uplink TB size.

18.2.2.51.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual subtest.
- 3. At step 15 the UE shall return
 - for sub-test 1: an RLC SDU on RB6 having the content equal to the first 120 bits of the test data sent by the SS in downlink; and no data shall be received on RB5.
 - for sub-test 2: an RLC SDU on RB6 having the content equal to the first 376 bits of the test data sent by the SS in downlink; and no data shall be received on RB5.
 - for sub-test 3: an RLC SDU on RB6 having the content equal to the first 888 bits of the test data sent by the SS in downlink; and no data shall be received on RB5.
 - for sub-test 4: an RLC SDU on RB6 having the same content as sent by SS; and no data shall be received on RB5.
 - for sub-test 5: two RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6.
 - for sub-test 6: two RLC SDUs on RB5 and one RLC SDU on RB6 having the content equal to the first 120 bits of the test data sent by the SS in downlink.
 - for sub-test 7: two RLC SDUs on RB5 and one RLC SDU on RB6 having the content equal to the first 376 bits of the test data sent by the SS in downlink.
 - for sub-test 8: two RLC SDUs on RB5 and one RLC SDU on RB6 having the content equal to the first 888 bits of the test data sent by the SS in downlink.
 - for sub-test 9: two RLC SDUs on RB5 and one RLC SDU on RB6 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.51a Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or Background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.51a.1 Conversational / unknown / UL:64 DL:64 kbps / CS RAB / + Interactive or background / UL:8 DL:8 kbps / PS RAB / Payload 320, 40 ms TTI
- 18.2.2.51a.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.51a.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.51a for the uplink payload 320, 40 ms TTI case.

18.2.2.51a.1.3 Method of test

Initial Conditions

 $\frac{\text{The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps}{\text{/ CS RAB (RB5):}}$

	RB5 (Conv. 64 kbps)	
Uplink RLC		
TM RLC		
Segmentation indication	<u>FALSE</u>	
Transmission RLC discard		
CHOICE SDU		
Discard Mode		
Timer based		
no explicit		
	100ms	
Timer_discard		
Downlink RLC		
TM RLC		
Segmentation indication	FALSE	
NOTE: Timer based discard without explicit sign	nalling is used	
in uplink to secure that the UE will be a	ble to return	
data for the case when the UE test loop function will		
not deliver all the SDUs in one and the	same TTI.	

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (Conv. 64 kbps)	RB6 (I/B 8 kbps)	<u>DCCH</u>
TFS	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
11-3	TF1, bits	2x640	1x336	1x148

Uplink TFCS:

<u>TFCI</u>	(RB5, RB6, DCCH)
UL_TFC0	(TF0, TF0, TF0)
UL TFC1	(TF0, TF1, TF0)
UL TFC2	(TF1, TF0, TF0)
UL TFC3	(TF1, TF1, TF0)
UL TFC4	(TF0, TF0, TF1)
UL_TFC5	(TF0, TF1, TF1)
UL TFC6	(TF1, TF0, TF1)
UL TFC7	(TF1, TF1, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	<u>RB6</u> (<u>I/B</u> 8kbps)	<u>DCCH</u>
TFS	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
115	TF1, bits	<u>2x640</u>	<u>1x336</u>	<u>1x148</u>

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL_TFC0	(TF0, TF0, TF0)
DL_TFC1	(TF0, TF1, TF0)
DL TFC2	(TF1, TF0, TF0)
DL_TFC3	(TF1, TF1, TF0)
DL TFC4	(TF0, TF0, TF1)
DL TFC5	(TF0, TF1, TF1)
DL TFC6	(TF1, TF0, TF1)
DL TFC7	(TF1, TF1, TF1)

Sub-tests:

Sub- test	Downlink TFCS Under Test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)
	<u> </u>	<u> </u>		(note 1)	(note 2)	(note 2)
1	DL TFC1 DL TFC5	UL TFC1 UL TFC5	DL TFC0, DL TFC4, UL TFC0, UL TFC4,	UL TFC0, UL TFC1, UL TFC2, UL TFC4, UL TFC5	RB5: 640 RB6: 312	RB5: No data RB6: 312
2	DL_TFC2 DL_TFC6	UL_TFC2 UL_TFC6	DL_TFC0, DL_TFC4, UL_TFC0, UL_TFC4,	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC4, UL_TFC6	RB5: 640 RB6: 312	RB5: 2x640 RB6: No data
<u>3</u>	DL_TFC3 DL_TFC7	UL_TFC3 UL_TFC7	DL_TFC0, DL_TFC4, UL_TFC0, UL_TFC4,	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3, UL_TFC4, UL_TFC5, UL_TFC6, UL_TFC7	RB5: 640 RB6: 312	RB5: 2x640 RB6: 312

NOTE 1: UL TFC0, UL TFC1, UL TFC5 and UL TFC10 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB6: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB5 is the same for both downlink and uplink then UL RLC SDU size has been set equal to the uplink TB size.

18.2.2.51a.1.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB6 having the same content as sent by SS; and no data shall be received on RB5.
 - for sub-test 2: two RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6.
 - for sub-test 3: two RLC SDUs on RB5 having the same content as sent by SS; and an RLC SDU on RB6 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.51a.2 Conversational / unknown / UL:64 DL:64 kbps / CS RAB / + Interactive or background / UL:8 DL:8 kbps / PS RAB / Payload 128, 80 ms TTI

18.2.2.51a.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.51a.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.51a for the uplink payload 128, 80 ms TTI case.

18.2.2.51a.2.3 Method of test

Initial Conditions

The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps / CS RAB (RB5):

	RB5 (Conv. 64 kbps)	
Uplink RLC	<u> </u>	
TM RLC		
Segmentation indication	<u>FALSE</u>	
Transmission RLC discard		
CHOICE SDU		
Discard Mode		
Timer based		
no explicit		
	100ms	
Timer_discard		
Downlink RLC		
TM RLC		
Segmentation indication	<u>FALSE</u>	
NOTE: Timer based discard without explicit sign	nalling is used	
in uplink to secure that the UE will be a	ble to return	
data for the case when the UE test loop function will		
not deliver all the SDUs in one and the	same TTI.	

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	RB6 (I/B 8 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x640</u>	<u>0x144</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	2x640	<u>1x144</u>	<u>1x148</u>
	TF2, bits	N/A	5x144	N/A

Uplink TFCS:

TFCI	(RB5, RB6, DCCH)
UL_TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF0, TF1, TF0)
UL TFC2	(TF0, TF2, TF0)
UL_TFC3	(TF1, TF0, TF0)
UL TFC4	(TF1, TF1, TF0)
UL TFC5	(TF1, TF2, TF0)
UL TFC6	(TF0, TF0, TF1)
UL TFC7	(TF0, TF1, TF1)
UL_TFC8	(TF0, TF2, TF1)
UL TFC9	(TF1, TF0, TF1)
UL_TFC10	(TF1, TF1, TF1)
UL_TFC11	(TF1, TF2, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	<u>RB6</u> (<u>I/B</u> 64 kbps)	<u>DCCH</u>
TEC	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	2x640	1x336	<u>1x148</u>

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL TFC0	(TF0, TF0, TF0)
DL TFC1	(TF0, TF1, TF0)
DL TFC2	(TF1, TF0, TF0)
DL TFC3	(TF1, TF1, TF0)
DL_TFC4	(TF0, TF0, TF1)
DL TFC5	(TF0, TF1, TF1)
DL TFC6	(TF1, TF0, TF1)
DL TFC7	(TF1, TF1, TF1)

Sub-tests:

Sub- test	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
1001	Under Test	<u>Under test</u>		11 010	(bits)	
					Note 1	Note 1
1	DL TFC1,	UL TFC1,	DL TFC0, DL TFC4,	UL TFC0,	RB5: 640	RB5: No data
	DL_TFC5	UL_TFC7	UL_TFC0, UL_TFC6	UL_TFC1, UL_TFC6.	RB6: 56	RB6: 312
				UL TFC7		
2	DL TFC1,	UL TFC2,	DL TFC0, DL TFC4,	UL TFC0,	RB5: 640	RB5: No data
-	DL_TFC5	UL_TFC8	UL_TFC0, UL_TFC6	UL_TFC1,	RB6: 312	RB6: 312
				UL_TFC2,		
				UL TFC6,		
				UL_TFC7, UL_TFC8		
3	DL TFC2,	UL TFC3,	DL TFC0, DL TFC4,	UL TFC0,	RB5: 640	RB5: 2x640
=	DL TFC6	UL TFC9	UL TFC0, UL TFC6	UL TFC1,	RB6: 56	RB6: No data
				UL TFC3,		
				UL_TFC6,		
				UL_TFC7,		
4	DI TECO	III TECA	DI TECO DI TECA	UL TFC9	DDE: 040	DDE: 0::040
4	DL TFC3, DL TFC7	UL TFC4, UL TFC10	DL TFC0, DL TFC4, UL TFC0, UL TFC6	UL TFC0, UL TFC1,	RB5: 640 RB6: 56	RB5: 2x640 RB6: 312
	DL_II OI	<u> </u>	<u>OL_11 OU, OL_11 OU</u>	UL TFC3,	<u>IXDO. 50</u>	<u>IXD0. 312</u>
				UL TFC4,		
				UL TFC6,		
				UL TFC7,		
				UL_TFC9, UL_TFC10		
<u>5</u>	DL TFC3,	UL TFC5,	DL TFC0, DL TFC4,	UL TFC0,	RB5: 640	RB5: 2x640
=	DL TFC7	UL TFC11	UL TFC0, UL TFC6	UL TFC1,	RB6: 312	RB6: 312
				UL TFC3,		
				UL TFC5,		
				UL_TFC6,		
				UL TFC7, UL TFC9,		
				UL_TFC9,		

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.
RB6: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB5 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit).

18.2.2.51a.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: two RLC SDUs on RB6 having the same content equal to the first 56 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 2: two RLC SDUs on RB6 having the same content as the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 3: two RLC SDUs on RB5 having the same content as the test data sent by SS in downlink; and no data shall be received on RB6.
 - for sub-test 4: two RLC SDUs on RB6 having the same content equal to the first 56 bits of the test data sent by SS in downlink; and two RLC SDU on RB5 having the same content as sent by SS.
 - for sub-test 5: two RLC SDUs on RB6 having the same content as the test data sent by SS in downlink; and two RLC SDU on RB5 having the same content as sent by SS.

4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.51b Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or Background / UL:16 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.

18.2.2.51b.1 Conversational / unknown / UL:64 DL:64 kbps / CS RAB / + Interactive or background / UL:16 DL:64 kbps / PS RAB / Payload 320

18.2.2.51b.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.51b.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.51b for the uplink payload 320 case.

18.2.2.51b.1.3 Method of test

Initial Conditions

The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps / CS RAB (RB5):

	RB5 (Conv. 64 kbps)
Uplink RLC	
TM RLC	
Segmentation indication	<u>FALSE</u>
Transmission RLC discard	
CHOICE SDU	
Discard Mode	
Timer based	
no explicit	
	<u>100ms</u>
Timer discard	
Downlink RLC	
TM RLC	
Segmentation indication	<u>FALSE</u>
NOTE: Timer based discard without explicit significant	gnalling is used
in uplink to secure that the UE will be a	ble to return
data for the case when the UE test loo	o function will
not deliver all the SDUs in one and the	

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	RB6 (I/B 16 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	2x640	<u>1x336</u>	<u>1x148</u>
	TF2, bits	N/A	2x336	N/A

Uplink TFCS:

TFCI	(RB5, RB6, DCCH)
UL_TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF0, TF1, TF0)
UL TFC2	(TF0, TF2, TF0)
UL_TFC3	(TF1, TF0, TF0)
UL TFC4	(TF1, TF1, TF0)
UL TFC5	(TF1, TF2, TF0)
UL TFC6	(TF0, TF0, TF1)
UL TFC7	(TF0, TF1, TF1)
UL_TFC8	(TF0, TF2, TF1)
UL TFC9	(TF1, TF0, TF1)
UL_TFC10	(TF1, TF1, TF1)
UL_TFC11	(TF1, TF2, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	RB6 (I/B 64 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	2x640	1x336	<u>1x148</u>
	TF2, bits	<u>N/A</u>	2x336	<u>N/A</u>
	TF3, bits	N/A	3x336	N/A
	TF4, bits	<u>N/A</u>	4x336	<u>N/A</u>

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL TFC0	(TF0, TF0, TF0)
DL TFC1	(TF0, TF1, TF0)
DL TFC2	(TF0, TF2, TF0)
DL TFC3	(TF0, TF3, TF0)
DL TFC4	(TF0, TF4, TF0)
DL TFC5	(TF1, TF0, TF0)
DL TFC6	(TF1, TF1, TF0)
DL_TFC7	(TF1, TF2, TF0)
DL TFC8	(TF1, TF3, TF0)
DL_TFC9	(TF1, TF4, TF0)
DL_TFC10	(TF0, TF0, TF1)
DL_TFC11	(TF0, TF1, TF1)
DL_TFC12	(TF0, TF2, TF1)
DL TFC13	(TF0, TF3, TF1)
DL_TFC14	(TF0, TF4, TF1)
DL TFC15	(TF1, TF0, TF1)
DL TFC16	(TF1, TF1, TF1)
DL_TFC17	(TF1, TF2, TF1)
DL TFC18	(TF1, TF3, TF1)
DL_TFC19	(TF1, TF4, TF1)

Sub-tests:

Sub-	Downlink	<u>Uplink</u>	Implicitely tested	Restricted	UL RLC	Test data size
<u>test</u>	TFCS Under	TFCS Under test		UL TFCIs	SDU size (bits)	(bits)
	Test			(note 1)	(note 2)	(note 2)
1	DL TFC1, DL TFC11	UL TFC1, UL TFC7	DL TFC0, DL TFC10, UL TFC0, UL TFC6	UL TFC0, UL TFC1,	RB5: 640 RB6: 152	RB5: No data RB6: 312
	<u>DL_II CII</u>	<u>0L_11 07</u>	<u>0E_11 </u>	UL TFC3,	<u>IXDO. 132</u>	<u>IXD0. 512</u>
				UL TFC6,		
2	DL TFC2,	UL TFC2	DL TFC0, DL TFC10,	UL_TFC7 UL_TFC0,	RB5: 640	RB5: No data
_	DL TFC12	UL TFC8	UL TFC0, UL TFC6	UL TFC1,	RB6: 312	RB6: 632
	_			UL TFC2,		
				UL_TFC3, UL_TFC6,		
				UL_TFC8		
<u>3</u>	DL_TFC3,	UL_TFC2,	DL_TFC0, DL_TFC10,	UL_TFC0,	RB5: 640	RB5: No data
	DL TFC13	UL TFC8	UL TFC0, UL TFC6	UL TFC1, UL TFC2,	RB6: 312	RB6: 952
				UL TFC3,		
				UL TFC6,		
4	DL TFC4,	UL TFC2	DL TFC0, DL TFC10,	UL_TFC8 UL_TFC0,	RB5: 640	RB5: No data
-	DL TFC14	,UL TFC8	UL TFC0, UL TFC6	UL TFC1,	RB6: 312	RB6: 1272
				UL_TFC2, UL_TFC3,		
				UL TFC6,		
				UL_TFC8		
<u>5</u>	DL_TFC5, DL_TFC15	UL_TFC3 ,UL_TFC9	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC6	UL_TFC0, UL_TFC1,	RB5: 640 RB6: 152	RB5: 2x640 RB6: No data
	DL IFCIS	,UL IFC9	OL TPCO, OL TPCO	UL TFC3,	KB0. 152	KDO. NO data
				UL TFC6,		
<u>6</u>	DL TFC6,	UL TFC4,	DL TFC0, DL TFC10,	UL TFC9 UL TFC0,	RB5: 640	RB5: 2x640
	DL TFC16	UL TFC10	UL TFC0, UL TFC6	UL TFC1,	RB6: 152	RB6: 312
				UL TFC3,		
				UL_TFC4, UL_TFC6,		
				UL TFC7,		
				UL_TFC9, UL_TFC10		
<u>7</u>	DL TFC7,	UL TFC5,	DL TFC0, DL TFC10,	UL TFC10	RB5: 640	RB5: 2x640
-	DL_TFC17	UL_TFC11	UL_TFC0, UL_TFC6	UL_TFC1,	RB6: 312	RB6: 632
				UL TFC2, UL TFC3,		
				UL TFC5,		
				UL TFC6,		
				UL_TFC8, UL_TFC9,		
				UL TFC11		
8	DL TFC8,	UL TFC5,	DL TFC0, DL TFC10,	UL TFC0,	RB5: 640	RB5: 2x640
	DL_TFC18	UL_TFC11	UL_TFC0, UL_TFC6	UL_TFC1, UL_TFC2,	RB6: 312	RB6: 952
				UL TFC3,		
				UL TFC5, UL TFC6,		
				UL TFC8,		
				UL TFC9,		
9	DL TFC9,	UL TFC5,	DL TFC0, DL TFC10,	UL_TFC11 UL_TFC0,	RB5: 640	RB5: 2x640
=	DL_TFC19	UL_TFC11	UL_TFC0, UL_TFC6	UL_TFC1,	RB6: 312	RB6: 1272
			<u> </u>	UL TFC2,		
				UL_TFC3, UL_TFC5,		
				UL_TFC6,		
				UL_TFC8,		
				UL TFC9, UL TFC11		
-		•	•		š	

Sub- test	Downlink TFCS	Uplink TFCS	<u>Implicitely tested</u>	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
	Under	Under test			(bits)	<u>,</u>
	<u>Test</u>			(note 1)	(note 2)	(note 2)
NOTE '	1: UL TFC0,	UL TFC1, UL	TFC3 and UL TFC6 are part of minim	um set of TFCIs	<u>).</u>	
NOTE 2	2: See TS 34	.109 [10] claus	se 5.3.2.6.2 for details regarding loopba	ck of RLC SDUS	<u>3.</u>	
	RB6: Test	data size has l	been set to DL TFS size under test minu	us 8 bits (size of	7 bit length in	dicator and
	expansion	bit). The UL R	LC SDU size for RB6 has been set equ	al to the uplink	ΓFS size under	test minus 8
	bits (size o	of 7 bit length in	ndicator and expansion bit) divided by 2	(40ms uplink T	TI divided by 2	<u>0 ms downlink</u>

TTI) and the UL RLC SDU size for RB5 has been set equal to the uplink TB size.

18.2.2.51b.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: two RLC SDUs on RB6 having the content equal to the first 152 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 2, 3, and 4: two RLC SDUs on RB6 having the content equal to the first 312 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 5: two RLC SDUs on RB5 having the same content as sent by the SS in downlink per TB; and no data shall be received on RB6.
 - for sub-test 6: two RLC SDUs on RB5 having the same content as sent by the SS in downlink per TB; and two RLC SDUs on RB6 having the content equal to the first 152 bits of the test data sent by the SS in downlink.
 - for sub-test 7, 8, and 9: two RLC SDUs on RB5 having the same content as sent by the SS in downlink per TB; and two RLC SDUs on RB6 having the content equal to the first 312 bits of the test data sent by the SS in downlink.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.51b.2 Conversational / unknown / UL:64 DL:64 kbps / CS RAB / + Interactive or background / UL:16 DL:64 kbps / PS RAB / Payload 128

18.2.2.51b.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.51b.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.51b for the uplink payload 128 case.

18.2.2.51b.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	<u>RB6</u> (<u>I/B</u> 16 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x640</u>	<u>0x144</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	2x640	<u>1x144</u>	<u>1x148</u>
	TF2, bits	<u>N/A</u>	<u>5x144</u>	<u>N/A</u>

Uplink TFCS:

<u>TFCI</u>	(RB5, RB6, DCCH)
UL TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF0, TF1, TF0)
UL_TFC2	(TF0, TF2, TF0)
UL_TFC3	(TF1, TF0, TF0)
UL_TFC4	(TF1, TF1, TF0)
UL TFC5	(TF1, TF2, TF0)
UL_TFC6	(TF0, TF0, TF1)
UL TFC7	(TF0, TF1, TF1)
UL TFC8	(TF0, TF2, TF1)
UL_TFC9	(TF1, TF0, TF1)
UL TFC10	(TF1, TF1, TF1)
UL_TFC11	(TF1, TF2, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	<u>RB6</u> (<u>I/B</u> 64 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	2x640	<u>1x336</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	N/A	2x336	N/A
	TF3, bits	<u>N/A</u>	3x336	<u>N/A</u>
	TF4, bits	N/A	4x336	N/A

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL_TFC0	(TF0, TF0, TF0)
DL TFC1	(TF0, TF1, TF0)
DL TFC2	(TF0, TF2, TF0)
DL_TFC3	(TF0, TF3, TF0)
DL TFC4	(TF0, TF4, TF0)
DL_TFC5	(TF1, TF0, TF0)
DL_TFC6	(TF1, TF1, TF0)
DL_TFC7	(TF1, TF2, TF0)
DL_TFC8	(TF1, TF3, TF0)
DL TFC9	(TF1, TF4, TF0)
DL_TFC10	(TF0, TF0, TF1)
DL TFC11	(TF0, TF1, TF1)
DL TFC12	(TF0, TF2, TF1)
DL_TFC13	(TF0, TF3, TF1)
DL TFC14	(TF0, TF4, TF1)
DL_TFC15	(TF1, TF0, TF1)
DL_TFC16	(TF1, TF1, TF1)
DL TFC17	(TF1, TF2, TF1)
DL_TFC18	(TF1, TF3, TF1)
DL TFC19	(TF1, TF4, TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely tested	Restricted	UL RLC	Test data size
test	TFCS	TFCS	implicatory tested	UL TFCIs	SDU size	(bits)
	Under	Under test			(bits)	1000
	Test				Note 1	Note 1
<u>1</u>	DL TFC1,	UL TFC1,	DL TFC0, DL TFC10,	UL TFC0,	RB5: 640	RB5: No data
	DL TFC11	UL TFC7	UL TFC0, UL TFC6	UL TFC1,	RB6: 56	RB6: 312
				UL TFC6,		
				UL TFC7		
2	DL TFC2,	UL TFC2,	DL TFC0, DL TFC10,	UL TFC0,	RB5: 640	RB5: No data
	DL TFC12	UL TFC8	UL_TFC0, UL_TFC6	UL_TFC2,	RB6: 312	RB6: 632
				UL_TFC6,		
				UL TFC8		
<u>3</u>	DL_TFC3,	UL_TFC2,	DL_TFC0, DL_TFC10,	UL_TFC0,	RB5: 640	RB5: No data
	DL TFC13	UL TFC8	UL TFC0, UL TFC6	UL TFC2,	RB6: 312	RB6: 952
				UL TFC6,		
				UL_TFC8		
<u>4</u>	DL_TFC4,	UL_TFC2,	DL_TFC0, DL_TFC10,	UL_TFC0,	RB5: 640	RB5: No data
	DL TFC14	UL TFC8	UL TFC0, UL TFC6	UL TFC2,	RB6: 312	RB6: 1272
				UL_TFC6,		
	DI TEGE	LU TEOC	DI TEON DI TEON	UL_TFC8	DD5 040	DD5 0 040
<u>5</u>	DL_TFC5,	UL_TFC3,	DL_TFC0, DL_TFC10,	UL_TFC0,	RB5: 640	RB5: 2x640
	DL TFC15	UL TFC9	UL TFC0, UL TFC6	UL TFC3,	RB6: 56	RB6: No data
				UL_TFC6, UL_TFC9		
	DI TECC	III TECA	DI TECO DI TECAO		DDE: 040	DDE: 0::040
<u>6</u>	DL TFC6,	UL TFC4, UL TFC10	DL TFC0, DL TFC10, UL TFC0, UL TFC6	UL TFC0,	RB5: 640	RB5: 2x640
	DL_TFC16	UL_IFC10	UL_IFC0, UL_IFC6	UL_TFC1, UL_TFC3,	RB6: 56	RB6: 312
				UL TFC3,		
				UL TFC6,		
				UL TFC7,		
				UL TFC9,		
				UL TFC10		
<u>7</u>	DL TFC7,	UL TFC5,	DL TFC0, DL TFC10,	UL TFC0,	RB5: 640	RB5: 2x640
-	DL TFC17	UL TFC11	UL TFC0, UL TFC6	UL TFC2,	RB6: 312	RB6: 632
		<u> </u>	<u></u>	UL TFC3,	1.50. 0.5	<u></u>
				UL TFC5,		
				UL TFC6,		
				UL TFC8,		
				UL_TFC9,		
				UL_TFC11		
<u>8</u>	DL_TFC8,	UL_TFC5,	DL_TFC0, DL_TFC10,	UL_TFC0,	RB5: 640	RB5: 2x640
	DL_TFC18	UL TFC11	UL TFC0, UL TFC6	UL TFC2,	RB6: 312	RB6: 952
				UL_TFC3,		
				UL_TFC5,		
				UL TFC6,		
				UL_TFC8,		
				UL TFC9,		
0	DL TFC9,	UL TFC5,	DL TFC0, DL TFC10,	UL_TFC11	DDE: 640	RB5: 2x640
9	DL_TFC9, DL_TFC19	UL_TFC5,	UL TFC0, UL TFC6	UL_TFC0, UL_TFC2,	RB5: 640 RB6: 312	RB5: 2x640 RB6: 1272
	DL IFC19	UL IFUIT	OL 1FOU, OL 1FOU	UL TFC2,	1100. 312	11DU. 12/2
	1	1		UL TFC5,		
				UL TFC6,		
				UL TFC8,		
				UL TFC9,		
				UL TFC11		

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB6: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size for RB6 has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit) divided by 2 (40ms uplink TTI divided by 20 ms downlink TTI) and the UL RLC SDU size for RB5 has been set equal to the uplink TB size.

18.2.2.51b.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: two RLC SDUs on RB6 having the content equal to the first 56 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 2, 3, and 4: two RLC SDUs on RB6 having the content equal to the first 312 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 5: two RLC SDUs on RB5 having the same content as sent by the SS in downlink per TB; and no data shall be received on RB6.
 - for sub-test 6: two RLC SDUs on RB5 having the same content as sent by the SS in downlink per TB; and two RLC SDUs on RB6 having the content equal to the first 56 bits of the test data sent by the SS in downlink.
 - for sub-test 7, 8, and 9: two RLC SDUs on RB5 having the same content as sent by the SS in downlink per TB; and two RLC SDUs on RB6 having the content equal to the first 312 bits of the test data sent by the SS in downlink.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.52 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:64 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
- 18.2.2.52.1 Conversational / unknown / UL:64 DL:64 kbps / CS RAB / + Interactive or background / UL:64 DL:128 kbps / PS RAB / Payload 320
- 18.2.2.52.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.52.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.52 for the uplink payload 320 case.

<u>18.2.2.52.1.3</u> Method of test

Initial Conditions

The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps / CS RAB (RB5):

	<u>RB5</u> (Conv. 64 kbps)
Uplink RLC	
TM RLC	
Segmentation indication	<u>FALSE</u>
Transmission RLC discard	
CHOICE SDU	
<u>Discard Mode</u>	
Timer based	
no explicit	
	100ms
Timer_discard	
Downlink RLC	
TM RLC	
Segmentation indication	FALSE
NOTE: Timer based discard without explicit sign	nalling is used
in uplink to secure that the UE will be a	ble to return
data for the case when the UE test loop	function will
not deliver all the SDUs in one and the	same TTI.

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (Conv. 64 kbps)	RB6 (I/B 64 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	2x640	<u>1x336</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>N/A</u>	<u>2x336</u>	<u>N/A</u>
	TF3, bits	<u>N/A</u>	<u>3x336</u>	<u>N/A</u>
	TF4, bits	N/A	4x336	N/A

Uplink TFCS:

TFCI	(RB5, RB6, DCCH)
UL TFC0	(TF0, TF0, TF0)
UL TFC1	(TF0, TF1, TF0)
UL_TFC2	(TF0, TF2, TF0)
UL_TFC3	(TF0, TF3, TF0)
UL TFC4	(TF0, TF4, TF0)
UL_TFC5	(TF1, TF0, TF0)
UL TFC6	(TF1, TF1, TF0)
UL TFC7	(TF1, TF2, TF0)
UL_TFC8	(TF1, TF3, TF0)
UL TFC9	(TF1, TF4, TF0)
UL_TFC10	(TF0, TF0, TF1)
UL_TFC11	(TF0, TF1, TF1)
UL_TFC12	(TF0, TF2, TF1)
UL_TFC13	(TF0, TF3, TF1)
UL TFC14	(TF0, TF4, TF1)
UL_TFC15	(TF1, TF0, TF1)
UL TFC16	(TF1, TF1, TF1)
UL TFC17	(TF1, TF2, TF1)
UL_TFC18	(TF1, TF3, TF1)
UL TFC19	(TF1, TF4, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	RB6 (I/B 128 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	2x640	1x336	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>N/A</u>	2x336	<u>N/A</u>
	TF3, bits	N/A	4x336	N/A
	TF4, bits	N/A	8x336	N/A

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL TFC0	(TF0, TF0, TF0)
DL TFC1	(TF0, TF1, TF0)
DL_TFC2	(TF0, TF2, TF0)
DL TFC3	(TF0, TF3, TF0)
DL_TFC4	(TF0, TF4, TF0)
DL_TFC5	(TF1, TF0, TF0)
DL TFC6	(TF1, TF1, TF0)
DL_TFC7	(TF1, TF2, TF0)
DL TFC8	(TF1, TF3, TF0)
DL TFC9	(TF1, TF4, TF0)
DL_TFC10	(TF0, TF0, TF1)
DL TFC11	(TF0, TF1, TF1)
DL_TFC12	(TF0, TF2, TF1)
DL TFC13	(TF0, TF3, TF1)
DL_TFC14	(TF0, TF4, TF1)
DL_TFC15	(TF1, TF0, TF1)
DL TFC16	(TF1, TF1, TF1)
DL_TFC17	(TF1, TF2, TF1)
DL TFC18	(TF1, TF3, TF1)
DL TFC19	(TF1, TF4, TF1)

Sub-tests:

Sub-	Downlink	Uplink	Implicitely	Restricted UL	UL RLC SDU	Test data size
test	TFCS	TFCS	tested	TFCIs	size	(bits)
	Under	Under test			(bits)	
	Test				(note)	(note)
1	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 640	RB5: No data
_	DL TFC11	DL TFC11	DL TFC10,	UL TFC1,	RB6: 312	RB6: 312
			UL TFC0,	UL TFC10,		
			UL TFC10	UL TFC11		
<u>2</u>	DL TFC2,	UL TFC2,	DL TFC0,	UL TFC0,	RB5: 640	RB5: No data
	DL TFC12	DL TFC12	DL TFC10,	UL TFC2,	RB6: 632	RB6: 632
			UL_TFC0,	UL_TFC10,		
			UL_TFC10	UL_TFC12		
<u>3</u>	DL_TFC3,	UL_TFC3,	DL_TFC0,	UL_TFC0,	RB5: 640	RB5: No data
	DL TFC13	DL TFC13	DL TFC10,	UL TFC3,	RB6: 952	RB6: 1272
			UL_TFC0,	UL_TFC10,		
			UL TFC10	UL TFC13		
<u>4</u>	DL TFC4,	UL TFC4,	DL TFC0,	UL TFC0,	RB5: 640	RB5: No data
	DL_TFC14	DL_TFC14	DL_TFC10,	UL_TFC4,	RB6: 1272	RB6: 2552
			UL_TFC0,	UL_TFC10,		
			UL TFC10	UL TFC14		
<u>5</u>	DL TFC5,	UL TFC5,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
	DL_TFC15	DL_TFC15	DL_TFC10,	UL_TFC5,	RB6: 312	RB6: No data
			UL TFC0,	UL TFC10,		
	DI TEOO	III TEOC	UL_TFC10	UL_TFC15	DDE: 040	DDE: 0::040
<u>6</u>	DL_TFC6,	UL_TFC6,	DL_TFC0,	UL_TFC0,	RB5: 640	RB5: 2x640
	DL_TFC16	DL_TFC16	DL_TFC10,	UL_TFC1,	RB6: 312	RB6: 312
			UL TFC0, UL TFC10	UL TFC5, UL TFC6,		
			UL_IFCIU	UL TFC10,		
				UL TFC10,		
				UL TFC15,		
				UL TFC16		
7	DL TFC7,	UL TFC7,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
<u> -</u>	DL TFC17	DL TFC17	DL TFC10,	UL TFC2.	RB6: 632	RB6: 632
	<u> </u>	<u> </u>	UL TFC0,	UL TFC5,	1100. 002	1XD0: 002
			UL TFC10	UL TFC7,		
				UL TFC10,		
				UL TFC12,		
				UL TFC15,		
				UL TFC17		
<u>8</u>	DL TFC8,	UL TFC8,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
	DL_TFC18	DL_TFC18	DL_TFC10,	UL_TFC3,	RB6: 952	RB6: 1272
			UL TFC0,	UL TFC5,		
			UL_TFC10	UL_TFC8,		
		1		UL_TFC10,		
				UL TFC13,		
				UL_TFC15,		
	DI TEGO	III TE00	DI TECC	UL TFC18	DDE: 040	DDE: 0::040
<u>9</u>	DL_TFC9,	UL_TFC9,	DL_TFC0,	UL_TFC0,	RB5: 640	RB5: 2x640
	DL TFC19	DL TFC19	DL TFC10,	UL TFC4,	RB6: 1272	RB6: 2552
			UL_TFC0, UL_TFC10	UL_TFC5,		
			UL IFUIU	UL TFC9, UL TFC10,		
				UL TFC14,		
				UL TFC14,		
				UL TFC19		
NOTE:	Con TC 24	1 400 [40] -	- F000000	toile regarding lee	I COLO OD	1

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB6: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB5 and RB6 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size for RB6 has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit) and the UL RLC SDU size for RB5 has been set equal to the uplink TB size.

18.2.2.52.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual subtest.
- 3. At step 15 the UE shall return
 - for sub-test 1, 2, 3, 4: an RLC SDU on RB6 having the same content as sent by SS; and no data shall be received on RB5.
 - for sub-test 5: two RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6.
 - for sub-test 6: two RLC SDUs on RB5 and one RLC SDU on RB6 having the same content as sent by SS.
 - For sub-test 3: RLC SDU on RB6 having the content equal to the first 952 bits of the test data sent by the SS in downlink:
 - For sub-test 4: RLC SDU on RB6 having the content equal to the first 1272 bits of the test data sent by the SS in downlink;
 - for sub-test 8: an RLC SDU on RB6 having the content equal to the first 952 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS.
 - for sub-test 9: an RLC SDU on RB6 having the content equal to the first 1272 bits of the test data sent by the SS in downlink; an RLC SDU on RB5 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.52.2 Conversational / unknown / UL:64 DL:64 kbps / CS RAB / + Interactive or background / UL:64 DL:128 kbps / PS RAB / Payload 128

18.2.2.52.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.52.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.51 for the uplink payload 128 case.

18.2.2.52.2.3 Method of test

Initial Conditions

 $\frac{\text{The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps}{\text{/ CS RAB (RB5):}}$

	RB5 (Conv. 64 kbps)
Uplink RLC	
TM RLC	
Segmentation indication	<u>FALSE</u>
Transmission RLC discard	
CHOICE SDU	
Discard Mode	
Timer based	
no explicit	
	<u>100ms</u>
Timer discard	
Downlink RLC	
TM RLC	
Segmentation indication	<u>FALSE</u>
NOTE: Timer based discard without explicit sign	nalling is used
in uplink to secure that the UE will be a	ble to return
data for the case when the UE test loop	function will
not deliver all the SDUs in one and the	same TTI .

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (Conv. 64 kbps)	RB6 (I/B 64 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x640</u>	<u>0x144</u>	<u>0x148</u>
	TF1, bits	2x640	<u>1x144</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	<u>N/A</u>	<u>3x144</u>	<u>N/A</u>
	TF3, bits	<u>N/A</u>	<u>3x144</u>	<u>N/A</u>
	TF4, bits	N/A	10x144	N/A

Uplink TFCS:

TFCI	(RB5, RB6, DCCH)
UL_TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF0, TF1, TF0)
UL TFC2	(TF0, TF2, TF0)
UL_TFC3	(TF0, TF3, TF0)
UL TFC4	(TF0, TF4, TF0)
UL TFC5	(TF1, TF0, TF0)
UL TFC6	(TF1, TF1, TF0)
UL TFC7	(TF1, TF2, TF0)
UL_TFC8	(TF1, TF3, TF0)
UL TFC9	(TF1, TF4, TF0)
UL_TFC10	(TF0, TF0, TF1)
UL_TFC11	(TF0, TF1, TF1)
UL TFC12	(TF0, TF2, TF1)
UL_TFC13	(TF0, TF3, TF1)
UL TFC14	(TF0, TF4, TF1)
UL TFC15	(TF1, TF0, TF1)
UL_TFC16	(TF1, TF1, TF1)
UL TFC17	(TF1, TF2, TF1)
UL_TFC18	(TF1, TF3, TF1)
UL_TFC19	(TF1, TF4, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	RB6 (I/B 128 kbps)	<u>DCCH</u>
<u>TFS</u>	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	2x640	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>N/A</u>	2x336	<u>N/A</u>
	TF3, bits	N/A	4x336	N/A
	TF4, bits	N/A	8x336	N/A

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL TFC0	(TF0, TF0, TF0)
DL_TFC1	(TF0, TF1, TF0)
DL_TFC2	(TF0, TF2, TF0)
DL_TFC3	(TF0, TF3, TF0)
DL_TFC4	(TF0, TF4, TF0)
DL TFC5	(TF1, TF0, TF0)
DL_TFC6	(TF1, TF1, TF0)
DL TFC7	(TF1, TF2, TF0)
DL TFC8	(TF1, TF3, TF0)
DL_TFC9	(TF1, TF4, TF0)
DL TFC10	(TF0, TF0, TF1)
DL_TFC11	(TF0, TF1, TF1)
DL_TFC12	(TF0, TF2, TF1)
DL TFC13	(TF0, TF3, TF1)
DL_TFC14	(TF0, TF4, TF1)
DL TFC15	(TF1, TF0, TF1)
DL_TFC16	(TF1, TF1, TF1)
DL TFC17	(TF1, TF2, TF1)
DL TFC18	(TF1, TF3, TF1)
DL_TFC19	(TF1, TF4, TF1)

Sub-tests:

Sub- test	Downlink TFCS	Uplink TFCS	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size	Test data size (bits)
test	Under Test	Under test	testeu	IFCIS	(bits) (note)	(note)
1	DL TFC1, DL_TFC11	UL TFC1, DL_TFC11	DL TFC0, DL TFC10, UL TFC0,	UL TFC0, UL TFC1, UL TFC10,	RB5: 640 RB6: 120	RB5: No data RB6: 312
2	DL TFC2, DL_TFC12	UL TFC2, DL_TFC12	UL TFC10 DL TFC0, DL TFC10, UL TFC0, UL TFC10	UL TFC11 UL TFC0, UL TFC2, UL TFC10, UL TFC12	RB5: 640 RB6: 376	RB5: No data RB6: 632
3	DL_TFC3, DL_TFC13	UL_TFC3, DL_TFC13	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL TFC0, UL TFC3, UL TFC10, UL TFC13	RB5: 640 RB6: 888	RB5: No data RB6: 1272
4	DL_TFC4, DL_TFC14	UL_TFC4, DL_TFC14	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL TFC0, UL TFC4, UL TFC10, UL TFC14	RB5: 640 RB6: 1272	RB5: No data RB6: 2552
<u>5</u>	DL_TFC5, DL_TFC15	UL_TFC5, DL_TFC15	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL TFC0, UL TFC5, UL TFC10, UL TFC15	RB5: 640 RB6: 120	RB5: 2x640 RB6: No data
6	DL TFC6, DL TFC16	UL TFC6, DL_TFC16	DL TFC0, DL TFC10, UL TFC0, UL_TFC10	UL TFC0, UL TFC1, UL TFC5, UL TFC6, UL TFC10, UL TFC11, UL TFC15, UL TFC16	RB5: 640 RB6: 120	RB5: 2x640 RB6: 312
7	DL_TFC7, DL_TFC17	UL_TFC7, DL_TFC17	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL TFC0, UL TFC2, UL TFC5, UL TFC7, UL TFC10, UL TFC12, UL TFC15, UL TFC17	RB5: 640 RB6: 376	RB5: 2x640 RB6: 632
8	DL_TFC8, DL_TFC18	UL_TFC8, DL_TFC18	DL_TFC0, DL TFC10, UL_TFC0, UL_TFC10	UL TFC0, UL TFC3, UL TFC5, UL TFC8, UL TFC10, UL TFC13, UL TFC15, UL TFC18	RB5: 640 RB6: 888	RB5: 2x640 RB6: 1272
9	DL_TFC9, DL_TFC19	UL_TFC9, DL TFC19	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL TFC0, UL TFC4, UL TFC15, UL TFC9, UL TFC10, UL TFC14, UL TFC15, UL TFC19	RB5: 640 RB6: 1272	RB5: 2x640 RB6: 2552

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB6: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB5 and RB6 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size for RB6 has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit) and the UL RLC SDU size for RB5 has been set equal to the uplink TB size.

18.2.2.52.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual subtest.
- 3. At step 15 the UE shall return
 - for sub-test 1: an RLC SDU on RB6 having the content equal to the first 120 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 2: an RLC SDU on RB6 having the content equal to the first 376 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 3: an RLC SDU on RB6 having the content equal to the first 888 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 4: an RLC SDU on RB6 having the same content as sent by SS; and no data shall be received on RB5.
 - for sub-test 5: two RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6.
 - for sub-test 6: two RLC SDUs on RB5 and an RLC SDU on RB6 having the content equal to the first 120 bits of the test data sent by SS in downlink.
 - for sub-test 7: two RLC SDUs on RB5 and an RLC SDU on RB6 having the content equal to the first 376 bits of the test data sent by SS in downlink.
 - for sub-test 8: two RLC SDUs on RB5 and an RLC SDU on RB6 having the content equal to the first 888 bits of the test data sent by SS in downlink.
 - for sub-test 9: two RLC SDUs on RB5 and an RLC SDU on RB6 having the content equal to the first 1272 bits of the test data sent by SS in downlink.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.53 Conversational / unknown / UL:64 DL:64 kbps / CS RAB + Interactive or background / UL:128 DL:128 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
- 18.2.2.53.1 Conversational / unknown / UL:64 DL:64 kbps / CS RAB / + Interactive or background / UL:128 DL:128 kbps / PS RAB / Payload 320
- 18.2.2.53.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.53.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.53 for the uplink payload 320 case.

<u>18.2.2.53.1.3</u> Method of test

Initial Conditions

 $\frac{\text{The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps}{\text{/ CS RAB (RB5):}}$

	<u>RB5</u> (Conv. 64 kbps)
Uplink RLC	
TM RLC	
Segmentation indication	<u>FALSE</u>
Transmission RLC discard	
CHOICE SDU	
Discard Mode	
Timer based	
no explicit	
THE SAPHOR	100ms
Timer_discard	
Downlink RLC	
TM RLC	
Segmentation indication	<u>FALSE</u>
NOTE: Timer based discard without explicit sign	nalling is used
in uplink to secure that the UE will be a	ble to return
data for the case when the UE test loop	function will
not deliver all the SDUs in one and the	

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 (Conv. 64 kbps)	RB6 (I/B 128 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	2x640	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>N/A</u>	<u>2x336</u>	<u>N/A</u>
	TF3, bits	<u>N/A</u>	<u>4x336</u>	<u>N/A</u>
	TF4, bits	N/A	8x336	N/A

Uplink TFCS:

TFCI	(RB5, RB6, DCCH)
UL_TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF0, TF1, TF0)
UL TFC2	(TF0, TF2, TF0)
UL_TFC3	(TF0, TF3, TF0)
UL TFC4	(TF0, TF4, TF0)
UL TFC5	(TF1, TF0, TF0)
UL TFC6	(TF1, TF1, TF0)
UL TFC7	(TF1, TF2, TF0)
UL_TFC8	(TF1, TF3, TF0)
UL TFC9	(TF1, TF4, TF0)
UL_TFC10	(TF0, TF0, TF1)
UL_TFC11	(TF0, TF1, TF1)
UL TFC12	(TF0, TF2, TF1)
UL_TFC13	(TF0, TF3, TF1)
UL TFC14	(TF0, TF4, TF1)
UL TFC15	(TF1, TF0, TF1)
UL_TFC16	(TF1, TF1, TF1)
UL TFC17	(TF1, TF2, TF1)
UL_TFC18	(TF1, TF3, TF1)
UL_TFC19	(TF1, TF4, TF1)

Downlink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	RB6 (I/B 128 kbps)	<u>DCCH</u>
TFS	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	2x640	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>N/A</u>	2x336	<u>N/A</u>
	TF3, bits	N/A	4x336	<u>N/A</u>
	TF4, bits	N/A	8x336	N/A

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL TFC0	(TF0, TF0, TF0)
DL TFC1	(TF0, TF1, TF0)
DL TFC2	(TF0, TF2, TF0)
DL TFC3	(TF0, TF3, TF0)
DL TFC4	(TF0, TF4, TF0)
DL TFC5	(TF1, TF0, TF0)
DL_TFC6	(TF1, TF1, TF0)
DL TFC7	(TF1, TF2, TF0)
DL TFC8	(TF1, TF3, TF0)
DL_TFC9	(TF1, TF4, TF0)
DL TFC10	(TF0, TF0, TF1)
DL_TFC11	(TF0, TF1, TF1)
DL_TFC12	(TF0, TF2, TF1)
DL TFC13	(TF0, TF3, TF1)
DL_TFC14	(TF0, TF4, TF1)
DL TFC15	(TF1, TF0, TF1)
DL_TFC16	(TF1, TF1, TF1)
DL TFC17	(TF1, TF2, TF1)
DL TFC18	(TF1, TF3, TF1)
DL_TFC19	(TF1, TF4, TF1)

Sub-tests:

Sub- test	Downlink TFCS Under	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)
1	Test DL TFC1, DL TFC11	UL TFC1, DL_TFC11	DL TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL TFC0, UL TFC1, UL TFC10, UL TFC11	(note) RB5: 640 RB6: 312	(note) RB5: No data RB6: 312
2	DL TFC2, DL_TFC12	UL TFC2, DL_TFC12	DL TFC0, DL TFC10, UL TFC0, UL TFC10	UL TFC0, UL TFC2, UL TFC10, UL TFC12	RB5: 640 RB6: 632	RB5: No data RB6: 632
3	DL_TFC3, DL_TFC13	UL_TFC3, DL_TFC13	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL_TFC0, UL_TFC3, UL_TFC10, UL_TFC13	RB5: 640 RB6: 1272	RB5: No data RB6: 1272
4	DL_TFC4, DL_TFC14	UL_TFC4, DL_TFC14	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL_TFC0, UL_TFC4, UL_TFC10, UL_TFC14	RB5: 640 RB6: 2552	RB5: No data RB6: 2552
<u>5</u>	DL_TFC5, DL_TFC15	UL_TFC5, DL_TFC15	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL_TFC0, UL_TFC5, UL_TFC10, UL_TFC15	RB5: 640 RB6: 312	RB5: 2x640 RB6: No data
<u>6</u>	DL_TFC16	UL TFC6, DL TFC16	DL TFC0, DL_TFC10, UL TFC0, UL_TFC10	UL TFC0, UL TFC1, UL TFC5, UL TFC6, UL TFC10, UL TFC11, UL TFC15, UL TFC16	RB5: 640 RB6: 312	RB5: 2x640 RB6: 312
7	DL_TFC7, DL_TFC17	UL_TFC7, DL_TFC17	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL_TFC0, UL_TFC2, UL_TFC5, UL_TFC7, UL_TFC10, UL_TFC12, UL_TFC15, UL_TFC17	RB5: 640 RB6: 632	RB5: 2x640 RB6: 632
8	DL_TFC8, DL_TFC18	UL_TFC8, DL_TFC18	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL TFC0, UL TFC3, UL TFC5, UL TFC10, UL TFC13, UL TFC15, UL TFC18	RB5: 640 RB6: 1272	RB5: 2x640 RB6: 1272
<u>9</u>	DL_TFC9, DL_TFC19	UL_TFC9, DL_TFC19	DL_TFC0, DL_TFC10, UL_TFC0, UL_TFC10	UL TFC0, UL TFC4, UL TFC5, UL TFC9, UL TFC10, UL TFC14, UL TFC15, UL TFC19	RB5: 640 RB6: 2552	RB5: 2x640 RB6: 2552

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB6: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB5 and RB6 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size for RB6 has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit) and the UL RLC SDU size for RB5 has been set equal to the uplink TFS size under test.

18.2.2.53.1.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual subtest.
- 3. At step 15 the UE shall return
 - for sub-test 1, 2, 3, 4: an RLC SDU on RB6 having the same content as sent by SS; and no data shall be received on RB5.
 - for sub-test 5: two RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6.
 - for sub-test 6, 7, 8 and 9: two RLC SDUs on RB5 and one RLC SDU on RB6 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.53.2 Conversational / unknown / UL:64 DL:64 kbps / CS RAB / + Interactive or background / UL:128 DL:128 kbps / PS RAB / Payload 128

18.2.2.53.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.53.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.53 for the uplink payload 128 case.

18.2.2.53.2.3 Method of test

Initial Conditions

The following RLC Info parameter values shall be set by the SS for the Conversational / unknown / UL:64 DL:64 kbps / CS RAB (RB5):

	RB5			
	(Conv.			
	<u>64 kbps)</u>			
Uplink RLC				
TM RLC				
Segmentation indication	FALSE			
Transmission RLC discard				
CHOICE SDU				
Discard Mode				
Timer based				
no explicit				
	100ms			
Timer discard				
Downlink RLC				
TM RLC				
Segmentation indication	<u>FALSE</u>			
NOTE: Timer based discard without explicit sign	nalling is used			
in uplink to secure that the UE will be a	ble to return			
data for the case when the UE test loop function will				
not deliver all the SDUs in one and the				

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	<u>RB5</u> (Conv. 64 kbps)	RB6 (I/B 128 kbps)	<u>DCCH</u>
<u>TFS</u>	TF0, bits	<u>0x640</u>	<u>0x144</u>	<u>0x148</u>
	TF1, bits	2x640	<u>1x144</u>	<u>1x148</u>
	TF2, bits	<u>N/A</u>	<u>7x144</u>	<u>N/A</u>
	TF3, bits	<u>N/A</u>	<u>14x144</u>	<u>N/A</u>
	TF4, bits	<u>N/A</u>	20x144	<u>N/A</u>

Uplink TFCS:

TFCI	(RB5, RB6, DCCH)
UL TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF0, TF1, TF0)
UL TFC2	(TF0, TF2, TF0)
UL_TFC3	(TF0, TF3, TF0)
UL_TFC4	(TF0, TF4, TF0)
UL TFC5	(TF1, TF0, TF0)
<u>UL_TFC6</u>	(TF1, TF1, TF0)
UL TFC7	(TF1, TF2, TF0)
UL TFC8	(TF1, TF3, TF0)
<u>UL_TFC9</u>	(TF1, TF4, TF0)
UL TFC10	(TF0, TF0, TF1)
UL_TFC11	(TF0, TF1, TF1)
UL_TFC12	(TF0, TF2, TF1)
UL_TFC13	(TF0, TF3, TF1)
UL_TFC14	(TF0, TF4, TF1)
UL TFC15	(TF1, TF0, TF1)
UL_TFC16	(TF1, TF1, TF1)
UL TFC17	(TF1, TF2, TF1)
UL TFC18	(TF1, TF3, TF1)
UL_TFC19	(TF1, TF4, TF1)

Downlink TFS:

	<u>TFI</u>	RB5 (Conv. 64 kbps)	RB6 (I/B 128 kbps)	DCCH
	TF0, bits	<u>0x640</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	4x640	<u>1x336</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	N/A	2x336	N/A
	TF3, bits	N/A	4x336	N/A
	TF4, bits	N/A	8x336	N/A

Downlink TFCS:

TFCI	(RB5, RB6, DCCH)
DL_TFC0	(TF0, TF0, TF0)
DL_TFC1	(TF0, TF1, TF0)
DL TFC2	(TF0, TF2, TF0)
DL_TFC3	(TF0, TF3, TF0)
DL TFC4	(TF0, TF4, TF0)
DL TFC5	(TF1, TF0, TF0)
DL TFC6	(TF1, TF1, TF0)
DL TFC7	(TF1, TF2, TF0)
DL_TFC8	(TF1, TF3, TF0)
DL TFC9	(TF1, TF4, TF0)
DL_TFC10	(TF0, TF0, TF1)
DL_TFC11	(TF0, TF1, TF1)
DL TFC12	(TF0, TF2, TF1)
DL_TFC13	(TF0, TF3, TF1)
DL TFC14	(TF0, TF4, TF1)
DL TFC15	(TF1, TF0, TF1)
DL_TFC16	(TF1, TF1, TF1)
DL TFC17	(TF1, TF2, TF1)
DL_TFC18	(TF1, TF3, TF1)
DL_TFC19	(TF1, TF4, TF1)

Sub-tests:

Sub-	Downlink	<u>Uplink</u>	Implicitely	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS Under	TFCS Under test	<u>tested</u>	<u>TFCIs</u>	SDU size (bits)	(bits)
	Test	<u>Onder test</u>			(note)	(note)
1	DL TFC1,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 640	RB5: No data
	UL_TFC11	UL_TFC11	DL_TFC10,	UL_TFC1,	RB6: 120	RB6: 312
			UL TFC0,	UL TFC10,		
2	DL_TFC2,	UL_TFC2,	UL TFC10 DL TFC0,	UL TFC11 UL TFC0,	RB5: 640	RB5: No data
_	UL TFC12	UL TFC12	DL_TFC10,	UL TFC2,	RB6: 888	RB6: 632
			UL_TFC0,	UL_TFC10,		
			UL_TFC10	UL_TFC12		
<u>3</u>	DL_TFC3, UL_TFC13	UL_TFC3,	DL_TFC0,	UL_TFC0,	RB5: 640	RB5: No data
	UL IFC13	UL TFC13	DL TFC10, UL TFC0,	UL TFC3, UL TFC10,	RB6: 1784	RB6: 1272
			UL TFC10	UL TFC13		
<u>4</u>	DL TFC4,	UL TFC4,	DL TFC0,	UL TFC0,	RB5: 640	RB5: No data
	UL_TFC14	UL_TFC14	DL_TFC10,	UL_TFC4,	RB6: 2552	RB6: 2552
			UL_TFC0,	UL_TFC10,		
<u>5</u>	DL TFC5,	UL TFC5,	UL TFC10 DL TFC0,	UL TFC14 UL TFC0,	RB5: 640	RB5: 2x640
-	UL TFC15	UL TFC15	DL TFC10,	UL TFC5,	RB6: 120	RB6: No data
			UL TFC0,	UL TFC10,		
			UL_TFC10	UL_TFC15		
<u>6</u>	DL_TFC6,	UL_TFC6.	DL_TFC0,	UL_TFC0,	RB5: 640	RB5: 2x640
	UL_TFC16	UL_TFC16	DL_TFC10, UL_TFC0,	UL_TFC1, UL_TFC5	RB6: 120	RB6: 312
			UL TFC10	UL TFC6,		
				UL TFC10,		
				UL TFC11,		
				UL_TFC15, UL_TFC16		
7	DL TFC7,	UL TFC7,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
-	UL_TFC17	UL_TFC17	DL_TFC10,	UL_TFC2,	RB6: 888	RB6: 632
			UL TFC0,	UL TFC5,		
			UL_TFC10	UL_TFC7, UL_TFC10,		
				UL TFC12,		
				UL TFC15,		
				UL_TFC17		
<u>8</u>	DL TFC8,	UL TFC8, UL TFC18	DL TFC10	UL TFC0, UL TFC3,	RB5: 640	RB5: 2x640
	UL_TFC18	UL_IFC18	DL_TFC10, UL_TFC0,	UL_TFC3, UL_TFC5,	RB6: 1784	RB6: 1272
			UL TFC10	UL TFC8,		
				UL_TFC10,		
				UL TFC13,		
				UL_TFC15, UL_TFC18		
9	DL TFC9,	UL TFC9,	DL TFC0,	UL TFC0,	RB5: 640	RB5: 2x640
	UL TFC19	UL TFC19	DL TFC10,	UL TFC4,	RB6: 2552	RB6: 2552
			UL_TFC0,	UL_TFC5,		
			UL TFC10	UL TFC9, UL TFC10,		
				UL TFC14,		
				UL_TFC15,		
				UL_TFC19		

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB6: Test data size has been set to DL TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the TTI for RB5 and RB6 is the same for both downlink and uplink then UL RLC SDU size has been set to achieve UE to return one SDU per TTI, i.e. the UL RLC SDU size for RB6 has been set equal to the uplink TFS size under test minus 8 bits (size of 7 bit length indicator and expansion bit) and the UL RLC SDU size for RB5 has been set equal to the uplink TFS size under test.

18.2.2.53.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual subtest.
- 3. At step 15 the UE shall return
 - for sub-test 1: an RLC SDU on RB6 having the content equal to the first 120 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 2: an RLC SDU on RB6 having the same content as 1 times plus 256 lsb's of the test data sent by the SS in downlink; and no data shall be received on RB5.
 - for sub-test 3: an RLC SDU on RB6 having the same content as 1 times plus 512 lsb's of the test data sent by the SS in downlink; and no data shall be received on RB5.
 - for sub-test 4: an RLC SDU on RB6 having the same content as sent by SS in downlink; and no data shall be received on RB5..
 - for sub-test 5: two RLC SDUs on RB5 having the same content as sent by SS; and no data shall be received on RB6.
 - for sub-test 6: two RLC SDUs on RB5 having the same content as sent by SS; and an RLC SDU on RB6 having the same content as 1 times plus 120 lsb's of the test data sent by the SS in downlink.
 - for sub-test 6: two RLC SDUs on RB5 having the same content as sent by SS; and an RLC SDU on RB6 having the same content as 1 times plus 256 lsb's of the test data sent by the SS in downlink.
 - for sub-test 6: two RLC SDUs on RB5 having the same content as sent by SS; and an RLC SDU on RB6 having the same content as 1 times plus 512 lsb's of the test data sent by the SS in downlink.
 - for sub-test 9: two RLC SDUs on RB5 and an RLC SDU on RB6 having the same content as sent by SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.54 Void

18.2.2.55 Void

- 18.2.2.56 Interactive or background / UL:8 DL:8 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.56.1 Interactive or background / UL:8 DL:8 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320, TTI 40.

18.2.2.56.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.56.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.56 for the uplink payload 320, TTI 40ms case.

18.2.2.56.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 + RB6 (2x8 kbps)	<u>DCCH</u>
TFS	TF0, bits	<u>0x340</u>	<u>0x148</u>
11-3	TF1, bits	1x340	1x148

Uplink TFCS:

<u>TFCI</u>	(RB5 + RB6, DCCH)
UL_TFC0	(TF0, TF0)
UL TFC1	(TF1, TF0)
UL_TFC2	(TF0, TF1)
UL TFC3	(TF1, TF1)

Downlink TFS:

		RB5 + RB6 (2x8 kbps)	<u>DCCH</u>
TFS	TF0, bits	<u>0x340</u>	<u>0x148</u>
<u>1F3</u>	TF1, bits	1x340	1x148

Downlink TFCS:

TFCI	(RB5+RB6, DCCH)
DL_TFC0	(TF0, TF0)
DL TFC1	(TF1, TF0)
DL_TFC2	(TF0, TF1)
DL TFC3	(TF1, TF1)

Sub-tests:

Sub- test	Downlink TFCS Under Test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits) (note)	Test data size (bits) (note)
1	DL TFC1, DL_TFC3	UL TFC1, UL_TFC3	DL TFC0, DL TFC2, UL_TFC0, UL_TFC2	UL TFC0, UL TFC1, UL TFC2, UL TFC3	RB5: 312 RB6: 312	RB5: 312 RB6: no data
2	DL_TFC1, DL_TFC3	UL_TFC1, UL_TFC3	DL_TFC0, DL_TFC2, UL_TFC0, UL_TFC2	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC3	RB5: 312 RB6: 312	RB5: no data RB6: 312

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB5 and RB6: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.56.1.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return

- for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6.
- for sub-test 2: an RLC SDU on RB6 having the same content as sent by SS; and no data shall be received on RB5.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.56.2 Interactive or background / UL:8 DL:8 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128, TTI 80.

18.2.2.56.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.56.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.56 for the uplink payload 128, TTI 80ms case.

18.2.2.56.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 + RB6 (2x8 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x144</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x144</u>	<u>1x148</u>
	TF2, bits	<u>5x144</u>	<u>N/A</u>

Uplink TFCS:

TFCI	(RB5 + RB6, DCCH)
UL_TFC0	(TF0, TF0)
UL TFC1	(TF1, TF0)
UL_TFC2	(TF2, TF0)
UL TFC3	(TF0, TF1)
UL_TFC4	(TF1, TF1)
<u>UL_TFC5</u>	(TF2, TF1)

Downlink TFS:

		<u>RB5 + RB6</u> (2x8 kbps)	<u>DCCH</u>
TFS	TF0, bits	<u>0x340</u>	<u>0x148</u>
115	TF1, bits	1x340	1x148

Downlink TFCS:

TFCI		(RB5+RB6, DCCH)	
DL_TFC0	(TF0, TF0)		
DL TFC1	(TF1, TF0)		
DL_TFC2	(TF0, TF1)		
DL TFC3	(TF1, TF1)		

Sub-tests:

Sub- test	Downlink TFCS Under	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)
	Test				(note)	(note)
1	DL TFC1, DL_TFC3	UL TFC1, UL_TFC4	DL TFC0, DL TFC2, UL TFC0, UL TFC3	UL TFC0, UL TFC1, UL TFC3, UL TFC4	RB5: 56 RB6: 56	RB5: 312 RB6: no data
2	DL_TFC1, DL_TFC3	UL_TFC2, UL_TFC5	DL_TFC0, DL_TFC2, UL_TFC0, UL_TFC3	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5	RB5: 312 RB6: 312	RB5: 312 RB6: no data
3	DL_TFC1, DL_TFC3	UL_TFC1, UL_TFC4	DL_TFC0, DL_TFC2, UL_TFC0, UL_TFC3	UL TFC0, UL TFC1, UL TFC3, UL TFC4	RB5: 56 RB6: 56	RB5: no data RB6: 312
4	DL_TFC1, DL_TFC3	UL_TFC2, UL_TFC5	DL_TFC0, DL_TFC2, UL_TFC0, UL_TFC3	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5	RB5: 312 RB6: 312	RB5: no data RB6: 312

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB5 and RB6: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit) divided by 2(80ms/40ms).

18.2.2.56.2.4 Test requirements

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the content equal to the first 56 bits of the test data sent by SS in downlink; and no data shall be received on RB6.
 - for sub-test 2: an RLC SDU on RB5 having the same content as sent by SS in downlink; and no data shall be received on RB6.
 - for sub-test 3: an RLC SDU on RB6 having the content equal to the first 56 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 4: an RLC SDU on RB6 having the same content as sent by SS in downlink; and no data shall be received on RB5.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

- 18.2.2.57 Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.57.1 Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320.

18.2.2.57.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.57.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.57 for the uplink payload 320 case.

18.2.2.57.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 + RB6 (64 kbps RAB)	<u>DCCH</u>
	TF0, bits	<u>0x340</u>	<u>0x148</u>
	TF1, bits	<u>1x340</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	2x340	N/A
	TF3, bits	3x340	<u>N/A</u>
	TF4, bits	4x340	N/A

Uplink TFCS:

TFCI	(RB5 + RB6, DCCH)
UL_TFC0	(TF0, TF0)
UL TFC1	(TF1, TF0)
UL TFC2	(TF2, TF0)
UL_TFC3	(TF3, TF0)
UL TFC4	(TF4, TF0)
UL_TFC5	(TF0, TF1)
UL_TFC6	(TF1, TF1)
UL_TFC7	(TF2, TF1)
UL_TFC8	(TF3, TF1)
UL TFC9	(TF4, TF1)

Downlink TFS:

	<u>TFI</u>	RB5 + RB6 (64 kbps RAB)	DCCH
	TF0, bits	<u>0x340</u>	<u>0x148</u>
	TF1, bits	<u>1x340</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	2x340	<u>N/A</u>
	TF3, bits	3x340	N/A
	TF4, bits	4x340	N/A

<u>TFCI</u>	(RB5 + RB6, DCCH)
DL_TFC0	(TF0, TF0)
DL_TFC1	(TF1, TF0)
DL TFC2	(TF2, TF0)
DL TFC3	(TF3, TF0)
DL TFC4	(TF4, TF0)
DL TFC5	(TF0, TF1)
DL TFC6	(TF1, TF1)
DL TFC7	(TF2, TF1)
DL_TFC8	(TF3, TF1)
DL TFC9	(TF4, TF1)

Sub- test	Downlink TFCS Under test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)
				(note 1)	(note 2)	(note 2)
1	DL TFC1 DL TFC6	UL TFC1 DL TFC6	DL TFC0, DL TFC5, UL TFC0, UL TFC5	UL TFC0, UL TFC1, UL TFC5, UL TFC6	RB5: 312 RB6: 312	RB5: 312 RB6: No data
2	DL TFC2 DL_TFC7	UL TFC2 DL_TFC7	DL_TFC0, DL_TFC5, UL_TFC0, UL_TFC5	UL TFC0, UL TFC1, UL TFC2, UL TFC5, UL TFC7	RB5: 632 RB6: 632	RB5: 632 RB6: No data
3	DL_TFC3 DL_TFC8	UL_TFC3 DL_TFC8	DL_TFC0, DL_TFC5, UL_TFC0, UL_TFC5	UL TFC0, UL TFC1, UL TFC3, UL TFC5, UL TFC8	RB5: 952 RB6: 952	RB5: 952 RB6: No data
4	DL_TFC4 DL_TFC9	UL_TFC4 DL TFC9	DL_TFC0, DL_TFC5, UL_TFC0, UL_TFC5	UL TFC0, UL TFC1, UL TFC4, UL TFC5, UL TFC9	RB5: 1272 RB6: 1272	RB5: 1272 RB6: No data
<u>5</u>	DL_TFC9	UL TFC4 DL TFC9	DL TFC0, DL TFC5, UL TFC0, UL TFC5	UL TFC0, UL TFC1, UL TFC4, UL TFC5, UL TFC9	RB5: 1272 RB5: 1272	RB5: No data RB6: 1272

NOTE 1: UL_TFC0, UL_TFC1 and UL_TFC5 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB5 and RB6: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.57.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1 to 4: an RLC SDU on RB5 having the same content as the test data sent by SS in downlink; and no data shall be received on RB6.
 - for sub-test 5: an RLC SDU on RB6 having the same content as the test data sent by SS in downlink; and no data shall be received on RB5..

4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.57.2 Interactive or background / UL:64 DL:64 kbps / PS RAB + Interactive or background / UL:64 DL:64 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128.

18.2.2.57.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.57.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.57 for the uplink payload 128 case.

18.2.2.57.2.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 + RB6 (64 kbps RAB)	<u>DCCH</u>
	TF0, bits	<u>0x148</u>	<u>0x148</u>
	TF1, bits	<u>1x148</u>	<u>1x148</u>
TFS	TF2, bits	3x148	N/A
	TF3, bits	<u>7x148</u>	<u>N/A</u>
	TF4, bits	<u>10x148</u>	N/A

Uplink TFCS:

TFCI	(RB5 + RB6, DCCH)
UL TFC0	(TF0, TF0)
UL_TFC1	(TF1, TF0)
UL TFC2	(TF2, TF0)
UL_TFC3	(TF3, TF0)
UL_TFC4	(TF4, TF0)
UL TFC5	(TF0, TF1)
UL_TFC6	(TF1, TF1)
UL TFC7	(TF2, TF1)
UL_TFC8	(TF3, TF1)
UL TFC9	(TF4, TF1)

Downlink TFS:

	<u>TFI</u>	RB5 + RB6 (64 kbps RAB)	DCCH
	TF0, bits	<u>0x340</u>	<u>0x148</u>
	TF1, bits	<u>1x340</u>	<u>1x148</u>
<u>TFS</u>	TF2, bits	2x340	<u>N/A</u>
	TF3, bits	3x340	N/A
	TF4, bits	4x340	N/A

TFCI	(RB5 + RB6, DCCH)
DL TFC0	(TF0, TF0)
DL_TFC1	(TF1, TF0)
DL TFC2	(TF2, TF0)
DL_TFC3	(TF3, TF0)
DL TFC4	(TF4, TF0)
DL TFC5	(TF0, TF1)
DL TFC6	(TF1, TF1)
DL TFC7	(TF2, TF1)
DL_TFC8	(TF3, TF1)
DL TFC9	(TF4, TF1)

Sub- test	Downlink TFCS Under test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)
				(note 1)	(note 2)	(note 2)
1	DL TFC1 DL TFC6	UL TFC1 DL TFC6	DL TFC0, DL TFC5, UL TFC0, UL TFC5	UL TFC0, UL TFC1, UL TFC5, UL TFC6	RB5: 120 RB6: 120	RB5: 312 RB6: No data
2	DL TFC2 DL_TFC7	UL TFC2 DL_TFC7	DL_TFC0, DL_TFC5, UL_TFC0, UL_TFC5	UL TFC0, UL TFC1, UL TFC2, UL TFC5, UL TFC7	RB5: 376 RB6: 376	RB5: 632 RB6: No data
3	DL_TFC3 DL_TFC8	UL_TFC3 DL_TFC8	DL_TFC0, DL_TFC5, UL_TFC0, UL_TFC5	UL TFC0, UL TFC1, UL TFC3, UL TFC5, UL TFC8	RB5: 888 RB6: 888	RB5: 952 RB6: No data
4	DL_TFC4 DL_TFC9	UL_TFC4 DL TFC9	DL_TFC0, DL_TFC5, UL_TFC0, UL_TFC5	UL_TFC0, UL_TFC1, UL_TFC4, UL_TFC5, UL_TFC9	RB5: 1272 RB6: 1272	RB5: 1272 RB6: No data
<u>5</u>	DL TFC4 DL TFC9	UL TFC4 DL TFC9	DL TFC0, DL TFC5, UL TFC0, UL TFC5	UL TFC0, UL TFC1, UL TFC4, UL TFC5, UL TFC9	RB5: 1272 RB5: 1272	RB5: No data RB6: 1272

UL_TFC0, UL_TFC1 and UL_TFC5 are part of minimum set of TFCIs.

See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs. NOTE 2:

RB5 and RB6: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.57.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the content equal to the first 120 bits of the test data sent by SS in downlink; and no data shall be received on RB6.
 - for sub-test 2: an RLC SDU on RB5 having the content equal to the first 376 bits of the test data sent by SS in downlink; and no data shall be received on RB6.

- for sub-test 3: an RLC SDU on RB5 having the content equal to the first 888 bits of the test data sent by SS in downlink; and no data shall be received on RB6.
- for sub-test 4: an RLC SDU on RB5 having the same content as the test data sent by SS in downlink; and no data shall be received on RB6.
- for sub-test 5; an RLC SDU on RB6 having the same content as the test data sent by SS in downlink; and no data shall be received on RB5...
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.58 Streaming / unknown / UL:16 DL:64 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH.
- 18.2.2.58.1 Streaming / unknown / UL:16 DL:64 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320, TTI 40ms.

18.2.2.58.1.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.58.1.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.58 for the uplink payload 320, and TTI 40ms case.

18.2.2.58.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 uplink (16 kbps, 20 ms TTI)	RB6 (8 kbps)	<u>DCCH</u>
TFS	TF0, bits	<u>0x336</u>	<u>0x336</u>	<u>0x148</u>
115	TF1, bits	<u>1x336</u>	<u>1x336</u>	<u>1x148</u>

Uplink TFCS:

<u>TFCI</u>	(RB5, RB6, DCCH)
UL TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0)
UL TFC2	(TF0, TF1, TF0)
UL_TFC3	(TF1, TF1, TF0)
UL_TFC4	(TF0, TF0, TF1)
UL_TFC5	(TF1, TF0, TF1)
UL_TFC6	(TF0, TF1, TF1)
UL TFC7	(TF1, TF1, TF1)

	<u>TFI</u>	RB5 (64 kbps, 40 ms TTI)	<u>RB6</u> (8 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x656</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x656</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	<u>2x656</u>	<u>N/A</u>	N/A
	TF3, bits	<u>4x656</u>	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, DCCH)
DL TFC0	(TF0, TF0, TF0)
DL_TFC1	(TF1, TF0, TF0)
DL TFC2	(TF2, TF0, TF0)
DL_TFC3	(TF3, TF0, TF0)
DL TFC4	(TF0, TF1, TF0)
DL_TFC5	(TF1, TF1, TF0)
DL_TFC6	(TF2, TF1, TF0)
DL TFC7	(TF3, TF1, TF0)
DL_TFC8	(TF0, TF0, TF1)
DL TFC9	(TF1, TF0, TF1)
DL TFC10	(TF2, TF0, TF1)
DL_TFC11	(TF3, TF0, TF1)
DL TFC12	(TF0, TF1, TF1)
DL_TFC13	(TF1, TF1, TF1)
DL_TFC14	(TF2, TF1, TF1)
DL_TFC15	(TF3, TF1, TF1)

Sub- test	Downlink TFCS Under	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (bits)	Test data size (bits)
1	Test DL TFC1, DL TFC9	UL TFC1, UL_TFC5	DL TFC0, DL TFC8, UL TFC0, UL TFC4	(note 1) UL TFC0, UL TFC1, UL TFC2, UL TFC4, UL_TFC5	(note 2) RB5: 632 RB6: 312	(note 2) RB5: 632 RB6: no data
2	DL_TFC2, DL_TFC10	UL_TFC1, UL_TFC5	DL_TFC0, DL_TFC8, UL_TFC0, UL_TFC4	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC4, UL_TFC5	RB5: 632 RB6: 312	RB5: 1272 RB6: no data
<u>3</u>	DL TFC3, DL TFC11	UL TFC1, UL TFC5	DL TFC0, DL_TFC8, UL TFC0, UL_TFC4	UL TFC0, UL TFC1, UL TFC2, UL TFC4, UL TFC5	RB5: 632 RB6: 312	RB5: 2552 RB6: no data
4	DL TFC4, DL TFC12	UL TFC2, UL TFC6	DL TFC0, DL TFC8, UL TFC0, UL_TFC4	UL TFC0, UL TFC1, UL TFC2, UL TFC4, UL TFC6	RB5: 632 RB6: 312	RB5: no data RB6: 312
<u>5</u>	DL_TFC5, DL_TFC13	UL TFC3, UL_TFC7	DL TFC0, DL TFC8, UL TFC0, UL TFC4	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6	RB5: 632 RB6: 312	RB5: 632 RB6: 312
<u>6</u>	DL_TFC6, DL_TFC14	UL_TFC3, UL_TFC7	DL_TFC0, DL_TFC8, UL_TFC0, UL_TFC4	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6	RB5: 632 RB6: 312	RB5: 1272 RB6: 312
7	DL_TFC7, DL_TFC15	UL_TFC3, UL_TFC7	DL_TFC0, DL_TFC8, UL_TFC0, UL_TFC4	UL TFC0, UL TFC1, UL TFC2, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC7	RB5: 632 RB6: 312	RB5: 2552 RB6: 312

NOTE 1: UL TFC0, UL TFC1 and UL TFC4 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB5: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). As the uplink TTI for RB5 is 20 ms while the downlink TTI is 40 ms then, to achieve continous data transmission in uplink the size of the uplink RLC SDU has been set such that it will be transmitted over two subsequent TTIs, i.e. UL RLC SDU size has been set to two times the payload size of the UL TF under test minus 8 bits (the size of a 7 bit length indicator and expansion bit).

RB6: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the uplink TFS size minus 8 bits (the size of a 7 bit length indicator and expansion bit).

18.2.2.58.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by the SS; and no data shall be received on RB6.
 - for sub-test 2 and 3: an RLC SDU on RB5 having the content equal to the first 632 bits of the test data sent by SS in downlink; and no data shall be received on RB6.
 - for sub-test 4: RLC SDUs on RB6 having the same content as sent by the SS; and no data shall be received on RB5.
 - for sub-test 5: RLC SDUs on RB5 and RB6 having the same content as sent by the SS.
 - for sub-test 6 and 7: RLC SDUs on RB5 having the content equal to the first 632 bits of the test data sent by the SS in downlink; and RLC SDUs on RB6 having the same content as sent by the SS.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.
- 18.2.2.58.2 Streaming / unknown / UL:16 DL:64 kbps / PS RAB + Interactive or background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 128, TTI 80ms.

18.2.2.58.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.58.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.58 for the uplink payload 128, and TTI 80ms case.

<u>18.2.2.58.2.3</u> Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 uplink (16 kbps, 20 ms TTI)	<u>RB6</u> (8 kbps)	<u>DCCH</u>
	TF0, bits	<u>0x336</u>	<u>0x144</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x336</u>	<u>1x144</u>	<u>1x148</u>
	TF2, bits	N/A	5x144	N/A

Uplink TFCS:

TFCI	(RB5, RB6, DCCH)
UL_TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0)
UL TFC2	(TF0, TF1, TF0)
UL_TFC3	(TF0, TF2, TF0)
UL TFC4	(TF1, TF1, TF0)
UL TFC5	(TF1, TF2, TF0)
UL TFC6	(TF0, TF0, TF1)
UL TFC7	(TF1, TF0, TF1)
UL_TFC8	(TF0, TF1, TF1)
UL TFC9	(TF0, TF2, TF1)
UL_TFC10	(TF1, TF1, TF1)
UL_TFC11	(TF1, TF2, TF1)

Downlink TFS:

	<u>TFI</u>	RB5 (64 kbps, 40 ms TTI)	<u>RB6</u> (8 kbps)	<u>DCCH</u>
<u>TFS</u>	TF0, bits	<u>0x656</u>	<u>0x336</u>	<u>0x148</u>
	TF1, bits	<u>1x656</u>	<u>1x336</u>	<u>1x148</u>
	TF2, bits	2x656	<u>N/A</u>	<u>N/A</u>
	TF3, bits	<u>4x656</u>	<u>N/A</u>	<u>N/A</u>

TFCI	(RB5, RB6, DCCH)
DL TFC0	(TF0, TF0, TF0)
DL_TFC1	(TF1, TF0, TF0)
DL_TFC2	(TF2, TF0, TF0)
DL TFC3	(TF3, TF0, TF0)
DL_TFC4	(TF0, TF1, TF0)
DL TFC5	(TF1, TF1, TF0)
DL TFC6	(TF2, TF1, TF0)
DL TFC7	(TF3, TF1, TF0)
DL TFC8	(TF0, TF0, TF1)
DL_TFC9	(TF1, TF0, TF1)
DL TFC10	(TF2, TF0, TF1)
DL_TFC11	(TF3, TF0, TF1)
DL_TFC12	(TF0, TF1, TF1)
DL TFC13	(TF1, TF1, TF1)
DL_TFC14	(TF2, TF1, TF1)
DL TFC15	(TF3, TF1, TF1)

Sub-	Downlink	Uplink	Implicitely tested	Restricted UL	UL RLC	Test data size
<u>test</u>	TFCS Under	TFCS Under test		TFCIs	SDU size (bits)	(bits)
	Test			(note 1)	(note 2)	(note 2)
<u>1</u>	DL TFC1, DL TFC9	UL TFC1, UL TFC7	DL TFC0, DL TFC8,	UL TFC0, UL TFC1,	RB5: 632	RB5: 632
	DL_IFC9	UL_IFC/	UL TFC0,	UL_TFC1,	RB6: 56	RB6: no data
			UL TFC6	UL TFC6,		
				UL_TFC7,		
2	DL TFC2,	UL TFC1,	DL TFC0,	UL TFC8 UL TFC0,	RB5: 632	RB5: 1272
2	DL_TFC2,	UL TFC7	DL_TFC0, DL_TFC8,	UL TFC1,	RB6: 56	RB6: no data
			UL TFC0,	UL TFC2,		
			UL_TFC6	UL_TFC6,		
				UL TFC7, UL TFC8		
<u>3</u>	DL TFC3,	UL TFC1,	DL TFC0,	UL TFC0,	RB5: 632	RB5: 2552
-	DL_TFC11	UL_TFC7	DL TFC8,	UL TFC1,	RB6: 56	RB6: no data
			UL TFCO,	UL TFC2,		
			UL_TFC6	UL_TFC6, UL_TFC7,		
				UL TFC8		
<u>4</u>	DL TFC4,	UL TFC2,	DL TFC0,	UL TFC0,	RB5: 632	RB5: no data
	DL_TFC12	UL_TFC8	DL_TFC8,	UL_TFC1,	RB6: 56	RB6: 312
			UL TFC0, UL TFC6	UL TFC2, UL TFC6,		
			<u> </u>	UL TFC7,		
				UL TFC8		
<u>5</u>	DL_TFC4, DL_TFC12	UL_TFC3, UL_TFC9	DL_TFC0, DL_TFC8,	UL_TFC0, UL_TFC1,	RB5: 632 RB6: 312	RB5: no data RB6: 312
	DL_IFC12	<u>UL_IFC9</u>	UL TFC0,	UL TFC2,	KB0. 312	KD0. 312
			UL_TFC6	UL TFC3,		
				UL TFC6,		
				UL_TFC7, UL_TFC8,		
				UL TFC9		
<u>6</u>	DL TFC5,	UL TFC4,	DL TFC0,	UL TFC0,	RB5: 632	RB5: 632
	DL_TFC13	UL_TFC10	DL_TFC8, UL_TFC0,	UL_TFC1, UL_TFC2,	RB6: 56	RB6: 312
			UL TFC6	UL TFC4,		
				UL TFC6,		
				UL TFC7,		
				UL_TFC8, UL_TFC10		
<u>7</u>	DL TFC6,	UL TFC5,	DL TFC0,	UL TFC0,	RB5: 632	RB5: 1272
-	DL TFC14	UL TFC11	DL_TFC8,	UL TFC1,	RB6: 312	RB6: 312
			UL_TFC0, UL_TFC6	UL_TFC2, UL_TFC5,		
			UL IFUU	UL TFC5,		
				UL TFC7,		
				UL_TFC8,		
8	DL TFC7,	UL TFC5,	DL TFC0,	UL_TFC11 UL_TFC0,	RB5: 632	RB5: 2552
_	DL TFC15	UL TFC11	DL TFC8,	UL TFC1,	RB6: 312	RB6: 312
			UL TFC0,	UL_TFC2,		
			UL TFC6	UL TFC5, UL TFC6,		
				UL TFC7,		
				UL TFC8,		
				UL_TFC11		

Sub-	Downlink	<u>Uplink</u>	Implicitely tested	Restricted UL	UL RLC	Test data size	
test	<u>TFCS</u>	<u>TFCS</u>		<u>TFCIs</u>	SDU size	(bits)	
	<u>Under</u>	Under test			(bits)		
	<u>Test</u>			(note 1)	(note 2)	(note 2)	
NOTE	1: UL TFC0,	UL TFC1, UL	TFC2, UL TFC6, UL	TFC7, and UL TFC	28 are part of mi	nimum set of	
	TFCIs.						
NOTE	2: See TS 34	.109 [10] claus	se 5.3.2.6.2 for details r	regarding loopback of	of RLC SDUs.		
	RB5: Test	data size has	been set to the payload	I size of the DL TF υ	ınder test minus	8 bits (size of 7	
	bit length i	ndicator and e	xpansion bit). As the up	olink TTI for RB5 is 2	20 ms while the	downlink TTI is	
	40 ms ther	n, to achieve c	ontinous data transmiss	sion in uplink the siz	e of the uplink R	RLC SDU has	
	been set s	uch that it will	be transmitted over two	subsequent TTIs, i	.e. UL RLC SDL	J size has been	
	set to two	times the paylo	oad size of the UL TF u	nder test minus 8 bi	ts (the size of a	7 bit length	
	indicator and expansion bit).						
	RB6: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7						
	bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the uplink TFS						
	size minus	8 bits (the siz	e of a 7 bit length indica	ator and expansion l	bit) divided by 2	(80ms TTI /	
	40ms TTI)						

18.2.2.58.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by the SS; and no data shall be received on RB6.
 - for sub-test 2 and 3: an RLC SDU on RB5 having the content equal to the first 632 bits of the test data sent by SS in downlink; and no data shall be received on RB6.
 - for sub-test 4: two RLC SDUs on RB6 having the content equal to the first 56 bits of the test data sent by SS in downlink; and no data shall be received on RB5.
 - for sub-test 5: two RLC SDUs on RB6 having the same content as sent by the SS; and no data shall be received on RB5.
 - for sub-test 6: an RLC SDU on RB5 having the same content as sent by the SS; and two RLC SDUs on RB6 having the content equal to the first 56 bits of the test data sent by SS in downlink.
 - for sub-test 7 and 8: an RLC SDU on RB5 having the content equal to the first 632 bits of the test data sent by the SS in downlink; and an RLC SDU on RB6 having the same content as sent by the SS.
- 5. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.59 Reserved for future use

18.2.2.60 Reserved for future use

- 18.2.2.61 Conversational / unknown / UL:8 DL:8 kbps / PS RAB + Interactive or Background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH
- 18.2.2.61.1 Conversational / unknown / UL:8 DL:8 kbps / PS RAB + Interactive or Background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Payload 320, TTI 40ms
- 18.2.2.61.1.1 Conformance requirement

See 18.2.2.4.1.

<u>18.2.2.61.1.2</u> Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.56 for the uplink payload 320, and TTI 40ms case.

18.2.2.61.1.3 Method of test

See 18.2.1.2 for test procedure.

Uplink TFS:

	<u>TFI</u>	RB5 Conversational	RB6 Inter or Back	<u>DCCH</u>
TEC	TF0, bits	<u>0x328</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x328</u>	<u>1x336</u>	<u>1x148</u>

Uplink TFCS:

TFCI	(8 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)
UL TFC0	(TF0, TF0, TF0)
UL TFC1	(TF0, TF1, TF0)
UL TFC2	(TF1, TF0, TF0)
UL TFC3	(TF1, TF1, TF0)
UL TFC4	(TF0, TF0, TF1)
UL TFC5	(TF0, TF1, TF1)
UL TFC6	(TF1, TF0, TF1)
UL_TFC7	(TF1, TF1, TF1)

Downlink TFS:

	<u>TFI</u>	RB5 Conversational	RB6 Inter or Back	DCCH
TFS	TF0, bits	<u>0x328</u>	<u>0x336</u>	<u>0x148</u>
11 3	TF1, bits	<u>1x328</u>	<u>1x336</u>	<u>1x148</u>

TFCI	(8 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)
DL TFC0	(TF0, TF0, TF0)
DL_TFC1	(TF0, TF1, TF0)
DL_TFC2	(TF1, TF0, TF0)
DL TFC3	(TF1, TF1, TF0)
DL_TFC4	(TF0, TF0, TF1)
DL TFC5	(TF0, TF1, TF1)
DL TFC6	(TF1, TF0, TF1)
DL TFC7	(TF1, TF1, TF1)

Sub- test	Downlink TFCS Under Test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs (note 1)	UL RLC SDU size (bits) (note 2)	Test data size (bits) (note 2)
1	DL_TFC1 DL_TFC5,	UL_TFC1 UL_TFC5	DL_TFC0, DL_TFC4, UL_TFC0, UL_TFC4,	UL_TFC0, UL_TFC1, UL_TFC4, UL_TFC5	RB5: 312 RB6: 312	RB5: 312 RB6: no data
2	DL TFC2 DL_TFC6,	UL TFC2 UL TFC6	DL TFC0, DL TFC4, UL TFC0, UL TFC4,	UL TFC0, UL TFC2, UL TFC4, UL TFC6	RB5: 312 RB6: 312	RB5: no data RB6: 312
3	DL TFC3 DL TFC7.	UL_TFC7	DL TFC0, DL TFC4, UL_TFC0, UL_TFC4.	UL TFC0, UL TFC1, UL TFC3, UL TFC4, UL TFC5, UL TFC6, UL TFC6,	RB5: 312 RB6: 312	RB5: 312 RB6: 312

NOTE 1: UL TFC0, UL TFC1, UL TFC2, UL TFC6, UL TFC7, and UL TFC8 are part of minimum set of TFC1s.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB5 and RB6: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.61.1.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6.
 - for sub-test 2: an RLC SDU on RB6; and no data shall be received on RB5.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

18.2.2.61.2 Conversational / unknown / UL:8 DL:8 kbps / PS RAB + Interactive or Background / UL:8 DL:8 kbps / PS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH / Pavload 128, TTI 80ms

18.2.2.61.2.1 Conformance requirement

See 18.2.2.4.1.

18.2.2.61.2.2 Test purpose

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.3.4.1.56 for the uplink payload 128, and TTI 80ms case.

18.2.2.61.2.3 Method of test

See 18.2.1.2 for test procedure.

<u>Uplink TFS:</u>

	<u>TFI</u>	RB5 Conversational	RB6 Inter or Back	<u>DCCH</u>
	TF0, bits	<u>0x328</u>	<u>0x144</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	<u>1x328</u>	<u>1x144</u>	<u>1x148</u>
	TF2, bits	<u>N/A</u>	<u>5x144</u>	<u>N/A</u>

Uplink TFCS:

TFCI	(RB5, RB6, DCCH)
UL_TFC0	(TF0, TF0, TF0)
UL_TFC1	(TF1, TF0, TF0)
UL TFC2	(TF0, TF1, TF0)
UL_TFC3	(TF0, TF2, TF0)
UL TFC4	(TF1, TF1, TF0)
UL TFC5	(TF1, TF2, TF0)
UL_TFC6	(TF0, TF0, TF1)
UL TFC7	(TF1, TF0, TF1)
UL_TFC8	(TF0, TF1, TF1)
UL_TFC9	(TF0, TF2, TF1)
UL_TFC10	(TF1, TF1, TF1)
UL_TFC11	(TF1, TF2, TF1)

Downlink TFS:

	<u>TFI</u>	RB5 Conversational	RB6 Inter or Back	<u>DCCH</u>
TEC	TF0, bits	<u>0x328</u>	<u>0x336</u>	<u>0x148</u>
<u>TFS</u>	TF1, bits	1x328	<u>1x336</u>	<u>1x148</u>

TFCI	(8 kbps Conversational RAB, 8 kbps I/B RAB, DCCH)
DL_TFC0	(TF0, TF0, TF0)
DL_TFC1	(TF0, TF1, TF0)
DL TFC2	(TF1, TF0, TF0)
DL_TFC3	(TF1, TF1, TF0)
DL TFC4	(TF0, TF0, TF1)
DL TFC5	(TF0, TF1, TF1)
DL_TFC6	(TF1, TF0, TF1)
DL TFC7	(TF1, TF1, TF1)

Sub- test	Downlink TFCS Under Test	Uplink TFCS Under test	Implicitely tested	Restricted UL TFCIs (note 1)	UL RLC SDU size (bits) (note 2)	Test data size (bits) (note 2)
1	DL_TFC1 DL TFC5,	UL_TFC1 UL_TFC7	DL_TFC0, DL_TFC4, UL_TFC0, UL_TFC6,	UL TFC0, UL TFC1, UL TFC2, UL TFC6, UL TFC7, UL TFC8	RB5: 312 RB6: 56	RB5: 312 RB6: no data
2	DL_TFC2 DL_TFC6,	UL_TFC2 UL_TFC8	DL_TFC0, DL_TFC4, UL_TFC0, UL_TFC6,	UL TFC0, UL TFC1, UL TFC2, UL TFC6, UL TFC7, UL TFC8	RB5: 312 RB6: 56	RB5: no data RB6: 312
3	DL TFC2 DL TFC6,	UL_TFC3 UL_TFC9	DL_TFC0, DL_TFC4, UL_TFC0, UL_TFC6,	UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC6, UL_TFC7, UL_TFC8, UL_TFC9	RB5: 312 RB6: 312	RB5: no data RB6: 312
4	DL_TFC3 DL_TFC7,	UL TFC4 UL_TFC1 0	DL TFC0, DL TFC4, UL_TFC0, UL_TFC6,	UL TFC0, UL TFC1, UL TFC2, UL TFC4, UL TFC6, UL TFC7, UL TFC8, UL TFC10	RB5: 312 RB6: 56	RB5: 312 RB6: 312
5	DL TFC3 DL TFC7,	UL TFC5 UL TFC1 1	DL TFC0, DL TFC4, UL TFC0, UL TFC6,	UL TFC0, UL TFC1, UL TFC2, UL TFC5, UL TFC6, UL TFC7, UL TFC8, UL TFC11	RB5: 312 RB6: 312	RB5: 312 RB6: 312

NOTE 1: UL_TFC0, UL_TFC1, UL_TFC2, UL_TFC6, UL_TFC7, and UL_TFC8 are part of minimum set of TFCIs.

NOTE 2: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.

RB5 and RB6: Test data size has been set to the payload size of the DL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit). The UL RLC SDU size has been set equal to the size of the payload size of the UL TF under test minus 8 bits (the size of 7 bit length indicator and expansion bit).

18.2.2.61.2.4 Test requirements

See 18.2.1.2 for definition of step 10 and step 15.

- 1. At step 10 the UE shall send RADIO BEARER SETUP COMPLETE.
- 2. At step 15a and step 15b the UE transmitted transport format shall be within the set of restricted TFCIs as specified for the actual sub-test.
- 3. At step 15a and step 15b the UE shall return
 - for sub-test 1: an RLC SDU on RB5 having the same content as sent by SS; and no data shall be received on RB6.
 - for sub-test 2: two RLC SDUs on RB6 having the content equal to the first 56 bits of the test data sent by SS in downlink; and no data shall be received on RB5.

- for sub-test 3: two RLC SDUs on RB6 having the same content as sent by the SS; and no data shall be received on RB5.
- for sub-test 4: an RLC SDU on RB5 having the same content as sent by the SS; and two RLC SDUs on RB6 having the content equal to the first 56 bits of the test data sent by SS in downlink.
- for sub-test 5: an RLC SDU on RB5 having the same content as sent by the SS; and two RLC SDUs on RB6 having the same content as sent by SS in downlink.
- 4. At step 15b the UE shall send at least one MEASUREMENT REPORT message.

3GPP TSG-R5 Meeting #27 Bath, England, 25th April – 29th April 2005

Tdoc **≋**R5-050957

	CHANGE REQUEST	⊢orm-v7
3	34.123-1 CR 1240	
For <u>HELP</u> on	using this form, see bottom of this page or look at the pop-up text over the $rak{R}$ symbol	ols.
Proposed change	affects: UICC apps ■ ME X Radio Access Network Core Network	ork
Title:	Add TDD to RRC test case 8.4.1.33	
Source:	3GPP TSG RAN WG5 (Testing)	
Work item code:	TEI Date: 選 12/04/2005	
Category:	F Use one of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900. Release: Release: Release: Release: R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)	es:
Reason for chang	e: # TDD not in this test	
Summary of chan	ge: 1. Add TDD levels table on RF power 2. TDD added to MEASUREMENT CONTROL (Step 4)	
Consequences if not approved:	★ TC might fail a conformant UE.	
Clauses affected:	器 8.4.1.33	
Other specs affected:	Y N	
Other comments:	≋	

How to create CRs using this form:

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

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

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

8.4.1.33 Measurement Control and Report: Inter-RAT measurement, event 3a

8.4.1.33.1 Definition

8.4.1.33.2 Conformance requirement

- 1. When this event is ordered by UTRAN in a MEASUREMENT CONTROL message the UE shall send a report when the estimated quality of the currently used frequency is below the value of the IE "Threshold own system" and the hysteresis and time to trigger conditions are fulfilled and the estimated quality of the other system is above the value of the IE "Threshold other system" and the hysteresis and time to trigger conditions are fulfilled.
- 2. If the IE "DPCH Compressed Mode Status Info" is present, [in the MEASUREMENT CONTROL message]:
 - after the time indicated by IE "TGPS reconfiguration CFN" has elapsed:
 - activate the pattern sequence stored in the variable TGPS_IDENTITY corresponding to each IE "TGPSI" for which the "TGPS status flag" is set to "activate" at the time indicated by IE "TGCFN"; and
 - begin the inter-frequency and/or inter-RAT measurements corresponding to the pattern sequence measurement purpose of each activated pattern sequence;
 - if the values of IE "TGPS reconfiguration CFN" and IE "TGCFN" are equal:
 - start the concerned pattern sequence immediately at that CFN;
 - not alter pattern sequences stored in variable TGPS IDENTITY, but not identitifed in IE "TGPSI"
- 3. The UE shall perform GSM RSSI measurements in the gaps of compressed mode pattern sequence specified for GSM RSSI measurement purpose. The UE shall perform Initial BSIC identification in compressed mode pattern sequence specified for Initial BSIC identification measurement purpose. The UE shall be able to measure the "Observed time difference to GSM cell" during a compressed mode pattern sequence configured for this purpose. The UE shall perform BSIC re-confirmation in compressed mode pattern sequence specified for BSIC re-confirmation measurement purpose.
- 4. If the IE "Inter-RAT measurement quantity" is received in a MEASUREMENT CONTROL message and CHOICE system is GSM, the UE shall:
 - if IE "BSIC verification required" is set to "required", for cells that match any of the BCCH ARFCN and BSIC combinations in the list of inter-RAT cells that the UE has received in IE "Inter-RAT cell info list", and that has a "verified" BSIC:
 - report measurement quantities according to IE "inter-RAT reporting quantity" taking into account the restrictions defined in TS 25.331 clause 8.6.7.6;
 - trigger inter-RAT events according to IE "inter-RAT measurement reporting criteria"; and
 - perform event evaluation for event-triggered reporting after BSIC has been verified for a GSM cell
 - indicate non-verified BSIC for a GSM cell in the "Inter-RAT measured results list" IE
- 5. The UE shall include measured results in MEASUREMENT REPORT as specified in the IE "Inter-RAT reporting quantity".
- 6. If IE "Observed time difference to GSM cell Reporting indicator" is set to "TRUE" [, the UE shall]:
 - include optional IE "Observed time difference to GSM cell" with the value set to the time difference to that GSM cell for the GSM cells that have a BSIC that is "verified", and that match any of the BCCH ARFCN and BSIC combinations in the list of inter-RAT cells that the UE has received in IE "Inter-RAT cell info list".
 - if IE "GSM Carrier RSSI" is set to "TRUE"[, the UE shall]:

- include optional IE "GSM Carrier RSSI" with a value set to the measured RXLEV to that GSM cell in IE "Inter-RAT measured results list".
- if the BSIC of reported GSM cell is "verified"[, the UE shall]:
 - set the CHOICE BSIC to "Verified BSIC" and IE "inter-RAT cell id" to the value that GSM cell had in the IE "Inter-RAT cell info list":
- 7. If the IE "Reporting Cell Status" is received, the UE shall set the IE "Measured Results" in MEASUREMENT REPORT as follows.
 - the maximum number of the IE "Cell Measured Results" to be included in the IE "Measured Results" is the number specified in "Reporting Cell Status".

Reference

3GPP TS 25.331 clauses 8.4.1.3, 8.6.7.5, 8.6.7.6, 8.6.7.9, 14.3.1.1, 14.3.2.1, 14.3.2.2, 14.3.2.3.

8.4.1.33.3 Test Purpose

- 1. To confirm that the UE starts compressed mode and inter-RAT measurements when so required by the network in a MEASUREMEN CONTROL message.
- 2. To confirm that the UE sends MEASUREMENT REPORT message if event 3a is configured, if the quality of the currently used UTRAN frequency is below a given threshold and the estimated quality of the other system is above a certain threshold.
- 3. To confirm that the hysteresis and time to trigger behaviours for event 3a are correctly implemented.
- 4. To confirm that the UE verifies the BSIC of the cell triggering the event if so required by UTRAN and if the proper compressed mode patterns have been configured in the UE by UTRAN.
- 5. To confirm that the content of the MEASUREMENT REPORT sent by the UE is according to what was required by UTRAN.

NOTE: Test purpose 1 verifies conformance requirement 1 and 2.

NOTE: Test purpose 2 and 3 verifies conformance requirement 1.

NOTE: Test purpose 4 verifies conformance requirement 2, 3 and 4.

NOTE: Test purpose 5 verifies conformance requirement 4, 5, 6 and 7.

8.4.1.33.4 Method of test

Initial Condition

System simulator: 1 UTRAN FDD cell and 3 GSM cells. The initial configurations of the 3 cells in the SS shall follow the values indicated in the column marked T0. The table is found in "Test procedure".

UE: CELL DCH state, state 6-9 as specified in clause 7.4 of TS 34.108.

Related ICS/IXIT statements

- Compressed mode required ves/no

Table 8.4.1.33.4-1

		Para	neter	Unit			Cell 1 (GSM)					Cell 2 (GSM)					Cell 3 (GSM)
		T0	T1	T2	T3	T4	T0	T1	T2	T3	T4	T0	T1	T2	T3	T4	
Test Channel	#		G	SSM Ch	.1			G	SM Ch	.2			G	SM Ch	.3		
BCCH ARFCN	#			1					7					39			
CELL identity	#			0					1					2			
BSIC	#			BSIC 1					BSIC 2	<u> </u>				BSIC 3			
RF Signal Level	dB m	-85	-85	-70	-76	-70	-85	-85	-85	-84	-84	-90	-90	-90	-90	-90	

Table 8.4.1.33.4-2

Parameter	Unit			Cell 1 (UTRA)		
		T0	T1	T2	T3	T4
UTRA RF Channel Number				Ch.1		
CPICH Ec (FDD)	dBm /3.84 Mhz	-60	-80	-80	-80	-60
P-CCPCH (TDD)	<u>dBm</u>	<u>-60</u>	-80	<u>-80</u>	-80	<u>-60</u>

The two tables above illustrate the downlink power to be applied for the two cells at various instants of the test execution. Column marked "T0" denotes the initial conditions, while columns marked "T1", "T2", "T3" and "T4" indicate the values to be applied subsequently.

The UE is initially in CELL_DCH, state 6-9 as specified in clause 7.4 of TS 34.108. UTRA cell 1 is the only cell in the active set of the UE. If the UE requires compressed mode (refer ICS/IXIT), the SS sends a PHYSICAL CHANNEL RECONFIGURATION message to the UE to configure the compressed mode pattern sequence parameters to the UE. Three compressed mode patterns are configured, according to the message specified below. When the PHYSICAL CHANNEL RECONFIGURATION COMPLETE is received from the UE, the SS sends a MEASUREMENT CONTROL message to the UE, to set up inter-RAT measurements. Event 3a is set up in this message, and if the UE requires compressed mode (refer ICS/IXIT), compressed mode is activated.

At instant T1, the CPICH Ec drops as described in table 8.4.1.33.4-2.

At instant T2, the RF signal for GSM cell 1 increases, and crosses the threshold for the other system defined for event 3a.

After reception of the MEASUREMENT REPORT message, at instant T3, the RF signal strength for GSM cell 2 increases but remains below the threshold for the other system for event 3a. During that time, the RF signal strength for GSM cell 1 decreases, but remains above the releasing condition for event 3a.

At intant T4, the RF signal strength for GSM cell 1 increases above the threshold for the other system for event 3a+hysteresis. SS calls for generic procedure C.3 to check that UE is in CELL DCH state.

Expected Sequence

Step	Direction	Message	Comment
1	UE SS		The UE is brought to the CELL_DCH state in the cell 1. If the UE does not require compressed mode (refer ICS/IXIT), then goto step 4.
2	←	PHYSICAL CHANNEL RECONFIGURATION	Compressed mode pattern sequence parameters are loaded to UE.
3	\rightarrow	PHYSICAL CHANNEL RECONFIGURATION COMPLETE	
4	+	MEASUREMENT CONTROL	SS configures event 3a in the UE. If the UE requires compressed mode (refer ICS/IXIT), compressed mode is started.
5			SS re-adjusts the downlink transmission power settings according to columns "T1" in tables 8.4.1.33.4-1 and 8.4.1.33.4-2.
6			SS waits for approximately 10 seconds and verifies that no MEASUREMENT REPORT messages are detected on uplink DCCH.
7			SS re-adjusts the downlink transmission power settings according to columns "T2" in tables 8.4.1.33.4-1 and 8.4.1.33.4-2.
8	→	MEASUREMENT REPORT	After about 2s, the UE sends a MEASUREMENT REPORT to SS triggered by event 3a.
9			SS re-adjusts the downlink transmission power settings according to columns "T3" in tables 8.4.1.33.4-1 and 8.4.1.33.4-2.
10			SS waits for approximately 10 seconds and verifies that no MEASUREMENT REPORT messages are detected on uplink DCCH.
11			SS re-adjusts the downlink transmission power settings according to columns "T4" in tables 8.4.1.33.4-1 and 8.4.1.33.4-2.
12			SS waits for approximately 10 seconds and verifies that no MEASUREMENT REPORT messages are detected on uplink DCCH.
13	←→	CALL C.3	If the test result of C.3 indicates that UE is in CELL_DCH state, the test passes, otherwise it fails.

Specific Message Content

PHYSICAL CHANNEL RECONFIGURATION (Step 2)

Use the same message sub-type in Annex A titled "Speech in CS", with the following exceptions:

Information Element
- DPCH compressed mode info - TGPSI - TGPS Status Flag - TGCFN - Transmission gap pattern sequence configuration parameters - TGMP - TGPRC - TGSN - TGL1 - TGL2 - TGD - TGD - TGPL1 - TGPL1 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method 1 Deactivate Not present Not present Infinity 1 7 7 7 7 7 7 7 7 Not present undefined 12 Not present Undefined 12 Not present Not present Undefined 12 Not present Not present Undefined UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
- TGPSI - TGPS Status Flag - TGCFN - Transmission gap pattern sequence configuration parameters - TGMP - TGPRC - TGSN - TGL1 - TGL2 - TGD - TGPL1 - TGPL1 - TGPL2 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method 1 Deactivate Not present Not present Infinity 4 7 7 Not present undefined 12 Not present Mode 1 Mode 0 UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
- TGPS Status Flag - TGCFN - Transmission gap pattern sequence configuration parameters - TGMP - TGPRC - TGSN - TGL1 - TGL2 - TGD - TGPL1 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method Deactivate Not present Infinity 4 7 Not present undefined 12 Not present Mode 1 Mode 0 UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
- TGCFN - Transmission gap pattern sequence configuration parameters - TGMP - TGPRC - TGSN - TGL1 - TGL2 - TGD - TGPL1 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method Not present GSM Carrier RSSI Measurement Infinity 4 7 Not present Infinity 4 7 Not present Infinity 4 Not present Infinity A UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
- Transmission gap pattern sequence configuration parameters - TGMP - TGPRC - TGSN - TGL1 - TGL2 - TGD - TGPL1 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method - Tomus American Sequence GSM Carrier RSSI Measurement Infinity 4 7 Not present undefined 12 Not present Mode 1 Mode 0 UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
configuration parameters - TGMP - TGPRC - TGSN - TGL1 - TGL2 - TGD - TGPL1 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method GSM Carrier RSSI Measurement Infinity 4 7 Not present undefined 12 Not present Mode 1 Not present Mode 1 UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
- TGMP - TGPRC - TGSN - TGL1 - TGL2 - TGD - TGPL1 - TGPL1 - TGPL2 - TGPL1 - TGPL2 - TGPL1 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method GSM Carrier RSSI Measurement Infinity 4 7 Not present undefined 12 Not present Mode 1 Mode 0 UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
- TGPRC - TGSN - TGL1 - TGL2 - TGD - TGPL1 - TGPL1 - TGPL1 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method Infinity 4 - Value of the present of the pre
- TGSN - TGL1 - TGL2 - TGD - TGPL1 - TGPL1 - TGPL2 - TGPL2 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method 4 7 7 Not present undefined 12 12 Not present Mode 1 12 Not present Mode 1 UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
- TGL1 - TGL2 - TGD - TGPL1 - TGPL1 - TGPL2 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method 7 Not present undefined 12 Not present Mode 1 12 Not present UL2 - Not present Mode 1 UL2 - TGPL2 - Not present UL2 - Not present Mode 1 - Downlink compressed mode method 7 Not present UL2 - TGPL2 - Not present UL2 - Not present UL2 - Not present UL2 - Not present UL2 - Not present UL2 - Not present UL2 - SP
- TGL2 - TGD - TGPL1 - TGPL1 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method Not present undefined 12 Not present 10 Not present 12 Not present Solution 15 Not present
- TGD - TGPL1 - TGPL2 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method - TGPL2 - Not present Mode 1 - Mode 0 UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
- TGPL1 - TGPL2 - RPP - ITP CHOICE UL/DL Mode - Downlink compressed mode method 12 Not present Mode 1 Mode 0 UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
- TGPL2 - RPP - ITP - CHOICE UL/DL Mode - Downlink compressed mode method - TGPL2 - Not present Mode 1 Mode 0 UL&DL or UL-only or DL-only (depends on UE's Measurement capability) SF/2
- RPP - ITP CHOICE UL/DL Mode CHOICE UL/DL Mode UL&DL or UL-only or DL-only (depends on UE's Measurement capability) - Downlink compressed mode method SF/2
CHOICE UL/DL Mode UL&DL or UL-only or DL-only (depends on UE's Measurement capability) - Downlink compressed mode method SF/2
- Downlink compressed mode method Measurement capability) SF/2
- Downlink compressed mode method SF/2
- Uplink compressed mode method SF/2
- Downlink frame type A
- DeltaSIR1 1.0
- DeltaSIRAfter1 0.5
- DeltaSIR2 Not Present
- DeltaSIR2After2 Not Present
- N identify abort Not Present
- T Reconfirm abort Not Present - TGPSI 2
-
- TGPS Status Flag Deactivate - TGCFN Not present
- Transmission gap pattern sequence
configuration parameters
- TGMP GSM BSIC identification
- TGPRC Infinity
- TGSN 4
- TGL1 7
- TGL2 Not present
- TGD undefined
- TGPL1 8
- TGPL2 Not present
- RPP Mode 1
- ITP Mode 0
CHOICE UL/DL Mode UL&DL or UL-only or DL-only (depends on UE's
Measurement capability)
- Downlink compressed mode method SF/2
- Uplink compressed mode method SF/2
- Downlink frame type A
- DeltaSIR1 1.0 - DeltaSIRAfter1 0.5
- DeltaSIRAIter i U.S - DeltaSIR2 Not Present
- DeltaSIR2 Not Present Not Present
- Ni dentify abort 66
- T Reconfirm abort Not Present
- TGPSI 3
- TGPS Status Flag Deactivate
- TGCFN Not present
- Transmission gap pattern sequence
configuration parameters
- TGMP GSM BSIC re-confirmation
- TGPRC Infinity

- TGSN - TGL1 - TGL2 Not present - TGD undefined - TGPL1 - TGPL2 Not present - RPP Mode 1 - ITP Mode 0 UL&DL or UL-only or DL-only (depends on UE's Measurement capability) CHOICE UL/DL Mode - Downlink compressed mode method - Uplink compressed mode method SF/2 SF/2 - Downlink frame type Α - DeltaSIR1 1.0 - DeltaSIRAfter1 0.5 - DeltaSIR2 Not Present DeltaSIR2After2N identify abort Not Present Not Present - T Reconfirm abort 5 s

MEASUREMENT CONTROL (Step 4) (FDD)

Information Element	Value/remark
Measurement Identity	3
Measurement Command	Setup
Measurement Reporting Mode	
- Measurement Reporting Transfer Mode	Acknowledged Mode RLC
- Periodic Reporting / Event Trigger Reporting Mode	Event triggered
Additional measurements list	Not Present
CHOICE measurement type	
- inter-RAT measurement	
- inter-RAT measurement object list	
CHOICE Inter-RAT Cell Removal	Remove all inter-RAT cells
-Remove all inter-RAT cells	(No Data)
New inter-RAT cells (1 to <maxcellmeas>)</maxcellmeas>	MaxCellMeas=3
- inter-RAT cell id	0
CHOICE Radio Access Technology	GSM
- Cell individual offset	0
- Cell selection and re-selection info	Not present
- BSIC	BSIC1
- Band indicator	DCS 1800 band used
- BCCH ARFCN	1
- inter-RAT cell id	1
CHOICE Radio Access Technology	GSM
- Cell individual offset	0
- Cell selection and re-selection info	Not present
- BSIC	BSIC2
- Band indicator	DCS 1800 band used
- BCCH ARFCN	7
- inter-RAT cell id	2
CHOICE Radio Access Technology	GSM
- Cell individual offset	0
- Cell selection and re-selection info	Not present
- BSIC	BSIC3
- Band indicator	DCS 1800 band used
- BCCH ARFCN	39
- Cell for measurement	Not present
 inter-RAT measurement quantity 	
 Measurement quantity for UTRAN quality 	
estimate	
 Intra-frequency measurement quantity 	
- Filter coefficient	0
- CHOICE mode	FDD
 Measurement quantity 	CPICH RSCP
CHOICE system	GSM
 Measurement quantity 	GSM carrier RSSI
- Filter coefficient	0

- BSIC verification required	required
 inter-RAT reporting quantity 	
CHOICE system	GSM
 Observed time difference to to GSM cell 	FALSE
reporting indicator	
- GSM carrier RSSI reporting indicator	TRUE
CHOICE report criteria	
- Inter-RAT measurements reporting criteria	
- Parameters required for each event	
(1 to <maxmeasevent>)</maxmeasevent>	<maxmeasevent>=1</maxmeasevent>
- Inter-RAT event identity	3a
- Threshold own system	-66
- W	0
- Threshold other system	-80
- Hysteresis	5
- Time to Trigger	640 ms
- Reporting cell status	Report cells within active set or within virtual active set
i toporting con etatae	or of the other RAT
- Maximum number of reported cells	2 cells
Physical channel information elements	2 55115
- DPCH compressed mode status info	If the UE requires compressed mode (refer ICS/IXIT),
Di ori compressed mode status inio	this IE is present and contains the IEs as follows. If the
	UE does not require compressed mode (refer ICS/IXIT),
	this IE is not present.
- TGPS reconfiguration CFN	(Current CFN + (250 – TTI/10msec))mod 256
- Transmission gap pattern sequence (1 to	<pre> (Current CFN + (250 = FT)/TolliseC)/illou 250 <pre></pre></pre>
- Transmission gap pattern sequence (1 to	\Wax 1 GF3/-3
- TGPSI	4
1	Activate
- TGPS status flag - TGCFN	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
- TGPSI	(Current CFN + (252 – TTI/10msec))mod 256
- TGPSi - TGPS status flag	Activate
- TGCFN	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
- TGPSI	(Current CFN + (254 – TTI/10msec))mod 256
	1
- TGPS status flag	Activate
- TGCFN	(Current CFN + (250 – TTI/10msec))mod 256

MEASUREMENT CONTROL (Step 4) (TDD)

Information Element	<u>Value/remark</u>
Measurement Identity	<u>3</u>
Measurement Command	<u>Setup</u>
Measurement Reporting Mode	
- Measurement Reporting Transfer Mode	Acknowledged Mode RLC
 Periodic Reporting / Event Trigger Reporting Mode 	Event triggered
Additional measurements list	Not Present
CHOICE measurement type	
- inter-RAT measurement	
 inter-RAT measurement object list 	
CHOICE Inter-RAT Cell Removal	Remove all inter-RAT cells
-Remove all inter-RAT cells	(No Data)
New inter-RAT cells (1 to <maxcellmeas>)</maxcellmeas>	MaxCellMeas=3
- inter-RAT cell id	<u>0</u>
CHOICE Radio Access Technology	<u>GSM</u>
 Cell individual offset 	<u>0</u>
- Cell selection and re-selection info	Not present
- BSIC	BSIC1
- Band indicator	DCS 1800 band used
- BCCH ARFCN	<u>1</u>
- inter-RAT cell id	<u>1</u>
CHOICE Radio Access Technology	<u>GSM</u>
 Cell individual offset 	<u>0</u>
 Cell selection and re-selection info 	Not present
<u>- BSIC</u>	BSIC2
- Band indicator	DCS 1800 band used
- BCCH ARFCN	$\left \frac{7}{2} \right $
- inter-RAT cell id	<u>2</u>

CHOICE Radio Access Technology	GSM
- Cell individual offset	0
- Cell selection and re-selection info	Not present
- BSIC	BSIC3
- Band indicator	DCS 1800 band used
- BCCH ARFCN	39
- Cell for measurement	Not present
- inter-RAT measurement quantity	
 Measurement quantity for UTRAN quality 	
estimate	
- Intra-frequency measurement quantity	
- Filter coefficient	0
- CHOICE mode	O TDD
- Measurement quantity	CCPCH RSCP
CHOICE system	GSM
- Measurement quantity	GSM carrier RSSI
- Filter coefficient	0
- BSIC verification required	required
- inter-RAT reporting quantity	
CHOICE system	GSM
- Observed time difference to to GSM cell	FALSE
reporting indicator	
- GSM carrier RSSI reporting indicator	TRUE
CHOICE report criteria	
- Inter-RAT measurements reporting criteria	
- Parameters required for each event	
(1 to <maxmeasevent>)</maxmeasevent>	<maxmeasevent>=1</maxmeasevent>
- Inter-RAT event identity	3a
- Threshold own system	<u>3a</u> - <u>66</u>
- W	0
- Threshold other system	<u>0</u> - <u>80</u>
- Hysteresis	<u>5</u>
- Time to Trigger	
- Reporting cell status	Report cells within active set or within virtual active set
	or of the other RAT
- Maximum number of reported cells	2 cells
Physical channel information elements	

MEASUREMENT REPORT (Step 8)

Information Element	Value/remark
Measurement identity	Check to see if set to 3
Measured Results	
- CHOICE measurement	Check to see if set to "Inter-RAT measured results list"
 Inter-RAT measured result list 	
- CHOICE system	GSM
- Measured GSM cells	Check that measurement results for two GSM cells are included
- GSM carrier RSSI	Check that measurement result is reasonable. RXLEV is mapped to a value between 0 and 63. The RSSI bits are numbered b0 to b5, where b0 is the least significant bit. When mapping the RXLEV value to the RSSI bit string, the first/ leftmost bit of the bit string contains the most significant bit.
CHOICE BSIC	Check it is set to verified BSIC
- inter-RAT cell id	Check that it is set to 0.
- Observed time difference to GSM cell	Check that not present
- GSM carrier RSSI CHOICE BSIC	Check that measurement result is reasonable Verified BSIC
- inter-RAT cell id	Check that is set to 1
- Observed time difference to GSM cell	Check that not present
Measured results on RACH	Check that not present
Additional Measured results	Check that not present
Event results	Check that the İE is included
- CHOICE event result	Check that this is set to inter-RAT measurement event results
- Inter-RAT event identity	Check that this is set to 3a
- Cells to report (1 to <maxcellmeas>)</maxcellmeas>	Check that <maxcellmeas> is set to 1</maxcellmeas>
- CHOICE BSIC	Check that this is set to verified BSIC
- Inter-RAT cell id	Check that this is set to 0.

8.4.1.33.5 Test requirement

The UE shall not send any measurement report between instants T1 and T2.

Event 3a shall be triggered in the UE (i.e.the transmission of the MEASUREMENT REPORT) after instant T2.

Between instants T2 and T3, no MEASUREMENT REPORT message shall be received from the UE (since the hysteresis condition for triggering event 3a is not fulfilled).

No MEASUREMENT REPORT message shall be received from the UE after instant T4 (since the signal strength for cell 1 has not dropped under Threshold for event 3a-hysteresis).

	CHANG	GE REQUE	ST	CR-Form-v7
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For <u>HELP</u> on using	this form, see bottom of	this page or look	at the pop-up tex	t over the 麗 symbols.
Proposed change affect	cts: │ UICC apps <mark></mark> 無	ME <mark>X</mark> Ra	dio Access Netwo	ork Core Network
Title: 第 Cor	rrection to Package 4 RR	C test case 8.4.1	.26 to change TD	D content
Source: # 30	GPP TSG RAN WG5 (Te	sting)		
Work item code:	ĒΙ		Date:	14/04/2005
Det be f	e one of the following categor F (correction) A (corresponds to a corre B (addition of feature), C (functional modification) D (editorial modification) tailed explanations of the abfound in 3GPP TR 21.900.	ection in an earlier r of feature) nove categories can	2 elease) R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	f the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5) (Release 6)
	A at various time instar initial conditions, while downlink power to be a below the threshold set loose Sync with SS. As per Section 14.2.1.4 event 2d is as below: $Q_{Used} \leq T_{Usedd} - H_{2d}/2$ In case of 8.4.1.26, T_{Us} value less than -71 db settings for Cell A at 'T reliable.	nts of the test execolumns marked upplied for cell A in the toy Measurement of 25.331 the executed is given as -7 should be able to 1' should be chart	cution. Column m "T1" are to be app n columns marked t Control message quation need to be 70 db and H _{2d} is g trigger Event 2d. nged to –75 db to	e and can cause UE to e satisfied to trigger iven as 1 db, hence any
Summary of change:	Following change is ma 1) Downlink power to -75db.			irked 'T1' are changed to
Consequences if # not approved:	Test case may fail a co	onformant UE.		

Clauses affected:

8.4.1.26.4

Other specs affected:	H Z	Y N X X X	Other core specifications Test specifications O&M Specifications	$ \mathfrak{H} $	
Other comments:	æ	Affe	cts R99, Rel4 and Rel5 UEs		

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 >>

8.4.1.26 Measurement Control and Report: Measurement for events 2D and 2F

8.4.1.26.1 Definition

8.4.1.26.2 Conformance requirement

When event 2d is configured in the UE within a measurement, the UE shall:

1> if equation 1 below has been fulfilled for the used frequency during the time "Time to trigger":

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

3> set the variable TRIGGERED_2D_EVENT to TRUE;

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

4> set in "inter-frequency event results": "inter-frequency event identity" to "2d" and no IE "Inter-frequency cells";

4> set the IE "measured results" and the IE "additional measured results" according to TS 25.331 subclause 8.4.2.

1> if the variable TRIGGERED_2D_EVENT is set to TRUE and if equation 2 is fulfilled for the used frequency:

2> set the variable TRIGGERED 2D EVENT to FALSE.

Triggering condition:

Equation 1:

$$Q_{Used} \leq T_{Used 2d} - H_{2d} / 2$$

The variables in the formula are defined as follows:

 Q_{Used} is the quality estimate of the used frequency.

 $T_{Used\ 2d}$ is the absolute threshold that applies for the used frequency and event 2d.

 H_{2d} is the hysteresis parameter for the event 2d.

Leaving triggered state condition:

Equation 2:

$$Q_{Used} > T_{Used} > d + H_{2d} / 2$$

The variables in the formula are defined as follows:

 Q_{Used} is the quality estimate of the used frequency.

 $T_{Used\ 2d}$ is the absolute threshold that applies for the used frequency and event 2d.

 H_{2d} is the hysteresis parameter for the event 2d.

. . .

When event 2f is configured in the UE within a measurement, the UE shall:

1> if equation 1 below has been fulfilled for the used frequency during the time "Time to trigger":

2> if the variable TRIGGERED_2F_EVENT is set to FALSE:

3> set the variable TRIGGERED_2F_EVENT to TRUE;

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

- 4> set in "inter-frequency event results": "inter-frequency event identity" to "2f", and no IE "Inter-frequency cells";
- 4> set the IE "measured results" and the IE "additional measured results" according to TS 25.331 subclause 8.4.2.

1> if the variable TRIGGERED 2F EVENT is set to TRUE and if equation 2 is fulfilled for the used frequency:

2> set the variable TRIGGERED 2F EVENT to FALSE.

Triggering condition:

Equation 1:

$$Q_{Used} \geq T_{Used} + H_{2f} / 2$$

The variables in the formula are defined as follows:

 Q_{Used} is the quality estimate of the used frequency.

 $T_{Used\ 2f}$ is the absolute threshold that applies for the used frequency and event 2f.

 H_{2f} is the hysteresis parameter for the event 2f.

Leaving triggered state condition:

Equation 2:

$$Q_{Used}$$
 < T_{Used} $_{2 f}$ - $H_{2 f}$ / 2

The variables in the formula are defined as follows:

 Q_{Used} is the quality estimate of the used frequency.

 $T_{Used\ 2f}$ is the absolute threshold that applies for the used frequency and event 2f.

 H_{2f} is the hysteresis parameter for the event 2f.

Reference

3GPP TS 25.331 clause 14.2.1.4, 14.2.1.6

8.4.1.26.3 Test Purpose

- 1. To confirm that the UE sends MEASUREMENT REPORT message when event 2F is configured and estimated quality of the currently used frequency is above the value of the IE "Threshold used frequency".
- 2. To confirm that the UE sends MEASUREMENT REPORT message when event 2D is configured and estimated quality of the currently used frequency is below the value of the IE "Threshold used frequency".

8.4.1.26.4 Method of test

Initial Condition

System Simulator: 1 cells – The initial configurations of the cell in the SS shall follow the values indicated in the column marked "T0" in table 8.4.1.26-1. The table is found in "Test Procedure" clause.

UE: CS-DCCH+DTCH_DCH (State 6-9) or PS-DCCH+DTCH_DCH (State 6-10) in cell 1 as specified in clause 7.4 of TS 34.108, depending on the CN domain supported by the UE.

Test Procedure

Table 8.4.1.26-1 illustrates the downlink power to be applied for the cell at various time instants of the test execution. Column marked "T0" denotes the initial conditions, while columns marked "T1" is to be applied subsequently. The exact instant on which these values shall be applied is described in the text in this clause.

Table 8.4.1.26-1

Parameter	Unit	Cell 1		
		T0	T1	
UTRA RF Channel Number		Ch	ı. 1	
CPICH Ec (FDD)	dBm /3.8 4 MHz	-55	-75	
P-CCPCH RSCP(TDD)	dBm	-60	- 80 75	

The UE is initially in CELL_DCH state of cell 1. SS commands the UE to perform Inter-frequency measurements and report event 2D and/or event 2F by sending MEASUREMENT CONTROL message. Since quality estimate of used frequency is above threshold, the UE sends MEASUREMENT REPORT message indicating event 2F. SS then configures itself according to the values in columns "T1" shown above. Quality estimate for used frequency is now below threshold, the UE sends MEASUREMENT REPORT message to report it. SS calls for generic procedure C.3 to check that UE is in CELL_DCH state.

Expected Sequence

Step	Direction		Direction		Message	Comment
	UE	SS				
1			Void			
2			Void			
3			Void			
4	perform Inter-frequen		SS commands the UE to perform Inter-frequency measurements and to report event 2D and 2F.			
5	\rightarrow		MEASUREMENT REPORT	The UE shall report event 2F		
6				SS re-adjusts the downlink transmission power settings according to columns "T1" in table 8.4.1.26-1.		
7	-)	MEASUREMENT REPORT	The UE shall report event 2D.		
8	←	→	CALL C.3	If the test result of C.3 indicates that UE is in CELL_DCH state, the test passes, otherwise it fails.		

Specific Message Contents

All messages indicated below shall use the same content as described in default message content, with the following exceptions:

Information Element	Value/remark				
Measurement identity	10				
Measurement command	Setup				
- CHOICE measurement type	Inter-frequency measurement				
- Inter-frequency cell info list					
- Inter-frequency cell removal	Not present				
- New inter-frequency info list					
- Inter-frequency cell id	Any valid identity other than that of Cell 1				
- Frequency Information	Any valid frequency other than that of Cell 1				
- Cell info					
- Cell individual offset	Not present				
- Reference time difference to cell	Not present				
- CHOICE mode	FDD				
- Read SFN Indicator	FALSE				
- Primary CPICH Info					
- Primary scrambling code	Any value of Primary scrambling code				
- Primary CPICH TX power	Not present				
- TX Diversity Indicator	FALSE				
- Cell for measurement	Not present				
- Inter-frequency measurement quantity					
- Filter Coefficient	4				
- Frequency quality estimate quantity	CPICH RSCP				
- Inter-frequency reporting quantity	EM 05				
- UTRAN Carrier RSSI	FALSE				
- Frequency quality estimate	FALSE				
 Non frequency related quantities 					
- Cell synchronisation information reporting	FALSE				
indicator	171202				
- Cell identity reporting indicator	FALSE				
- CPICH Ec/No reporting indicator	FALSE				
- CPICH RSCP reporting indicator	FALSE				
- Pathloss reporting indicator	FALSE				
- Measurement validity	CELL_DCH state				
- UE autonomous update mode	Not present				
- CHOICE report criteria	Inter-frequency measurement reporting criteria				
- Parameters required for each events	. , ,				
- Inter-frequency event identity	2D				
- Used frequency threshold	-70 dBm				
- Used frequency W	0				
- Hysteresis	1 dB				
- Time to trigger	5000 mSec				
- Reporting cell status	Not present				
- Inter-frequency event identity	2F				
- Used frequency threshold	-70 dBm				
- Used frequency W	0				
- Hysteresis	1 dB				
- Time to trigger	5000 mSec				
- Reporting cell status	Not present				
Measurement reporting mode					
 Measurement reporting transfer mode 	Unacknowledged Mode RLC				
- Periodic reporting / Event trigger reporting mode	Event trigger				
Additional measurement list	Not present				
DPCH compressed mode status info	Not present				

Information Element	Value/remark
Measurement identity	10
Measurement command	Setup
Measurement reporting mode	
 Measurement reporting transfer mode 	Unacknowledged Mode RLC
 Periodic reporting / Event trigger reporting mode 	Event trigger
Additional measurement list	Not present
- CHOICE measurement type	Inter-frequency measurement
 Inter-frequency measurement objects list 	
- Inter-frequency cell removal	Not present
 New inter-frequency info list 	
- Inter-frequency cell id	Any valid identity other than that of Cell 1
- Frequency Information	Any valid frequency other than that of Cell 1
- Cell info	
- Cell individual offset	0
 Reference time difference to cell 	Not present
- Read SFN Indicator	FALSE
- CHOICE mode	TDD
- Primary CCPCH Info	
- CHOICE Mode	TDD
- CHOICE TDD option	1.28 Mcps TDD
- TSTD indicator	FALSE
- Cell parameters ID	Any value of Cell parameters ID
- SCTD indicator	FALSE
- Primary CCPCH TX power	Not present
- Timeslot list	Not present
- Cell for measurement	Not present
 Inter-frequency measurement quantity 	
- CHOICE reporting criteria	Inter-frequency reporting criteria
- Filter Coefficient	4
- CHOICE mode	TDD
 Measurement quantity for frequency quality 	P-CCPCH RSCP
estimate	
 Inter-frequency reporting quantity 	
- UTRAN Carrier RSSI	FALSE
- Frequency quality estimate	FALSE
 Non frequency related quantities 	
 Cell synchronisation information reporting 	FALSE
indicator	
 Cell identity reporting indicator 	FALSE
- CHOICE mode	TDD
 Timeslot ISCP reporting indicator 	FALSE
 Proposed TGSN reporting indicator 	FALSE
 Primary CCPCH RSCP reporting indicator 	FALSE
 Pathloss reporting indicator 	FALSE
- Measurement validity	CELL_DCH state
- CHOICE report criteria	Inter-frequency measurement reporting criteria
 Parameters required for each events 	
 Inter-frequency event identity 	2D
- Threshold used frequency	-70 dBm
- W used frequency	0
- Hysteresis	1 dB
- Time to trigger	5000 mSec
- Reporting cell status	Report cells within active set
- Maximum number of reported cells	2
 Inter-frequency event identity 	2F
- Threshold used frequency	-70 dBm
- W used frequency	0
- Hysteresis	1 dB
- Time to trigger	5000 mSec
- Reporting cell status	Report cells within active set
 Maximum number of reported cells 	2
DPCH compressed mode status info	Not present

Information Element	Value/remark	Release
Measurement identity	10	
Measurement command	Setup	
Measurement reporting mode		
- Measurement reporting transfer	Unacknowledged Mode RLC	
mode	Front triange	
- Periodic reporting / Event trigger	Event trigger	
reporting mode	Not present	
Additional measurement list - CHOICE measurement type	Not present Inter-frequency measurement	
- Inter-frequency measurement	inter-nequency measurement	
objects list		
- Inter-frequency cell removal	Not present	
- New inter-frequency info list	, , , , , , , , , , , , , , , , , , ,	
- Inter-frequency cell id	Any valid identity other than that of Cell 1	
- Frequency Information	Any valid frequency other than that of Cell 1	
- Cell info		
- Cell individual offset	0	
- Reference time difference to	Not present	
cell Pood SEN Indicator	FALSE	
 Read SFN Indicator CHOICE mode 	TDD	
- Primary CCPCH Info		
- CHOICE Mode	TDD	
- CHOICE TDD option	3.84 Mcps TDD	REL-4
- Cell parameters ID	Any value of Cell parameters ID	
- SCTD indicator	FALSE	
 Primary CCPCH TX power 	Not present	
- Timeslot list	Not present	
- Cell for measurement	Not present	
- Inter-frequency measurement		
quantity - CHOICE reporting criteria	Inter-frequency reporting criteria	
- Filter Coefficient	4	
- CHOICE mode	TDD	
- Measurement quantity for	P-CCPCH RSCP	
frequency quality estimate		
- Inter-frequency reporting quantity		
- UTRAN Carrier RSSI	FALSE	
- Frequency quality estimate	FALSE	
 Non frequency related quantities Cell synchronisation information 	FALSE	
reporting indicator	IALUE	
- Cell identity reporting indicator	FALSE	
- CHOICE mode	TDD	
- Timeslot ISCP reporting	FALSE	
indicator		
- Proposed TGSN reporting	FALSE	
indicator	FALSE	
- Primary CCPCH RSCP	FALSE	
reporting indicator - Pathloss reporting indicator	FALSE	
- Pathloss reporting indicator - Measurement validity	CELL DCH state	
- CHOICE report criteria	Inter-frequency measurement reporting criteria	
- Parameters required for each	and the state of t	
events		
- Inter-frequency event identity	2D	
- Threshold used frequency	-70 dBm	
- W used frequency	0	
- Hysteresis	1 dB	
Time to triggerReporting cell status	5000 mSec Report cells within active set	
- Maximum number of reported	2	
cells	_	
- Inter-frequency event identity	2F	
 Threshold used frequency 	-70 dBm	
- W used frequency	0	
- Hysteresis	1 dB	

	- Time to trigger - Reporting cell status - Maximum number of reported	5000 mSec Report cells within active set 2	
l	cells DPCH compressed mode status info	Not present	

MEASUREMENT REPORT (Step 5) (FDD)

Information Element	Value/remark
Measurement identity	Check to see if set to 10
Measured results	Check to see if it is absent
Measured results on RACH	Check to see if it is absent
Additional measured results	Check to see if it is absent
Event results	Inter-frequency measurement event results,
 Inter-frequency event identity 	2F

MEASUREMENT REPORT (Step 5)(TDD)

Information Element	Value/remark
Measurement identity	Check to see if set to 10
Measured results	Check to see if it is absent
Measured results on RACH	Check to see if it is absent
Additional measured results	Check to see if it is absent
Event results	
- CHOICE event results	Check to see if set to Inter-frequency measurement
	event results,
- Inter-frequency event identity	Check to see if set to 2F

MEASUREMENT REPORT (Step 7) (FDD)

Information Element	Value/remark
Measurement identity	Check to see if set to 10
Measured results	Check to see if it is absent
Measured results on RACH	Check to see if it is absent
Additional measured results	Check to see if it is absent
Event results	Inter-frequency measurement event results,
- Inter-frequency event identity	2D

MEASUREMENT REPORT (Step 7)(TDD)

Information Element	Value/remark
Measurement identity	Check to see if set to 10
Measured results	Check to see if it is absent
Measured results on RACH	Check to see if it is absent
Additional measured results	Check to see if it is absent
Event results	
- CHOICE event results	Check to see if set to Inter-frequency measurement event results,
- Inter-frequency event identity	Check to see if set to 2D

8.4.1.26.5 Test Requirement

- 1. In step 5 the UE shall send MEASUREMENT REPORT message indicating event 2F.
- 2. In step 7 the UE shall send MEASUREMENT REPORT message indicating event 2D.

<< END OF MODIFIED SECTION >>

	CHANGE REQUEST
3	4.123-1 CR 1242
For <u>HELP</u> on us	sing this form, see bottom of this page or look at the pop-up text over the 🕱 symbols.
Proposed change a	MEX Radio Access Network Core Network
Title: 第	Correction RRC test case 8.4.1.7A (TDD)
Source:	3GPP TSG RAN WG5 (Testing)
Work item code: 選	TEI Date: 8/04/2005 18 18 18 18 18 18 18 1
Category: ૠ	Release:
Reason for change	: 1. The specific message contents of Cell Update message at Step 22.
	 Do not indicate the presence of following mandatory IE's: Start List, RB Timer Indicator and AM_RLC error. Indicate presence of following IE's which are not part of Cell Update message: Protocol error indicator and Protocol error information. Minor editorial changes
Summary of chang	 e: # 1. Following changes are made to 34.123-1 section 8.4.1.7A.4 for Specific Message content of Cell Update message at Step 22: Mandatory IE's Start List, RB Timer Indicator and AM_RLC error indication are added. Removed extra IE's Protocol error indicator and Protocol error information. Minor editorial changes
Consequences if not approved:	Test will fail a compliant UE.
Clauses affected:	≋ 8.4.1.7A.4
Other specs affected:	Y N

Other comments: # Affects R99, Rel4 and Rel5 Ues

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 $|\mathbf{x}|$ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under 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 >>

- 8.4.1.7A Measurement Control and Report: Intra-frequency measurement for transition from CELL FACH to CELL DCH state (TDD)
- 8.4.1.7A.1 Definition
- 8.4.1.7A.2 Conformance requirement

Upon transition from CELL_FACH to CELL_DCH state:

- 1> if intra-frequency measurements applicable to CELL_DCH state are stored in the variable MEASUREMENT IDENTITY:
 - 2> if the cell in which the UE transited from CELL_FACH state is included in the active set for the CELL_DCH state, the UE shall:
 - 3> resume the measurement reporting.
 - 2> otherwise:
 - 3> the UE should not resume the measurement reporting. If the UE does not resume the measurement reporting, the measurement shall be restarted when a MEASUREMENT CONTROL message is received with the corresponding measurement identity.

. . .

Upon cell reselection while in CELL_FACH/CELL_PCH/URA_PCH state and the cell reselection has occurred after the measurement control information was stored, the UE shall:

1> delete all measurements of type intra-frequency, inter-frequency, and inter-RAT associated with the variable MEASUREMENT_IDENTITY;

. . .

1> delete the traffic volume measurements that have not been set up or modified through a MEASUREMENT CONTROL message.

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

The UE shall:

- 1> read the IE "Measurement command";
- 1> if the IE "Measurement command" has the value "setup":
 - 2> store this measurement in the variable MEASUREMENT_IDENTITY according to the IE "measurement identity", first releasing any previously stored measurement with that identity if that exists;
 - 2> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 3> if the UE is in CELL_FACH state:
 - 4> the UE behaviour is not specified.
 - 2> for measurement types "inter-RAT measurement" or "inter-frequency measurement" that require measurements on a frequency other than the actually used frequency:

. . .

2> for measurement type "inter-frequency measurement" that requires measurements only on the same frequency as the actually used frequency:

...

2> for measurement type "UE positioning measurement":

. . .

- 2> for any other measurement type:
 - 3> if the measurement is valid in the current RRC state of the UE:
 - 4> begin measurements according to the stored control information for this measurement identity.
- 1> if the IE "Measurement command" has the value "modify":
 - 2> for all IEs present in the MEASUREMENT CONTROL message:
 - 3> if a measurement was stored in the variable MEASUREMENT_IDENTITY associated to the identity by the IE "measurement identity":
 - 4> if the measurement type is quality, UE internal, intra-frequency, inter-frequency or inter-RAT:
 - 5> if the UE is in CELL FACH state:
 - 6> the UE behaviour is not specified.
 - 4> if measurement type is set to "intra-frequency measurement", for any of the optional IEs "Intra-frequency measurement objects list", "Intra-frequency measurement quantity", "Intra-frequency reporting quantity", "Measurement Validity", "report criteria" and "parameters required for each event" (given "report criteria" is set to "intra-frequency measurement reporting criteria") that are present in the MEASUREMENT CONTROL message:

. . .

- 5> replace the corresponding information (the IEs listed above and all their children) stored in variable MEASUREMENT_IDENTITY associated to the identity indicated by the IE "measurement identity" with the one received in the MEASUREMENT CONTROL message:
- 5> leave all other stored information elements unchanged in the variable MEASUREMENT IDENTITY.
- 1> if the IE "measurement command" has the value "release":
 - 2> terminate the measurement associated with the identity given in the IE "measurement identity";
 - 2> clear all stored measurement control information related associated to this measurement identity in variable MEASUREMENT_IDENTITY.

"If the IE "Reporting Cell Status" is received, the UE shall set the IE "Measured Results" in MEASUREMENT REPORT as follows. The UE shall:

for intra-frequency measurement and inter-frequency measurement:
 include the IE "Cell Measured Results" for cells (excluding cells of another RAT)
 that satisfy the condition (such as "Report cells within active set") specified in the IE
 "Reporting Cell Status", in descending order by the measurement quantity"

If the IE "Cells for measurement" has been included in a MEASUREMENT CONTROL message, only monitored set cells explicitly indicated for a given intra-frequency (resp. inter-frequency, interRAT) measurement by the IE "Cells for measurement" shall be considered for measurement. If the IE "Cells for measurement" has not been included in a MEASUREMENT CONTROL message, all of the intra-frequency (resp. inter-frequency, inter RAT) cells stored in the variable CELL_INFO_LIST shall be considered for measurement. The IE "Cells for measurement" is not applicable to active set cells or virtual active set cells e.g. when the triggering condition refers to active set cells, the UE shall

consider all active set cells in the CELL_INFO_LIST for measurement irrespective if these cells are explicitly indicated by the IE "Cells for measurement".

Reference

3GPP TS 25.331, clause 8.4.1.3, 8.4.1.6a, 8.4.1.7.1, 8.4.0 and 8.6.7.9

8.4.1.7A.3 Test Purpose

- To confirm that UE retrieves stored measurement control information for intra-frequency measurement type with "measurement validity" assigned to "CELL DCH", after it enters CELL DCH state from CELL FACH state.
- To confirm that the UE continues to monitor the neighbouring cells listed "intra-frequency cell info" IE in the System Information Block type 11 or 12 messages, if no intra-frequency measurements applicable to CELL DCH are stored.
- To confirm that the UE transmits MEASUREMENT REPORT messages if reporting criteria stated in IE "intra-frequency measurement reporting criteria" in System Information Block type 11 or 12 messages are fulfilled.
- To confirm that a MEASUREMENT CONTROL message received in CELL_DCH state overrides the measurement and associated reporting contexts maintained in the UE by virtue of System Information Block type 11 or 12 messages only if the measurement identities defined within the MEASUREMENT CONTROL message and System Information Block type 11 or 12 are identical.
- To confirm that the UE delete all measurements of type intra-frequency upon cell reselection while in CELL_FACH.

8.4.1.7A.4 Method of test

Initial Condition

System Simulator: 3 cells – Cell 1, cell 2 and cell 3 are active.

SYSTEM INFORMATION BLOCK TYPE 1 (see specific message contents).

UE: PS-DCCH+DTCH_FACH (state 6-11).

Test Procedure

Table 8.4.1.7A-1 illustrates the downlink power to be applied for the 3 cells at various time instants of the test execution. Column marked "T0" denotes the initial conditions, while columns marked "T1" are to be applied subsequently. The exact instants on which these values shall be applied are described in the text in this clause.

Table 8.4.1.7A-1

Para-meter	Unit			(Cell	1					(Cell	2					(Cell	3		
		T 0	T 1	T 2	T 3	T 4	T 5	T 6	T 0	T 1	T 2	T 3	T 4	T 5	T 6	T 0	T 1	T 2	T 3	T 4	T 5	T 6
UTRA RF Channel Number				(Ch.	1					(Ch. 1	1					(Ch. ′	1		
PCCPCH Ec	dBm /1.28 MHz	- 6 0	7 0	- 6 0	7 0	- 6 0	7 0	- 7 5	7 0	- 6 0	7 0	- 6 0	7 0	6 0	7 0	- 7 5	- 7 5	- 7 5	- 7 5	- 7 5	- 7 5	- 6 0

The UE is brought to CELL_FACH state in cell 1. (step 1) SS sends SYSTEM INFORMATION CHANGE INDICATION message to UE to inform UE of the modification in the system information.

SS sends a RADIO BEARER RECONFIGURATION message to UE (step2), and configures dedicated physical channels on both uplink and downlink directions. The UE shall move to CELL_DCH state and then return RADIO BEARER RECONFIGURATION COMPLETE message (step3). SS reconfigures the downlink transmission power settings for cells 1 to 3 according to column "T1" in table 8.4.1.7A .The UE shall send a MEASUREMENT REPORT message containing IE "Measured results" to report cell 2's PCCPCH RSCP value and IE "event results" to report triggering of event type "1g" (step 4). After receiving the MEASUREMENT REPORT message, SS transmits a MEASUREMENT CONTROL message with cell 3 included in the IE "new intra-frequency cell info" (step 5). After

receiving such a message, the UE shall transmit another set of MEASUREMENT REPORT message for measurement identity = 11. SS verifies that measurement readings for cell 1,2,3 's PCCPCHCH RSCP are reported in IE "cell measured results" in this message (step 6). SS modifies the downlink transmission power of the respect cells according to the settings in columns "T2" in table 8.4.1.7A-1. The UE shall send a MEASUREMENT REPORT message containing IE "Measured results" to report cell 1's PCCPCH RSCP value and IE "event results" to report triggering of event type "1g" (step 6b).Next, SS sends a PHYSICAL CHANNEL RECONFIGURATION message (step 7). SS configures common physical channels for both the uplink and the downlink directions. The UE shall transit to CELL_FACH state and then reply with a PHYSICAL CHANNEL RECONFIGURATION COMPLETE message (step 8). SS waits and checks the uplink RACH to confirm that no MEASUREMENT REPORT messages are received (step 9).

SS transmits then a RADIO BEARER RECONFIGURATION message to the UE, to move it to CELL_DCH state (step 9a). The UE shall move to that state, and transmit a RADIO BEARER RECONFIGURATION COMPLETE message to SS (step 9b). SS modifies the downlink transmission power of the respect cells according to the settings in columns "T3" in table 8.4.1.7A-1.Shortly after, a MEASUREMENT REPORT message shall be received which has been triggered by cell 2, i.e. the UE shall have deleted the measurement configured through the MEASUREMENT CONTROL message of step 5, and instead apply the measurement configured in SIB12: a MEASUREMENT REPORT message with measurement identity 10 shall be received while no such message with measurement identity 11 shall be sent by the UE (step 9c). SS modifies the downlink transmission power of the respect cells according to the settings in columns "T4" in table 8.4.1.7A-1. The UE shall send a MEASUREMENT REPORT message containing IE "Measured results" to report cell 1's PCCPCH RSCP value and IE "event results" to report triggering of event type "1g".

SS transmits MEASUREMENT CONTROL message on the downlink DCCH, to configure periodic intra-frequency measurements with validity CELL_DCH (step 10). The UE shall send a MEASUREMENT REPORT message (with IE "Measurement identity" = 12) to the SS (step 14).

SS transmits a PHYSICAL CHANNEL RECONFIGURATION message to the UE to move it to CELL_FACH state (step 14a). The UE shall move to that state and transmit a PHYSICAL CHANNEL RECONFIGURATION COMPLETE message to SS (step 14b). SS shall wait and check that no MEASUREMENT REPORT messages are detected on the uplink DCCH (step 14c).

SS transmits a RADIO BEARER RECONFIGURATION message to the UE, to move it to CELL_DCH state (step 14d). The UE shall move to that state, and transmit a RADIO BEARER RECONFIGURATION COMPLETE message to SS (step 14e). Shortly after, a MEASUREMENT REPORT message shall be received, i.e the UE shall have retrieved the measurement configured through the MEASUREMENT CONTROL message of step 10, instead of the ones that are broadcast in SIB12 (step 14f).

Following the reception of the MEASUREMENT REPORT message, SS commands the UE using MEASUREMENT CONTROL message to release measurement control information stored in "measurement identity" = 12 (step 15). Thereafter, SS verifies that no MEASUREMENT REPORT messages are detected on the uplink DCCH (step 16). After this requirement is satisfied, SS sends MEASUREMENT CONTROL on the downlink DCCH once more (step 17). This message is identical to the one sent in step 10 (see specific message content). A periodical MEASUREMENT REPORT message shall be received from the UE (step 17a).

SS transmits a PHYSICAL CHANNEL RECONFIGURATION message on the downlink DCCH and configures common physical channel (step 18). The UE shall transit to CELL_FACH state and then respond with a PHYSICAL CHANNEL RECONFIGURATION COMPLETE message (step 19). SS monitors the uplink DCCH once more to verify that no MEASUREMENT REPORT messages are detected (step 20). System information block type 11 and System Information Block type 12 for cell 2 shall be different from the default settings according to what is defined in the specific message content part of this section (step 21). SS modifies the downlink transmission power of the respect cells according to the settings in columns "T5" in table 8.4.1.7A-1. The UE shall initiate a cell re-selection procedure. This is verified in the SS when a CELL UPDATE message is received on the uplink CCCH with the "cell update cause" IE set to "cell reselection" (step 22). SS transmits a CELL UPDATE CONFIRM message, which includes "New C-RNTI", on the DCCH (step 23). Then the UE shall reply with UTRAN MOBILITY INFORMATION CONFIRM message (step 23a). Next, SS sends a RADIO BEARER RECONFIGURATION message on the downlink DCCH, assigning dedicated physical channels in both uplink and downlink directions (step 24). The UE shall respond with a RADIO BEARER RECONFIGURATION COMPLETE message and then return to CELL DCH state (step 25). SS modifies the downlink transmission power of all cells according to the settings in columns "T6" in table 8.4.1.7A-1. UE shall then send MEASUREMENT REPORT messages reporting cell 3's PCCPCH RSCP according to the content in System Information Block type 12 messages broadcasted in cell 2 (step 21).SS transmits a MEASUREMENT CONTROL message (step 27) whereby the measurement identity is set to the same value as that in the SIB type 12 messages (step 21). UE shall send MEASUREMENT REPORT message (step 28) reporting cell 1,2,3's PCCPCH RSCP according to the MEASUREMENT CONTROL message (step 27).

NOTE:	If the UE fails the test because of a failure to reselect to a right cell, then the operator may re-run the test.

Step	Direction	Message	Comment
	UE SS		
1	←	System Information Block type 11 and 12	UE is initially in PS-DCCH+DTCH_FACH (state 6-11) in cell 1. System Information Block type 11 and 12 messages are changed with respect to the default contents according to the descriptions in "Specific
	_		Message Contents" clause.
1a	+	SYSTEM INFORMATION CHANGE INDICATION	
2	+	RADIO BEARER RECONFIGURATION	SS configures dedicated physical channels.
3	\rightarrow	RADIO BEARER RECONFIGURATION COMPLETE	UE shall move to CELL_DCH state.
3a			SS reconfigures the downlink transmission power settings for cells 1 to 3 according to column "T1" in table 8.4.1.7A
4	→	MEASUREMENT REPORT	Reports cell 2's PCCPCH RSCP measurement value, with "measurement identity" IE set to "10".
5	←	MEASUREMENT CONTROL	A periodic measurement is setup with measurement identity of 11. Cell 3 is added to the list of monitored set of the UE.
6	→	MEASUREMENT REPORT	SS shall receive a MEASUREMENT REPORT message after the period set in step 5 in which the report for cell 1,cell 2 and cell 3 are included.
6a			SS reconfigures the downlink transmission power settings for cells 1 to 3 according to column "T2" in table 8.4.1.7A
6b	→	MEASUREMENT REPORT	Cell 1 shall trigger the event 1g and a MEASUREMENT REPORT message shall be sent to SS with the measurement identity 10.
7	+	PHYSICAL CHANNEL RECONFIGURATION	SS configures PRACH and S- CCPCH physical channels.
8	→	PHYSICAL CHANNEL RECONFIGURATION COMPLETE	UE shall move to CELL_FACH state.
9			SS waits and checks that no MEASUREMENT REPORT messages are sent by UE.
9a	+	RADIO BEARER RECONFIGURATION	SS configures dedicated physical channels.
9b	\rightarrow	RADIO BEARER RECONFIGURATION COMPLETE	UE shall move to CELL_DCH state.
9b1			SS reconfigures the downlink transmission power settings for cells 1 to 3 according to column "T3" in table 8.4.1.7A
9c	→	MEASUREMENT REPORT	Cell 2 shall trigger the event 1g and a MEASUREMENT REPORT message shall be sent to SS with the measurement identity 10.

Step	Direction UE SS	Message	Comment
9d			SS reconfigures the downlink transmission power settings for cells 1 to 3 according to column "T4" in table 8.4.1.7A
9e	→	MEASUREMENT REPORT	Cell 1 shall trigger the event 1g and a MEASUREMENT REPORT message shall be sent to SS with the measurement identity 10.
10	+	MEASUREMENT CONTROL	SS instructs the UE to setup intra-frequency measurement with measurement identity of 12. Measurement validity" IE is set to CELL_DCH state.
11		<u>Void</u>	
12	+	Void	
13	→ →	Void	
14		MEASUREMENT REPORT	UE reports cell 1 and cell 2's measured results for PCCPCH RSCP, with "measurement identity" IE set to "12".
14a	←	PHYSICAL CHANNEL RECONFIGURATION	SS configures PRACH and S- CCPCH physical channels.
14b	\rightarrow	PHYSICAL CHANNEL RECONFIGURATION COMPLETE	UE shall move to CELL_FACH state.
14c			SS waits and check that no MEASUREMENT REPORT messages are sent by the UE.
14d	+	RADIO BEARER RECONFIGURATION	SS configures dedicated physical channels.
14e	→	RADIO BEARER RECONFIGURATION COMPLETE	UE shall move to CELL_DCH state.
14f)	MEASUREMENT REPORT	UE shall have retrieved and resumed the measurement set up through the MEASUREMENT CONTROL of step 10.The "measurement identity" IE shall be set to "12".
15	+	MEASUREMENT CONTROL	Terminate all the intra- frequency measurement and reporting activities related to "measurement identity" = 12.
16			SS waits and verifies that UE stop transmitting MEASUREMENT REPORT messages.
17	+	MEASUREMENT CONTROL	This message is the same as in step 10.
17a	÷	MEASUREMENT REPORT	UE shall transmit a MEASUREMENT REPORT message with "measurement identity" IE set to "12".
18	+	PHYSICAL CHANNEL RECONFIGURATION	Allocates common physical channels.
19	→	PHYSICAL CHANNEL RECONFIGURATION COMPLETE	UE shall move to CELL_FACH state.
20			SS checks that no MEASUREMENT REPORT messages are received.

Step			Message	Comment
	UE	SS		
21	•	'.	System Information Block type 11 System Information Block type 12	SS sends SIB11 and SIB12 with specific values to Cell2. SS reconfigures the downlink transmission power settings for cells 1 to 3 according to column "T5" in table 8.4.1.7A.
22	=)	CELL UPDATE	UE shall re-selects to cell 2 and then perform a cell update procedure.
23		'	CELL UPDATE CONFIRM	UE shall stay in CELL_FACH state.
23a		>	UTRAN MOBILITY INFORMATION CONFIRM	
24	•	(-	RADIO BEARER RECONFIGURATION	Dedicated physical channels are assigned to the UE in this message.
25	<u>-</u>	>	RADIO BEARER RECONFIGURATION COMPLETE	UE shall return to CELL_DCH state.UE shall not send Measurement Report message with "measurement identity" = '12'.
25a				SS reconfigures the downlink transmission power settings of all cells according to column "T6" in table 8.4.1.7A-1.
26		>	MEASUREMENT REPORT	UE begins to report cell 3's measured results for PCCPCH RSCP, with "measurement identity" IE set to "1",event is 1g.
27	•	-	MEASUREMENT CONTROL	SS instructs the UE to setup period intra-frequency measurement. "measurement identity" IE set to "1"
28	-	>	MEASUREMENT REPORT	UE shall transmit a period MEASUREMENT REPORT message, with "measurement identity" IE set to "1".

Specific Message Content

System Information Block type 1 (TDD)

Use the default system information block with the same type specified in clause $\underline{6.19}$ of TS 34.108, with the following exceptions:

Information Element	Value/remark
- UE Timers and constants in connected mode	
- T312	2

Master Information Block (Step 1)

Information Element	Value/Remarks
MIB Value Tag	3

System Information Block type 11 for cell 1 (Step 1)

All messages content below shall use the same content as described in default message content specified in clause 6.1 of <u>TS 34.108</u>, with the following exception:

Information Element	Value/remark
SIB12 indicator	TRUE
FACH measurement occasion info	Not Present
Measurement control system information	
- Use of HCS	Not used
 Cell selection and reselection quality measure 	PCCPCH RSCP
 Intra-frequency measurement system information 	
 Intra-frequency measurement identity 	Not present
 Intra-frequency cell info list 	
 CHOICE intra-frequency cell removal 	Not present
 New intra-frequency cells 	
 Intra-frequency cell id 	1
- Cell info	
- Cell individual offset	Not present
 Reference time difference to cell 	Not present
- Read SFN indicator	FALSE
- CHOICE mode	TDD
- Primary CCPCH info	
- TSTD indicator	FALSE
- Cell parameters Id	Refer to clause titled "Default settings for cell No.1
	(TDD)" in clause 6.1.4 of TS34.108
- SCTD indicator	FALSE
 Primary CCPCH Tx power 	Not present
- timeslot info list	Not present
- Cell Selection and Re-selection info	Not present
- Cells for measurement	Not present
- Intra-frequency measurement quantity	Not present
- Intra-frequency reporting quantity for RACH	Not present
reporting	.
- Maximum number of reported cells on RACH	Not present
 Reporting information for state CELL_DCH 	Not present

· • · · · · · · · · · · · · · · · · · ·	
Information Element	Value/remark
FACH measurement occasion info	Not Present
Measurement control system information - Use of HCS	Not used
- Cell selection and reselection quality measure	PCCPCH RSCP
- Intra-frequency measurement system information	1 cor officer
- Intra-frequency measurement identity	10
- Intra-frequency cell info list	
- CHOICE intra-frequency cell removal	Not present
- New intra-frequency cells	
- Intra-frequency cell id	2
- Cell info	N. (
- Cell individual offset	Not present
Reference time difference to cell Read SFN Indicator	Not present FALSE
- CHOICE mode	TDD
- Primary CCPCH Info	100
- TSTD indicator	FALSE
- Cell parameters Id	Refer to clause titled "Default settings for cell No.2
·	(TDD)" in clause 6.1.4 of TS34.108
- SCTD indicator	FALSE
- Primary CCPCH Tx power	Not present
- timeslot info list	Not present
- Cell selection and Re-selection info	Not Present
- Cells for measurement	Not Present
- Intra-frequency measurement quantity - Filter Coefficient	Not procent
- CHOICE mode	Not present TDD
- Measurement quantity	PCCPCH RSCP
- Intra-frequency reporting quantity for RACH	Not present
reporting	
- Maximum number of reported cells on RACH	No report
- Reporting information for state CELL_DCH	
- Intra-frequency reporting quantity	
- Reporting quantities for active set cells	E41.0E
- Cell synchronisation information reporting	FALSE
indicator - Cell identity reporting indicator	FALSE
- CHOICE mode	TDD
- Timeslot ISCP reporting indicator	FALSE
- Proposed TGSN Reporting required	FALSE
- PCCPCH RSCP reporting indicator	TRUE
- Pathloss reporting indicator	FALSE
- Reporting quantities for monitored set cells	
- Cell synchronisation information reporting	FALSE
indicator	FALCE
- Cell identity reporting indicator - CHOICE mode	FALSE TDD
- Timeslot ISCP reporting indicator	FALSE
- Proposed TGSN Reporting required	FALSE
- PCCPCH RSCP reporting indicator	TRUE
- Pathloss reporting indicator	FALSE
- Reporting quantities for detected cells	Not present
- Measurement Reporting Mode	
- Measurement Reporting Transfer Mode	Acknowledged mode RLC
- Periodic Reporting/Event Trigger Reporting Mode	Event trigger
- CHOICE report criteria	Intra-frequency measurement reporting criteria
- Parameter required for each event - Intra-frequency event identity	10
- Reporting range constant	1g Not present
- W	Not present
- Hysteresis	1 dB
- Time to trigger	0
- Amount of reporting	Not Present
- Reporting Interval	Not Present
- Reporting cell status	

- CHOICE reported cells	Report cells within actived and monitored set cells on used frequency
 Maximum number of reported cells 	3
 Inter-frequency measurement system information 	Not Present
 Inter-RAT measurement system information 	Not Present
 Traffic volume measurement system information 	Not Present

SYSTEM INFORMATION CHANGE INDICATION (Step 1a)

Information Element	Value/Remarks
BCCH modification info	
- MIB Value Tag	3
- BCCH modification time	Not Present

RADIO BEARER RECONFIGURATION (Step 2, Step 9a, Step 14d and Step 24)

Use the same message type found in Annex A, with condition set to A4.

MEASUREMENT REPORT (Steps 4 and 9c)

Information Element	Value/remark
Measurement identity	Check to see if set to 10
Measured Results	
- CHOICE measurement	Check to see if set to "Intra-frequency measured results list"
 Intra-frequency measurement results 	
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
 Cell synchronisation information 	Check to see if this IE is absent
- CHOICE mode	TDD
 cell parameters identity 	Check to see if it's the same code for cell 1
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP List	Check to see if this IE is absent
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
- Cell synchronisation information	Check to see if this IE is absent
- CHOICE mode	TDD
- cell parameters identity	Check to see if it's the same code for cell 2
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP List	Check to see if this IE is absent
Measured Results on RACH	Check to see if this IE is absent
Additional measured results	Check to see if this IE is absent
Event Results	Oncok to dee if the 12 to absort
- CHOICE event result	Check to see if it's set to 'Intra-frequency measurement
OHOIOL EVENTICOUR	event results'
- Intra-frequency event identity	Check to see if this IE is set to '1g'
- Cell measurement event results	Oncok to see if this in is set to 19
- Och measurement event results	
- Cell parameters Id	Check to see if it's the same code for cell 2

MEASUREMENT CONTROL (Step 5).

Information Element	Value/remark
Measurement Identity	11
Measurement Command	Setup
Measurement Reporting Mode	Octup
- Measurement Reporting Transfer Mode	Acknowledged Mode RLC
- Periodic Reporting / Event Trigger Reporting Mode	Periodical Reporting
Additional measurements list	Not Present
CHOICE measurement type	Intra-frequency measurement
- Intra-frequency cell info list	
- CHOICE intra-frequency cell removal	Remove no intra-frequency cells
- New intra-frequency info list	
- Intra-frequency cell id	3
- Cell info	
- Cell individual offset	0 dB
 Reference time difference to cell 	Not Present
- Read SFN Indicator	FALSE
- CHOICE mode	TDD
- Primary CCPCH Info	EM 05
- TSTD indicator	FALSE
- Cell parameters Id	Refer to clause titled "Default settings for cell No.2
CCTD indicator	(TDD)" in clause 6.1.4 of TS34.108 FALSE
- SCTD indicator	
 Primary CCPCH Tx power timeslot info list 	Not present Not present
- Cells selection and Re-selection info	Not Present
- Cells for measurement	Not Present
- Ochs for measurement	Not i resent
- Intra-frequency measurement quantity	
- Filter Coefficient	Not Present
- Measurement quantity	PCCPCH RSCP
 Intra-frequency reporting quantity 	
 Reporting quantities for active set cells 	
 Cell synchronisation information reporting 	FALSE
indicator	
- Cell identity reporting indicator	FALSE
- CHOICE mode	TDD
- Timeslot ISCP reporting indicator	FALSE
- Proposed TGSN Reporting required	FALSE
 PCCPCH RSCP reporting indicator Pathloss reporting indicator 	TRUE FALSE
- Reporting quantities for monitored set cells	TALSE
Cell synchronisation information reporting	FALSE
indicator	TALGE
- Cell identity reporting indicator	FALSE
- CHOICE mode	TDD
- Timeslot ISCP reporting indicator	FALSE
- Proposed TGSN Reporting required	FALSE
- PCCPCH RSCP reporting indicator	TRUE
- Pathloss reporting indicator	FALSE
 Reporting quantities for detected cells 	Not present
- Reporting cell status	Not present
- Measurement validity	Not present
- CHOICE report criteria	Periodical reporting criteria
- reporting amount	infinity
- reportingInterval	64s
DPCH compressed mode status info	Not Present

MEASUREMENT REPORT (Steps 6)

Information Element	Value/remark
Measurement identity	Check to see if set to 11
Measured Results	
- CHOICE measurement	Check to see if set to "Intra-frequency measured results list"
 Intra-frequency measurement results 	
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
- Cell synchronisation information	Check to see if this IE is absent
- CHOICE mode	TDD
- cell parameters identity	Check to see if it's the same code for cell 2
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP_List	Check to see if this IE is absent
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
 Cell synchronisation information 	Check to see if this IE is absent
- CHOICE mode	TDD
 cell parameters identity 	Check to see if it's the same code for cell 1
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP_List	Check to see if this IE is absent
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
 Cell synchronisation information 	Check to see if this IE is absent
- CHOICE mode	TDD
- cell parameters identity	Check to see if it's the same code for cell 3
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP_List	Check to see if this IE is absent
Measured Results on RACH	Check to see if this IE is absent
Additional measured results	Check to see if this IE is absent
Event Results	Check to see if this IE is absent

MEASUREMENT REPORT (Steps 6b)

Information Element	Value/remark
	Check to see if set to 10
Measurement identity Measured Results	Check to see it set to 10
- CHOICE measurement	Chook to see if set to "Intra frequency measured results
	Check to see if set to "Intra-frequency measured results list"
 Intra-frequency measurement results 	
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
 Cell synchronisation information 	Check to see if this IE is absent
- CHOICE mode	TDD
 cell parameters identity 	Check to see if it's the same code for cell 1
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP List	Check to see if this IE is absent
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
- Cell synchronisation information	Check to see if this IE is absent
- CHOICE mode	TDD
 cell parameters identity 	Check to see if it's the same code for cell 2
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP List	Check to see if this IE is absent
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
- Cell synchronisation information	Check to see if this IE is absent
- CHOICE mode	TDD
- cell parameters identity	Check to see if it's the same code for cell 3
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
Measured Results on RACH	Check to see if this IE is absent
Additional measured results	Check to see if this IE is absent
Event Results	
- CHOICE event result	Check to see if it's set to 'Intra-frequency measurement event results'
- Intra-frequency event identity	Check to see if this IE is set to '1g'
- Cell measurement event results	3
- Cell parameters Id	Check to see if it's the same code for cell 1

PHYSICAL CHANNEL RECONFIGURATION (Steps 7, 14a and 18)

Use the same message sub-type found in clause 9 of TS 34.108, which is entitled "Packet to CELL_FACH from CELL_DCH in PS".

MEASUREMENT REPORT (Steps 9e)

Information Element	Value/remark
Measurement identity	Check to see if set to 10
Measured Results	
- CHOICE measurement	Check to see if set to "Intra-frequency measured results list"
 Intra-frequency measurement results 	
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
- Cell synchronisation information	Check to see if this IE is absent
- CHOICE mode	TDD
- cell parameters identity	Check to see if it's the same code for cell 1
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP_List	Check to see if this IE is absent
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
 Cell synchronisation information 	Check to see if this IE is absent
- CHOICE mode	TDD
 cell parameters identity 	Check to see if it's the same code for cell 2
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
timeslotISCP_List	Check to see if this IE is absent
Measured Results on RACH	Check to see if this IE is absent
Additional measured results	Check to see if this IE is absent
Event Results	
- CHOICE event result	Check to see if it's set to 'Intra-frequency measurement event results'
 Intra-frequency event identity 	Check to see if this IE is set to '1g'
 Cell measurement event results 	
- Cell parameters Id	Check to see if it's the same code for cell 1

MEASUREMENT CONTROL (Step 10 and 17).

Information Element	Value/remark
Measurement Identity	12
Measurement Command	Setup
Measurement Reporting Mode	
- Measurement Reporting Transfer Mode	Acknowledged Mode RLC
- Periodic Reporting / Event Trigger Reporting Mode	Periodical Reporting
Additional measurements list	Not Present
CHOICE measurement type	Intra-frequency measurement
- Intra-frequency cell info list	
- CHOICE intra-frequency cell removal	Remove no intra-frequency cells
 New intra-frequency info list 	Not Present
- Cells for measurement	Not Present
 Intra-frequency measurement quantity 	
- Filter Coefficient	Not Present
- Measurement quantity	PCCPCH RSCP
 Intra-frequency reporting quantity 	
 Reporting quantities for active set cells 	
 Cell synchronisation information reporting 	FALSE
indicator	
 Cell identity reporting indicator 	FALSE
- CHOICE mode	TDD
 Timeslot ISCP reporting indicator 	FALSE
 Proposed TGSN Reporting required 	FALSE
 PCCPCH RSCP reporting indicator 	TRUE
 Pathloss reporting indicator 	FALSE
 Reporting quantities for monitored set cells 	
 Cell synchronisation information reporting 	FALSE
indicator	
 Cell identity reporting indicator 	FALSE
- CHOICE mode	TDD
 Timeslot ISCP reporting indicator 	FALSE
 Proposed TGSN Reporting required 	FALSE
 PCCPCH RSCP reporting indicator 	TRUE
 Pathloss reporting indicator 	FALSE
 Reporting quantities for detected cells 	Not present
- Reporting cell status	Not present
- Measurement validity	CELL DCH
- CHOICE report criteria	Periodical reporting criteria
- reporting amount	infinity
- reportingInterval	64s
DPCH compressed mode status info	Not Present

MEASUREMENT REPORT (Steps 14, 14f and 17a)

Information Element	Value/remark
Measurement identity	Check to see if set to 12
Measured Results	
- CHOICE measurement	Check to see if set to "Intra-frequency measured results list"
 Intra-frequency measurement results 	
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
 Cell synchronisation information 	Check to see if this IE is absent
- CHOICE mode	TDD
 cell parameters identity 	Check to see if it's the same code for cell 1
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
timeslotISCP_List	Check to see if this IE is absent
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
 Cell synchronisation information 	Check to see if this IE is absent
- CHOICE mode	TDD
 cell parameters identity 	Check to see if it's the same code for cell 2
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
timeslotISCP_List	Check to see if this IE is absent
Measured Results on RACH	Check to see if this IE is absent
Additional measured results	Check to see if this IE is absent
Event Results	Check to see if this IE is absent

MEASUREMENT CONTROL (Step 15)

Information Element	Value/remark
Measurement Identity	12
Measurement Command	Release
Measurement Reporting Mode	Not Present
Additional measurements list	Not Present
CHOICE Measurement type	Not Present
DPCH compressed mode status info	Not Present

System Information Block type 11 for cell 2 (Step 21)

All messages content below shall use the same content as described in default message content specified in clause 6.1 of TS 34.108, with the following exception:

Information Element	Value/Remark
SIB12 indicator	TRUE
FACH measurement occasion info	Not Present
Measurement control system information	
- Use of HCS	Not used
- Cell selection and reselection quality measure	PCCPCH RSCP
- Intra-frequency measurement system information	
- Intra-frequency measurement identity	Not present
- Intra-frequency cell info list	
- CHOICE intra-frequency cell removal	Not Present
- New intra-frequency cells	
- Intra-frequency cell id	2
- Cell info	
- Cell individual offset	Not Present
- Reference time difference to cell	Not present
- Read SFN indicator	FALSE
- CHOICE mode	TDD
- Primary CCPCH info	
- TSTD indicator	FALSE
- Cell parameters Id	Refer to clause titled "Default settings for cell No.1
0.077	(TDD)" in clause 6.1.4 of TS34.108
- SCTD indicator	FALSE
- Primary CCPCH Tx power	Not present
- timeslot info list	Not present
- Cell Selection and Re-selection info	Not present
- Intra-frequency cell id	1
- Cell info	Not Decoret
- Cell individual offset	Not Present
Reference time difference to cell Read SFN indicator	Not present TRUE
- CHOICE mode	TDD
- Primary CCPCH info	TBD
- TSTD indicator	FALSE
- Cell parameters Id	Refer to clause titled "Default settings for cell No.1
Och parameters id	(TDD)" in clause 6.1.4 of TS34.108
- SCTD indicator	FALSE
- Primary CCPCH Tx power	Not present
- timeslot info list	Not present
- Cell Selection and Re-selection info	Not present
- Intra-frequency cell id	3
- Cell info	
- Cell individual offset	Not Present
- Reference time difference to cell	Not present
- Read SFN indicator	TRUE
- CHOICE mode	TDD
- Primary CCPCH info	
- TSTD indicator	FALSE
- Cell parameters Id	Refer to clause titled "Default settings for cell No.1
0.077	(TDD)" in clause 6.1.4 of TS34.108
- SCTD indicator	FALSE
- Primary CCPCH Tx power	Not present
- timeslot info list	Not present
- Cell Selection and Re-selection info	Not present
- Cells for measurement	Not present
- Intra-frequency measurement quantity	Not Propert
- Filter coefficient - CHOICE mode	Not Present
	TDD BCCBCH BSCB
Measurement quantity Intra-frequency reporting quantity for RACH	PCCPCH RSCP
reporting	Not present
- Maximum number of reported cells on RACH	Not present
- Reporting information for state CELL_DCH	Not present
1 Appliang morniation for state OLLE_DOTT	1 p. 500/it

Information Element	Value/Remark
FACIL magazinamant assasian infa	Not Drocost
FACH measurement occasion info	Not Present
Measurement control system information - Use of HCS	Not used
- Cell selection and reselection quality measure	PCCPCH RSCP
- Intra-frequency measurement system information	1 COI CITICOOI
- Intra-frequency measurement identity	Not present
- Intra-frequency cell info list	Not Present
- Intra-frequency measurement quantity	Not i recent
- Filter coefficient	Not Present
- CHOICE mode	TDD
- Measurement quantity	PCCPCH RSCP
- Intra-frequency reporting quantity for RACH	Not present
reporting	
- Maximum number of reported cells on RACH	Not present
- Reporting information for state CELL DCH	'
- Intra-frequency reporting quantity	
- Reporting quantities for active set cells	
 Cell synchronisation information reporting 	FALSE
indicator	
 Cell identity reporting indicator 	FALSE
- CHOICE mode	TDD
 Timeslot ISCP reporting indicator 	FALSE
 Proposed TGSN Reporting required 	FALSE
 PCCPCH RSCP reporting indicator 	TRUE
- Pathloss reporting indicator	FALSE
 Reporting quantities for monitored set cells 	
- Cell synchronisation information reporting	FALSE
indicator	
- Cell identity reporting indicator	FALSE
- CHOICE mode	TDD
- Timeslot ISCP reporting indicator	FALSE
- Proposed TGSN Reporting required	FALSE
- PCCPCH RSCP reporting indicator	TRUE FALSE
 Pathloss reporting indicator Reporting quantities for detected set cells 	Not Present
Reporting quantities for defected set cells Measurement reporting mode	NOT Present
Measurement Report Transfer Mode	Acknowledged mode RLC
- Periodic Reporting/Event Trigger Reporting Mode	Event trigger
- CHOICE report criteria	Intra-frequency measurement reporting criteria
- Intra-frequency measurement reporting criteria	mile irequerity measurement reporting enteria
- Intra-frequency event identity	1g
- W	0
- Hysteresis	1dB
- Threshold Used Frequency	Not Present
- Reporting deactivation threshold	2
- Replacement activation threshold	Not Present
- Time to trigger	0
- Amount of reporting	Not Present
- Reporting interval	Not Present
- Reporting cell status	
- CHOICE reported cell	Report cell within active set and/or monitored set cells on used frequency
 Maximum number of reported cells 	3
 Inter-frequency measurement system information 	Not present
 Inter-RAT measurement system information 	Not present
 Traffic volume measurement system information 	Not Present
 UE internal measurement system information 	Not Present

CELL UPDATE (Step 22)

Information Element	Value/remark
U-RNTI	
- SRNC Identity	Check to see if set to '0000 0000 0001'
- S-RNTI	Check to see if set to '0000 0000 0000 0000 0001'
START List	Check to see if it is present
AM RLC error indication(RB2, RB3 or RB4)	Checked to see if it is set to FALSE
AM RLC error indication(RB>4)	Checked to see if it is set to FALSE
Cell Update Cause	Check to see if set to 'Cell Re-selection'
RB timer indicator	
- T314 expired	Checked to see if it is set to 'FALSE'
- T315 expired	Checked to see if it is set to 'FALSE'
Protocol error indicator	Check to see if it is absent or set to 'FALSE'
Measured results on RACH	Check to see if it is absent
Protocol error information	Check to see if it is absent

CELL UPDATE CONFIRM (Step 23)

Use the default message content of the same message type in Annex A, with the following exceptions.

Information Element	Value/Remarks
New C-RNTI	'1010 1010 1010 1010'

UTRAN MOBILITY INFORMATION CONFIRM (Step 23a)

Only the message type is checked.

MEASUREMENT REPORT (Step 26)

Information Element	Value/Remarks
Measurement identity	Check to see if set to 1
Measured Results	
- CHOICE measurement	Check to see if set to "Intra-frequency
	measured results list"
 Intra-frequency measurement results 	
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
 Cell synchronisation information 	Check to see if this IE is absent
- CHOICE mode	TDD
 cell parameters identity 	Check to see if it's the same code for cell 3
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP List	Check to see if this IE is absent
- Cell Identity	Check to see if this IE is absent
- Cell synchronisation information	Check to see if this IE is present
- CHOICE mode	TDD
- cell parameters identity	Check to see if it's the same code for cell 2
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP List	
- Cell Identity	Check to see if this IE is absent
- Cell synchronisation information	Check to see if this IE is present
- CHOICE mode	TDD
- cell parameters identity	Check to see if it's the same code for cell 1
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP List	
Measured Results on RACH	Check to see if this IE is absent
Additional measured results	Check to see if this IE is absent
Event Results	
- CHOICE event result	Check to see if it's set to 'Intra-frequency
	measurement event results'
- Intra-frequency event identity	Check to see if this IE is set to '1g'
- Cell measurement event results	Shock to doo if this in it is dot to 19
- CHOICE mode	TDD
- Cell parameters Id	Check to see if it's the same code for cell 3
Ocii parametera id	Chook to see in it's the same code for cell's

Note: Cells 2 and 3 can be received in any order

MEASUREMENT CONTROL (Step 27)

Information Element	Value/remark
Measurement Identity	1
Measurement Command	Setup
Measurement Reporting Mode	
- Measurement Reporting Transfer Mode	Acknowledged Mode RLC
 Periodic Reporting / Event Trigger Reporting Mode 	Period
Additional measurements list	Not Present
CHOICE measurement type	Intra-frequency measurement
- Intra-frequency cell info list	
- CHOICE intra-frequency cell removal	Remove no intra-frequency cells
 New intra-frequency info list 	Not Present
- Cells for measurement	Not Present
 Intra-frequency measurement quantity 	
- Filter Coefficient	Not Present
- Measurement quantity	PCCPCH RSCP
 Intra-frequency reporting quantity 	
 Reporting quantities for active set cells 	
 Cell synchronisation information reporting 	FALSE
indicator	
 Cell identity reporting indicator 	FALSE
- CHOICE mode	TDD
 Timeslot ISCP reporting indicator 	FALSE
 Proposed TGSN Reporting required 	FALSE
 PCCPCH RSCP reporting indicator 	TRUE
 Pathloss reporting indicator 	FALSE
 Reporting quantities for monitored set cells 	
 Cell synchronisation information reporting 	FALSE
indicator	
 Cell identity reporting indicator 	FALSE
- CHOICE mode	TDD
 Timeslot ISCP reporting indicator 	FALSE
 Proposed TGSN Reporting required 	FALSE
 PCCPCH RSCP reporting indicator 	TRUE
 Pathloss reporting indicator 	FALSE
 Reporting quantities for detected cells 	Not present
- Reporting cell status	Not present
- Measurement validity	Not present
- CHOICE report criteria	period measurement criteria
 reporting amount 	infinity
- reportingInterval	64s
DPCH compressed mode status info	Not Present

Information Element	Value/Remarks
Measurement identity	Check to see if set to 1
Measured Results	
- CHOICE measurement	Check to see if set to "Intra-frequency
	measured results list"
 Intra-frequency measurement results 	
- Cell measured results	
- Cell Identity	Check to see if this IE is absent
 Cell synchronisation information 	Check to see if this IE is absent
- CHOICE mode	TDD
 cell parameters identity 	Check to see if it's the same code for cell 3
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP_List	Check to see if this IE is absent
- Cell Identity	Check to see if this IE is absent
 Cell synchronisation information 	Check to see if this IE is present
- CHOICE mode	TDD
- cell parameters identity	Check to see if it's the same code for cell 2
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP_List	
- Cell Identity	Check to see if this IE is absent
- Cell synchronisation information	Check to see if this IE is present
- CHOICE mode	TDD
- cell parameters identity	Check to see if it's the same code for cell 1
- proposed TGSN	Check to see if this IE is absent
- PCCPCH RSCP	Check to see if this IE is present
- Pathloss	Check to see if this IE is absent
- timeslotISCP_List	
Measured Results on RACH	Check to see if this IE is absent
Additional measured results	Check to see if this IE is absent
Event Results	Check to see if this IE is absent

8.4.1.7A.5 Test Requirement

After step 3 the UE shall report cell 2's PCCPCH RSCP value by transmitting MEASUREMENT REPORT messages.

After step 9 and step 11 the UE shall not transmit MEASUREMENT REPORT messages, which pertain to intrafrequency type measurement reporting.

After step 9b, the UE shall transmit a MEASUREMENT REPORT according to what is broadcast in SIB 11 and 12 of cell 1, and MEASUREMENT REPORT message pertaining to the MEASUREMENT CONTROL message that it had received in step 5.

After steps 13 and 14e, the UE shall resume the measurement and reporting activities as specified in MEASUREMENT CONTROL message received in step 10. The UE shall transmit MEASUREMENT REPORT messages, containing measured results of cell 2's PCCPCH RSCP value.

After step 15 the UE shall stop measurement activities pertaining to periodic reporting of cell 2's PCCPCH RSCP, no MEASUREMENT REPORT messages shall be detectable by the SS on the uplink DCCH.

After step 17, the UE shall transmit a MEASUREMENT REPORT message to the SS as specified in the MEASUREMENT CONTROL message received in step 17.

After step 21 the UE shall re-select to cell 2 and initiate a cell update procedure. SS shall receive a CELL UPDATE message on the uplink CCCH of cell 2, with the "cell update cause" IE stated as "cell re-selection".

After step 23, the UE shall transmit UTRAN MOBILITY INFORMATION CONFIRM message on the uplink DCCH AM RLC.

After step 25, UE shall not send MEASUREMENT REPORT message with "measurement identity" = '12'.

After step 25a the UE shall report cell 3's PCCPCH RSCP value by transmitting MEASUREMENT REPORT messages.

After step 27, UE shall send MEASUREMENT REPORT message with "measurement identity" = '1'.

<< END OF MODIFIED SECTION >>

3GPP RAN5#27 Meeting Bath, England, U.K. 25th April – 29th April, 2005

Jan, Ingla	2000 - 10					
CHANGE REQUEST CHANGE REQUEST						
	34.123-1 CR 1243					
For <u>HELP</u>	on using this form, see bottom of this page or look at the pop-up text over the 🕱 symbols.					
Proposed cha	nnge affects: UICC apps <mark>器 ME X</mark> Radio Access Network Core Network					
Title:	★ Correction to Package 4 Inter system cell reselection test case 8.3.9.3					
Source:	第 3GPP TSG RAN WG5 (Testing)					

Release:

Rel-5 ₩ F Category: Use one of the following categories: Use one of the following releases: F (correction) (GSM Phase 2) 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) (Release 1998) R98 (Release 1999) **D** (editorial modification) R99 Detailed explanations of the above categories can Rel-4 (Release 4) be found in 3GPP TR 21.900. Rel-5 (Release 5) Rel-6 (Release 6)

The conformance requirement of this test case states that:

"If the inter-RAT cell reselection fails, the UE shall:

1> resume the connection to UTRAN using the resources used before initiating the inter-RAT cell reselection procedure."

As per the test procedure at Step d)

"The SS increases Qrxlevmin, so S will become negative"

This will cause UE to consider Serving UMTS cell as out of service area and initiate an Inter RAT cell reselection procedure.

However UE will not consider cell 9 (GPRS cell) suitable to camp as this cell is barred.

Later at Step f)

"The SS decreases Qrxlevmin, so S will become positive".

This will cause UE to consider UMTS cell suitable for cell reselection. UE will then initiate a cell updating procedure with the cause "Re-entered Service Area".

Problem in Specification:

- 1) Initiation of Cell Update procedure by the UE after step f is not mentioned.
- 2) As per the test procedure change in the system information (change in S value) triggers cell Reselection. This is not a real network scenario. In order to simulate a real network scenario, cell power level changed, which will trigger cell reselection procedure due to change in cell ranking.

Summary of change: 黑 Cell power levels are changed instead of changing the S value. Due to this cell Reselection will be triggered, as GSM cell will rank better than the UMTS cell. At the same time S will be positive for the UMTS cell.

Consequences if not approved:

X Test case will not meet the test purpose.

Clauses affected: 8.3.9.3, 8.3.9.3.4, 8.3.9.3.5

Other specs affected:

Other core specifications Test specifications **O&M Specifications**

 \mathfrak{R}

置 This CR will require change in TTCN. Other comments:

How to create CRs using this form:

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<< START OF MODIFIED SECTION >>

8.3.9.3 Cell reselection if S<0cell rank changes; UTRAN to GPRS (UE in CELL FACH fails to complete an inter-RAT cell reselection)

8.3.9.3.1 Definition

8.3.9.3.2 Conformance requirement

If the inter-RAT cell reselection fails, the UE shall:

1> resume the connection to UTRAN using the resources used before initiating the inter-RAT cell reselection procedure.

References

TS 25.331, clause 8.3.9.4

8.3.9.3.3 Test purpose

To verify if the inter-RAT cell reselection fails before the UE in CELL_FACH succeeds in initiating the establishment of a connection to the GPRS cell, the UE shall:

- resume the connection to UTRAN using the resources used before initiating the inter-RAT cell reselection procedure.

8.3.9.3.4 Method of test

Initial conditions

System Simulator: 2 cells – Cell 1 is UTRAN FDD, Cell 9 is GPRS with PBCCH. 51.010 clauses 20.22 and 40.1.1 shall be referenced for the default parameters of cell 9.

All cells belong to the same PLMN.

The Inter-RAT Cell Info List of Cell 1 (UTRAN) refers to Cell 9 (GPRS).

The 3G Neighbour Cell Description of Cell 9 (GPRS) refers to Cell 1 (UTRAN)

UE: Power-Off (State 1) (UTRAN) as specified in clause 7.4 of TS 34.108.

SYSTEM INFORMATION BLOCK TYPE 11 and 12 (see specific message contents).

Related ICS/IXIT statement

- UE supports both GSM/GPRS and UTRAN Radio Access Technologies,
- UE supports Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH,
- UE supports GSM-P, GSM-E, GSM-DCS, GSM-450, GSM-480.

Step a-c:

Parameter	Unit	Cell 1 (UTRAN)
Test Channel		1
CPICH Ec (FDD)	dBm <u>/</u> 3.84 MHz	-60
P-CCPCH RSCP (TDD)	dBm	-60
<u>Qrxlevmin</u>	dBm	-101
Treselection _s	S	5
SrxlevR*	dB m	41 <u>-58</u>
CellBarred		Not barred

Parameter	Unit	Cell 9 (GPRS)
Test Channel		1
RF Signal Level	dBm	-80
GPRS_RXLEV_A CCESS_MIN	dBm	-100
C1*	dBm	20
C32*	d₿	20
<u>R*</u>	<u>dB</u>	<u>-80</u>
CellBarred		Barred

Step d:

Parameter	Unit	Cell 1 (UTRAN)
Qrxlevmin	DB	-101 -> -41
Srxlev*	ĐB	41 > 19

<u>Parameter</u>	<u>Unit</u>	<u>Cell 1</u> (UTRAN)
CPICH Ec (FDD)	dBm/ 3.84 MHz	<u>-60 -> -70</u>
P-CCPCH RSCP (TDD)	<u>dBm</u>	<u>-60 -> -70</u>
RSrxlev*	<u>dB</u>	26 -58 -> -68

<u>Parameter</u>	<u>Unit</u>	Cell 9 (GPRS)
RF Signal Level	<u>dBm</u>	<u>-80 -> -50</u>
<u>C1*</u>	<u>dBm</u>	<u>20 -> 50</u>
<u>C32*</u>	<u>dB</u>	<u>20 -> 50</u>
<u>R*</u>	<u>dB</u>	<u>-80 -> -50</u>
CellBarred		Barred

Step f:

Parameter	Unit	Cell 1 (UTRAN)
Qrxlevmin	DB	-41-> -101
Srxlev*	DB	-19 -> 41

Test procedure

- a) The SS activates cells 1 and 9. The SS monitors cells 1 and 9 for random access requests from the UE.
- b) The UE is switched on.
- c) The SS brings the UE to PS-DCCH+DTCH FACH (State 6-11).
- d) The SS increases Qrxlevmin, so S will become negative.
- e) The SS sends SYSTEM INFORMATION CHANGE INDICATION message to UE to inform UE of the modification in the system information.
- f) The SS decreases Qrxlevmin, so S will become positive (After the expiry of the timer Treselection). The SS sends SYSTEM INFORMATION CHANGE INDICATION message to UE to inform UE of this change in the system information
- d) The SS increases RF Signal Level of the GPRS Cell to -50 dBm and decreases the CPICH of the UMTS cell to -70 dBm so that the ranking of the UMTS cell goes lower than the GPRS cell.
- e) After the expiry of the timer Treselection, SS waits for 5 seconds to allow UE to read the system information for a GPRS cell and finds that the cell is barred. Later SS calls for generic procedure C.2 in cell 1 (UTRAN) to check that UE is in CELL_FACH state. The UE resumes the connection to UTRAN using the resources used before initiating the inter-RAT cell reselection procedure.
- f) The UE is switched off.
- g) SS calls for generic procedure C.2 in cell 1 (UTRAN) to check that UE is in CELL_FACH state. The UE resumes the connection to UTRAN using the resources used before initiating the inter RAT cell reselection procedure

Specific Message Contents

Contents of System Information Block type 11 (FDD)

Use the same message type found in clause $6\underline{1.0b}$ of TS 34.108, with the following exceptions:

- FACH measurement occasion info	
- FACH Measurement occasion cycle length coefficient FACH meas occasion coeff	3
- Inter-frequency FDD measurement indicatorinter freq FDD meas ind	FALSE
- Inter-frequency TDD measurement indicatorinter freq TDD meas ind	FALSE
- Inter-RAT measurement indicators inter RAT meas ind	
- RAT-Type	GSM

Contents of System Information Block type 12 (FDD)

Use the message type reference found in clause 8.3.9 of TS 34.123-1, with the following exceptions:

	FACI	I measurement occasi	ion int	Ю
--	------	----------------------	---------	---

- FACH Measurement occasion cycle length coefficient	3
- Inter-frequency FDD measurement indicator	FALSE
- Inter-frequency TDD measurement indicator	<u>FALSE</u>
- Inter-RAT measurement indicators	
- RAT-Type	<u>GSM</u>

8.3.9.3.5 Test Requirements

In After step fe, the UE remains in CELL_FACH in cell 1.

<< END OF MODIFIED SECTION >>

CHANGE REQUEST								
3	1.123-1 CR 1244	жrev	- H C	Current versior	^{1:} 5.11.1 [#]			
For <u>HELP</u> on u	ing this form, see bottom	of this page or	look at the p	pop-up text ov	rer the 🕱 symbols.			
Proposed change a	fects: UICC apps 黑	ME X	Radio Acc	ess Network	Core Network			
Title:	Correction to GCF WI-0	114 MAC-HS tes	t case 7.1.5	5.1				
Source:	3GPP TSG RAN WG5	(Testing)						
Work item code: 選	TEI	(1.00		Date: ⊯ 2	28/04/2005			
Reason for change	V F a re e m m ir 2. Ir	tion of feature) above categories above	n HS-DSCH parameters up Message tion of prope in uplink. T ce complex equence mo echanism an	Use one of the 2 (G R96 (R R97 (R R98 (R R99 (R Rel-4 (R Rel-5 (R Rel-6 (R I/DCH is estate s specified in 3 e, UE RLC layer Acknowledge his polling me To reduce the ore deterministed hence retra	chanism makes e complexity and tic, it is proposed to nsmission of PDU's			
Summary of chang	3. Ir 2. Ir b 3. Ir	initial condition imer Poll Prohib isabled test procedure acked PDU from	it set to 100 added new o UE	to 34.108 classics to 34.108 cla	and Timer Poll tep b, to receive loop e 6.10.2.4.5.1 added.			
Consequences if not approved:	置 Test procedure ver	ry complex to im	plement					
Clauses affected:	光 7.1.5.1							
Other specs	Y N X Other core s	oecifications	X					

affected:	X Test specifications O&M Specifications	
Other comments:	光 This CR affects Rel-5 and later releases	

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7.1.5 HS-DSCH MAC-hs

7.1.5.1 MAC-hs reordering and stall avoidance

7.1.5.1.1 Definition and applicability

All UEs which support HS-PDSCH.

7.1.5.1.2 Conformance requirement

When a MAC-hs PDU with TSN = SN is received:

- If SN is within the receiver window:
 - if SN < next expected TSN, or this MAC-hs PDU has previously been received:
 - the MAC-hs PDU shall be discarded.
 - else:
 - the MAC-hs PDU is placed in the reordering buffer at the place indicated by the TSN.
- If SN is outside the receiver window:
 - the received MAC-hs PDU shall be placed above the highest received TSN in the reordering buffer, at the position indicated by SN;
 - RcvWindow_UpperEdge shall be set to SN thus advancing the receiver window;
 - any MAC-hs PDUs with TSN ≤ RcvWindow_UpperEdge RECEIVE_WINDOW_SIZE, i.e. outside the receiver window after its position is updated, shall be removed from the reordering buffer and be delivered to the disassembly entity;
 - next_expected_TSN shall be set to RcvWindow_UpperEdge RECEIVE_WINDOW_SIZE + 1;
- All received MAC-hs PDUs with consecutive TSNs from next_expected_TSN (included) up to the first not received MAC-hs PDU are delivered to the disassembly entity.
- next_expected_TSN shall be advanced to the TSN of this first not received MAC-hs PDU.

[...]

If no timer T1 is active:

- the timer T1 shall be started when a MAC-hs PDU with TSN > next expected TSN is correctly received.
- T1 TSN shall be set to the TSN of this MAC-hs PDU.

If a timer T1 is already active:

- no additional timer shall be started, i.e. only one timer T1 may be active at a given time.

The timer T1 shall be stopped if:

- the MAC-hs PDU with TSN = T1 TSN can be delivered to the disassembly entity before the timer expires.

When the timer T1expires and T1_TSN > next_expected_TSN:

- all correctly received MAC-hs PDUs with TSN > next_expected_TSN up to and including T1_TSN-1 shall be delivered to the disassembly entity;
- all correctly received MAC-hs PDUs up to the next not received MAC-hs PDU shall be delivered to the disassembly entity.
- next_expected_TSN shall be set to the TSN of the next not received MAC-hs PDU.

When the timer T1 is stopped or expires, and there still exist some received MAC-hs PDUs that can not be delivered to higher layer:

- timer T1 is started
- set T1 TSN to the highest TSN among those of the MAC-hs PDUs that can not be delivered.

[...]

Reference(s)

TS 25.321 clauses 11.6.2.3.1, 11.6.2.3.2

7.1.5.1.3 Test purpose

- 1. To confirm that the UE performs MAC-hs reordering and delivers RLC PDUs in order to RLC.
- 2. To confirm that the UE performs stall avoidance in case of missing MAC-hs PDUs based on a) window based stall avoidance and b) timer based stall avoidance.

7.1.5.1.4 Method of test

Initial conditions

System Simulator:

1 cell, default parameters, Ciphering Off.

User Equipment:

The SS follows the procedure in TS 34.108 7.4.2.6 (Mobile Terminated) so that the UE shall be in state BGP 6-17 (PS-DCCH + DTCH HS-DSCH). During the procedure the radio bearer defined in TS 34.108 clause [6.10.2.4.5.1TBD] shall be established. The following parameters are specific for this test case:

Parameter	Value
MAC-hs receiver window size	32
MAC-hs reordering timer T1	400 ms
Polling Info	
- Timer poll periodic	1000(max value)
- Timer_poll	Not Present

The radio bearer is placed into UE test loop mode 1 with the UL SDU size set to 39 octets.

Let T be the value of MAC-hs reordering timer T1 parameter.

Test procedure

In this test procedure each MAC-hs PDU contains one RLC PDU carrying one SDU of size 39 octets and one length indicator indicating the end of the SDU.

- a) The SS transmits a MAC-hs PDU with Transmission Sequence Number (TSN) = 0 containing an RLC PDU with SN=0
- b) The SS checks that the RLC PDU with SN=0 is looped back
- bc) The SS transmits a MAC-hs PDU with TSN = 1 containing an RLC PDU with SN=1.
- ed) The SS checks that the RLC PDUs with SN=0,1 are is looped back
- de) The SS repeats the transmission of the MAC-hs PDUs in step a) and bc) with identical content except that the RLC PDUs have SN 2,3
- ef) The SS checks that no data is looped back (the data is discarded in the UE)
- fg) The SS transmits a MAC-hs PDU with TSN = 3 containing an RLC PDU with SN=3

- gh) The SS waits 400 ms and checks that no data is looped back and no RLC status report is received during that time
- hi) The SS transmits a MAC-hs PDU with TSN = 2 containing an RLC PDU with SN=2
- i) The SS checks that the RLC PDUs with SN = 2,3 are looped back
- ki) The SS transmits a MAC-hs PDU with TSN = 6 containing an RLC PDU with SN=4
- k]) The SS transmits a MAC-hs PDU with TSN = 7 containing an RLC PDU with SN=5
- 1 The SS transmits a MAC-hs PDU with TSN = 38 containing an RLC PDU with SN=6
- mn) The SS checks that the RLC PDU with SN = 4 and 5 is looped back but the RLC PDU with SN = 6 is not looped back
- Ho) The SS waits 400 ms and checks that the RLC PDU with SN = 6 is looped back after this time

Expected sequence

Step	Direction	Message Comments	
	UE SS		
1	+	MAC-hs PDU with TSN = 0, containing RLC PDU	
		with SN = 0	
2	→	RLC PDU with SN 0	
3	+	MAC-hs PDU with TSN = 1, containing RLC PDU	
	<u> </u>	with SN = 1	
4	→	RLC PDU with SN 1	
5	+	MAC-hs PDU with TSN = 0, containing RLC PDU with SN = 2	The duplicated data is discarded in the UE
6	←	MAC-hs PDU with TSN = 1, containing RLC PDU with SN = 3	The duplicated data is discarded in the UE
7	+	MAC-hs PDU with TSN = 3, containing RLC PDU with SN = 3	
8		SS waits T ms and checks that no data is looped back and no RLC status report is received	The waiting time may need to be adjusted to assure that T1 has not expired in the UE
9	+	MAC-hs PDU with TSN = 2, containing RLC PDU with SN = 2	
10	\rightarrow	RLC PDUs with SN 2,3	
11	+	MAC-hs PDU with TSN = 6, containing RLC PDU with SN = 4	
12	+	MAC-hs PDU with TSN = 7, containing RLC PDU with SN = 5	
13	+	MAC-hs PDU with TSN = 38, containing RLC PDU with SN = 6	SS need to transmit this PDU before timer T1 in UE expires (400 ms after reception of MAC-hs PDU with TSN=6). Note: T _A
14	→	RLC PDUs with SN 4,5	The RLC PDUs with SN = 4,5 is looped back after reception of the MAC_hs PDU in step 13, i.e. before timer T1 expires
15		SS waits T ms and checks that the RLC PDU with SN = 6 is not looped back during this time	
16	→	RLC PDU with SN 6	The RLC PDU with SN = 6 is looped back after expiry of T1. Note: T _B

- NOTE 1: The RLC SN in step 5,6 is increased since otherwise the data would be discarded by RLC even if the MAC-hs reordering does not work correctly. SInce the data is discarded the same RLC SN can be reused later in the test sequence.
- NOTE 2: In step 8 the absence of an RLC status report is used to check that the RLC PDU with SN = 3 is not delivered to RLC. If the RLC PDU was delivered to RLC the gap in the SN would trigger a status report (detection of missing PDUs).
- NOTE3: In step13, the timer T1 is restarted in the UE since the PDU with TSN = 38 can not be delivered to higher layers.
- NOTE 4: General timer tolerance as defined by 34.108 sub-clause 4.2.3 applies.

Specific Message Contents

None

7.1.5.1.5 Test requirements

- 1. After step 1, the RLC PDU with SN = 0 shall be looped back
- 2. After step 3, the RLC PDU with SN = 1 shall be looped back
- 3. After step 5 and 6, no data shall be looped back
- 4. After step 7, no data shall be looped back and no RLC status report shall be received
- 5. After step 9, the RLC PDUs with SN = 2.3 shall be looped back
- 6. After step 13, the RLC PDUs with SN = 4.5 shall be looped back

In step 16, the RLC PDU with SN = 6 shall be looped back and $T_B - T_A$ shall be equal to T ms .

7.

Bath, UK, 25 th – 29 th	April 2005	5			Agenda 8.8.11
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34.1	23-1 CR	1245	жrev	- H	Current version: 5.11.1 ^ℍ
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Reason for change: #	2. 3.	default RLC p Setup Messay of proper Ack polling mecha the complexity proposed to n PDU's in uplir In Initial condi	parameters ge, UE RL nowledge anism mak y and mak nodify poll nk is avoid itions refe loop back p 4 missir	s specified C layer was ments, was expected ing mechalist to the control of the c	CH is established in AM mode. With ed in 34.108 clause 9 for Radio Beare will set poll bits, and on not reception vill retransmit PDU's in uplink. This cted sequence complex. To reduce ted sequence more deterministic, it is nanism and hence retransmission of 34.108 class specified TBD fter step 2 and reception of loop back
Summary of change: ₩	1. 2. 3. 4. 5.	In initial cond In test proced In test proced Editorial corr	ditions refe dure b, ad dure d, ad ection in t	erence to ded that ded that est proce	Max value) and Timer Poll disabled 34.108 clause 6.10.2.4.5.1 added. UE will not loop back the RLC PDU UE will loop back the RLC PDU edure step 'e' teps 2a and 5
Consequences if	Test proced	dure very com	plex to im	plement	

Clauses affected:	光 7.1.5.4
	YN
Other specs	★ Other core specifications ★ Other core specifications
affected:	X Test specifications
	X O&M Specifications
Other comments:	光 This CR affects Rel-5 & later releases.

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7.1.5.4 MAC-hs retransmissions

7.1.5.4.1 Definition and applicability

All UEs which support HS-PDSCH.

7.1.5.4.2 Conformance requirement

[...]

The UE shall:

- if the New Data Indicator has been incremented compared to the value in the previous received transmission in this HARQ process or this is the first received transmission in the HARQ process:
 - replace the data currently in the soft buffer for this HARQ process with the received data.
 - if the Transport Block Size index value is equal to 111111 (FDD only):
 - generate a positive acknowledgement (ACK) of the data in this HARQ process;
 - discard the received data;
 - assume that the data has been successfully decoded.
- if the New Data Indicator is identical to the value used in the previous received transmission in the HARQ process:
 - if the Transport Block Size index value is equal to 111111 (FDD only):
 - assume that the transport block size is identical to the last valid transport block size signalled for this HARQ process.
 - if the data has not yet been successfully decoded:
 - combine the received data with the data currently in the soft buffer for this HARQ process.
- if the data in the soft buffer has been successfully decoded and no error was detected:
 - deliver the decoded MAC-hs PDU to the reordering entity;
 - generate a positive acknowledgement (ACK) of the data in this HARQ process.
- else:
 - generate a negative acknowledgement (NAK) of the data in this HARQ process;
- schedule the generated positive or negative acknowledgement for transmission and the time of transmission relative to the reception of data in a HARQ process is configured by upper layer.

[...]

Reference(s)

TS 25.321 clauses 11.6.22

7.1.5.4.3 Test purpose

1. To confirm that the UE correctly transmit positive and negative acknowledgements when receiving MAC-hs PDUs

7.1.5.4.4 Method of test

Initial conditions

System Simulator:

1 cell, default parameters, Ciphering Off.

User Equipment:

The SS follows the procedure in TS 34.108 7.4.2.6 (Mobile Terminated) so that the UE shall be in state BGP 6-17 (PS-DCCH + DTCH HS-DSCH). During the procedure the radio bearer defined in TS 34.108 clause [6.10.2.4.5.1TBD] shall be established.

<u>Parameter</u>	<u>Value</u>
Polling info	
- Timer Poll Periodic	1000(Max Value)
- Timer poll	Not Present

The radio bearer is placed into UE test loop mode 1 with the UL SDU size set to 39 octets.

Test procedure

In this test procedure each MAC-hs PDU contains one RLC PDU carrying one SDU of size 39 octets and one length indicator indicating the end of the SDU.

- a) The SS transmits a MAC-hs PDU where:
 - 1. The TSN = 0
 - 2. The HARQ process id = 0
 - 3. The Queue ID = 0
 - 4. The MAC-hs PDU contains an RLC PDU with SN=0.
 - 5. The physical layer CRC is modified such that the CRC check in the UE will fail
- b) The SS checks that a negative acknowledgement is received for the correct HARQ process <u>and no RLC PDU loop backed by UE</u>
- c) The SS transmits a MAC-hs PDU with the same content as in step a) but where the CRC is correct
- d) The SS checks that a postivive acknowledgement is received for the correct HARQ process and RLC PDU is loop backed by UE.
- e) The SS repeats steps a), b), c), d) with the HARQ process, TSN and RLC SN set as follows for iteration 2 to 78:

Iteration	HARQ process	TSN	RLC SN
1	0	0	0
2	1	1	1
3	2	2	2
4	3	3	3
5	4	4	4
6	5	5	5
7	6	6	6
8	7	7	7

Expected sequence

Step	Direction	Message	Comments		
	UE SS				
1	←	MAC-hs PDU sent in process N	Erroneous CRC		
2	\rightarrow	MAC-hs negative acknowledgement with process id = N			
<u>2a</u>			SS checks for 5 sec that UE does		
			not send loop backed PDU		
3	←	MAC-hs PDU sent in process N			
4	\rightarrow	MAC-hs positive acknowledgement with process			
		id = N			
<u>5</u>	<u></u>	RLC Loop Backed PDU			
NOTE	NOTE: The process id N in step 1-4 is taken from the table in the Test procedure description above.				

Steps 1 to $\underline{54}$ of the expected sequence are repeated for iteration 2-8.

7.1.5.4.5 Test requirements

- 1. After step 1, a MAC-hs negative acknowledgement shall be received for the correct HARQ process
- 2. After step 3, a MAC-hs positive acknowledgement shall be received for the correct HARQ process

	(HANGE	REQU	EST		CR-Form-v7
署	4.123-1 CR	<mark>1246</mark>	rev	- #	Current vers	sion: <mark>5.11.1</mark> [⊯]
For <u>HELP</u> on us	sing this form, see	bottom of this p	age or loc	ok at the	pop-up text	t over the 巽 symbols.
Proposed change a	affects: UICC a	pps <mark>æ</mark>	ME <mark>X</mark> R	Radio Ad	cess Netwo	rk Core Network
Title: ૠ	Correction to GC	F WI-014 MAC-	-HS test ca	ase 7.1.	5.5	
Source:	3GPP TSG RAN	WG5 (Testing)				
		(100 (100				
Work item code: 器	TEI				Date: ⊯	28/04/2005
Reason for change	B (addition of C (functional r D (editorial mode) Detailed explanation be found in 3GPP T	Is to a correction in feature), incodification of feature) of fication of feature in soft the above care in the second of the above care in the second of th	ture) ategories ca	an H is est	2) R96 R97 R98 R99 Rel-4 Rel-5 Rel-6	the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5) (Release 6)
	Messag Acknow makes expecte	e, UE RLC layer ledgements, wil expected seque	r will set p I retransm nce comp re determ	ooll bits, nit PDU's lex. To i inistic, it	and on not it is in uplink. The contract of th	lio Bearer Setup reception of proper This polling mechanism complexity and make It to modify polling ollink is avoided.
Summary of chang	e: 選 1. 2. 3.	Timer Poll Prob Editorial correc Test requireme	tion in exp	ected s	equence ste	•
Consequences if not approved:	置 Test proced	ure very comple	ex to imple	ement		
Clauses affected:	光 7.1.5.5					
Other specs affected:	X Test s	core specifications specifications Specifications	ons #	B		
Other comments:	署 This CR aff	ects Rel-5 and la	ater releas	ses		

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.

7.1.5.5 MAC-hs reset

7.1.5.5.1 Definition and applicability

All UEs which support HS-PDSCH.

7.1.5.5.2 Conformance requirement

If a reset of the MAC-hs entity is requested by upper layers, the UE shall:

- flush soft buffer for all configured HARQ processes;
- stop all active re-ordering release timer (T1) and set all timer T1 to their initial value;
- start TSN with value 0 for the next transmission on every configured HARQ process;
- initialise the variables RcvWindow_UpperEdge and next_expected_TSN to their initial values;
- disassemble all MAC-hs PDUs in the re-ordering buffer and deliver all MAC-d PDUs to the MAC-d entity;
- flush the re-ordering buffer.

and then:

- indicate to all AM RLC entities mapped on HS-DSCH to generate a status report.

[...]

Reference(s)

TS 25.321 clause 11.6.2.5

7.1.5.5.3 Test purpose

- 1. To confirm that the UE flushes the reordering buffer and delivers all MAC-d PDUs in the buffer to higher layers upon reset.
- 2. To confirm that the UE initializes the TSN and next_expected_TSN to their initial values.
- 3. To confirm that the UE sends an RLC status report after the reset.

7.1.5.5.4 Method of test

Initial conditions

System Simulator:

1 cell, default parameters, Ciphering Off

User Equipment:

The SS follows the procedure in TS 34.108 7.4.2.6 (Mobile Terminated) so that the UE shall be in state BGP 6-17 (PS-DCCH + DTCH HS-DSCH). The following parameters are specific for this test case:

Parameter	Value
MAC-hs receiver window size	32
MAC-hs reordering timer T1	400 ms
Polling Info	
- Timer poll prohibit	1000 (max value)
- Timer poll	Disabled

The radio bearer is placed into UE test loop mode 1 with the UL SDU size set to 39 octets.

Test procedure

In this test procedure each MAC-hs PDU contains one RLC PDU carrying one SDU of size 39 octets and one length indicator indicating the end of the SDU.

- a) The SS transmits a MAC-hs PDU with Transmission Sequence Number (TSN) = 0 containing an RLC PDU with SN=0
- b) The SS checks that the RLC PDU with SN=0 is looped back
- b) The SS transmits 2 MAC-hs PDUs with TSN = 2,3 containing the RLC PDUs with SN=1,2
- c) The SS initiates a MAC-hs reset by transmitting a PHYSICAL CHANNEL RECONFIGURATION message
- d) The SS checks that the RLC PDUs with SN=1,2 are looped back
- e) The SS checks that an RLC status report is transmitted by the UE
- d) The SS transmits a MAC-hs PDU with TSN = 0 containing an RLC PDU with SN=3
- e) The SS checks that the RLC PDU with SN=3 is looped back

Expected sequence

Step	Direction	Message	Comments			
	UE SS	_				
1	←	MAC-hs PDU with TSN = 0, containing RLC PDU				
		with SN = 0				
2	\rightarrow	RLC PDU with SN 0				
3	+	MAC-hs PDU with TSN = 2, containing RLC PDU with SN = 1				
4	+	MAC-hs PDU with TSN = 3, containing RLC PDU with SN = 2				
5	+	SS transmits a PHYSICAL CHANNEL RECONFIGURATION message to trigger a MAChs reset	Note: Time Ta			
6	\rightarrow	PHYSICAL CHANNEL RECONFIGURATION COMPLETE				
7	→	RLC PDUs with SN 1,2	The RLC PDUs are delivered directly after the MAC-hs reset i.e. before T1 expires. Note: time Tb			
8	\rightarrow	RLC status report				
9	+	MAC-hs PDU with TSN = 0, containing RLC PDU with SN = 3				
10	\rightarrow	RLC PDUs with SN 3				
NOTE	TE: Steps 6-8 may occur in different order.					

Specific Message Contents

PHYSICAL CHANNEL RECONFIGURATION (Step 5)

Use the same message as specified for "Packet to CELL_DCH from CELL_DCH in PS" in 34.108 except for the following:

Information Element	Value/remark
Downlink information common for all radio links	
- MAC-hs reset indicator	TRUE

7.1.5.5.5 Test requirements

- 1. After step 1, the RLC PDU with SN = 0 shall be looped back
- 2. After step 5, the RLC PDUs with SN = 1,2 shall be looped back

- 3. The time Tb-Ta shall be less than T1/2
- 3. After step 5 an RLC status report shall be received
- 4. After step <u>95</u>, the RLC PDU with SN=3 shall be looped back

3GPP RAN WG5 Meeting #27 Bath, England, 25-29 April, 2005

Proposed change affects: UICC apps₩

Consequences if

not approved:

ME X Radio Access Network Core Network

	CHANGE REQUEST						
[X]	34.123-1 C	CR <mark>1247</mark>	жrev	- #	Current version:	5.11.1 ^{x}	
For <u>HELF</u>	on using this form,	see bottom of	this page or	look at th	e pop-up text ove	r the 器 symbols.	

Title:	\aleph	Corre	ection to GCF WI-10 NAS Tes	t Cases 12.2.1.2	2, 12.2.1.5a	Proc 1, 12.2.1.5a Proc
		2, 12	.3.2.7, 12.4.1.2 and 12.6.1.2			
Source:	\mathbb{H}	3GPF	P TSG RAN WG5 (Testing)			
Work item code	:	TEI			Date: ૠ	10/04/2005
Category:	\mathfrak{H}	F			Release: ₩	Rel-5
		Use <u>or</u>	<u>e</u> of the following categories:		Use <u>one</u> of	the following releases:
		F	(correction)		2	(GSM Phase 2)
			(corresponds to a correction in a	an earlier release)	R96	(Release 1996)
		В	(addition of feature),		R97	(Release 1997)
		С	(functional modification of feature	e)	R98	(Release 1998)
		D	(editorial modification)		R99	(Release 1999)
			d explanations of the above cate	gories can	Rel-4	(Release 4)
		be four	nd in 3GPP <u>TR 21.900</u> .		Rel-5	(Release 5)
						(D (a)

	Rel-6 (Release 6)
Reason for change: #	In response to action item AP26.10 raised in T1#26, this CR is raised to complete this action. 1. The presence of the statement "Parameter mobile identity is" implies that the mobile identity (i.e. IMSI or TMSI) shall be checked against an expected value. The current TTCN implementation does this checking in some of the test cases, whereas in some of the test cases this mobile identity is allocated to the UE. As the checking of this IE is not part of the test purpose. It is felt that the statement should be removed in order to align the prose with the TTCN.
	angh the prose with the FFON.
	Where the checking of the mobile parameter is required, the wording has been changed to provide clarity.
	Where applicable in CS registration, a statement of the TMSI value allocated by the SS is added to provide clarity.
Summary of change: ⊯	 The statement "Parameter mobile identity is" has been removed and added check for Mobile Identity in case it is checked in TTCN. Also added a comment indicating which Mobile Identity to be assigned to UE. Where the checking is required, the statement "Parameter mobile identity is" has been replaced by "SS checks Mobile identity".
	 Where applicable in CS registration, a statement to state the SS allocating a TMSI value have been added.

置 The prose will remian unclear.

Clauses affected:	第 12.2.1.2.4, 12.2.1.5a.1.4, 12.2.1.5a.2.4, 12.3.2.7.4, 12.4.14 and 12.6.1.2.4			
	YN			
Other specs	X Other core specifications X			
affected:	X Test specifications			
	X O&M Specifications			
Other comments:	器 No impact to TTCN as the TTCN is already implemented this way.			

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.
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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.

12.2.1.2 PS attach / rejected / IMSI invalid / illegal UE

12.2.1.2.1 Definition

12.2.1.2.2 Conformance requirement

- 1) If the network rejects a PS attach procedure from the User Equipment with the cause 'Illegal MS, the User Equipment shall consider USIM invalid for PS services until power is switched off or USIM is removed.
- 2) If the network rejects a PS attach procedure from the User Equipment with the cause 'Illegal MS the User Equipment shall delete the stored RAI, PS-CKSN, P-TMSI and P-TMSI signature.
- 3) If the network rejects a PS attach procedure from the User Equipment with the cause 'Illegal MS, the User Equipment shall delete the LAI.

Reference

3GPP TS 24.008 clause 4.7.3.1.

12.2.1.2.3 Test purpose

To test the behaviour of the UE if the network rejects the PS attach procedure of the UE with the cause 'illegal MS.

12.2.1.2.4 Method of test

Initial condition

System Simulator:

Three cells (not simultaneously activated), cell A with MCC1/MNC1/LAC1/RAC1 (RAI-1), cell B in

MCC1/MNC1/LAC2/RAC1 (RAI-3), cell C in MCC2/MNC1/LAC1/RAC1 (RAI-2).

All three cells are operating in network operation mode II (in case of UE operation mode A).

The SIB1 IE "CN domain specific NAS system information", for the CS Domain, is set to value "00 00" (T3212 value is set to 0 and ATT flag is set to FALSE in all cells.

NB: i) Cell C will be mapped to Cell 4 as found in TS 34.108 clause 6.1.4.1.

User Equipment:

The UE has a valid P-TMSI-1 and RAI-1.

Related ICS/IXIT statements

Support of PS service Yes/No

UE operation mode C Yes/No

UE operation mode A Yes/No (only if mode C not supported)

Switch off on button Yes/No

Automatic PS attach procedure at switch on or power on Yes/No

Test procedure

The SS rejects a PS attach with the cause value 'Illegal MS'. The SS checks that the UE does not perform PS attach in the same or another PLMN.

Expected Sequence

Step	Direction	Message	Comments
	UE SS		The following messages are sent and shall be
			received on cell A.
1	UE		The UE is set in UE operation mode C (see
			ICS). The SIB1 IE "CN domain specific NAS
			system information", for the CS Domain, is set
			to value "00 00" (T3212 value is set to 0 and
	00		ATT flag is set to FALSE) in all cells.
2	SS		The SS is set in network operation mode II. Set the cell type of cell A to the "Serving cell".
			Set the cell type of cell B to the "Non-Suitable
			cell".
			Set the cell type of cell C to the "Non-Suitable cell".
			(see note)
3	UE		The UE is powered up or switched on and
			initiates an attach (see ICS). Cell A is preferred
3a		Void	by the UE.
4	->	ATTACH REQUEST	Attach type = 'GPRS attach'
			Mobile identity = P-TMSI-1
5	<-	ATTACH REJECT	Old Routing area identity = RAI-1 GMM cause = 'Illegal MS'.
		7.117.16111120201	The following messages are sent and shall be
	0.0		received on cell B.
6	SS		Set the cell type of cell A to the "Non-Suitable cell".
			Set the cell type of cell B to the "Serving cell".
_			(see note)
7 8	UE UE		Cell B is preferred by the UE. No ATTACH REQUEST sent to the SS
	OL		(SS waits 30 seconds).
9	UE		The UE initiates an attach by MMI or by AT
10	UE		command. No ATTACH REQUEST sent to the SS
10	OL.		(SS waits 30 seconds).
			The following messages are sent and shall be
11	SS		received on cell C. Set the cell type of cell B to the "Non-Suitable
''	00		cell".
			Set the cell type of cell C to the "Serving cell".
12	UE		(see note) Cell C is preferred by the UE.
13	UE		No ATTACH REQUEST sent to the SS
			(SS waits 30 seconds).
14	UE		The UE initiates an attach by MMI or by AT command.
15	UE		No ATTACH REQUEST sent to the SS
			(SS waits 30 seconds).
16	UE		If possible (see ICS) switch off is performed. Otherwise the power is removed.
17	UE		The UE is powered up or switched on.
18	ÜE	Registration on CS	See TS 34.108
			This is applied only for UE in UE operation mode A.
			Parameter mobile identity is IMSI.
			SS allocates Mobile identity = TMSI-1.
19	UE	ATTACH BEOLIEST	The UE initiates an attach (see ICS).
20	->	ATTACH REQUEST	Attach type = 'GPRS attach' Mobile identity = IMSI
20a	<-	AUTHENTICATION AND	
205		CIPHERING REQUEST	
20b	->	AUTHENTICATION AND CIPHERING RESPONSE	
1	1	12	1

20c	SS		The SS starts integrity protection.			
21	<-	ATTACH ACCEPT	Attach result = 'GPRS only attached'			
			Allocated P-TMSI = P-TMSI-1			
			P-TMSI Signature = P-TMSI-1 signature			
			Routing area identity = RAI-2			
22	->	ATTACH COMPLETE	,			
NOTE:	The definitions for "Non-Suitable cell" and "Serving cell" are specified in TS34.108 clause 6.1					
	"Reference Radio Conditions for signalling test cases only".					

Specific message contents

None.

12.2.1.2.5 Test requirements

At step4, when the UE is powered up or switched on, UE shall:

- initiate the PS attach procedure with the information elements specified in the above Expected Sequence.

At step8, 10, 13 and 15, UE shall:

 not send the ATTACH REQUEST message to SS, even if there is an instruction of attach request from MMI or from AT command.

At step20, UE shall:

- initiate the PS attach procedure with the information elements specified in the above Expected Sequence.

12.2.1.5a PS attach / rejected / roaming not allowed in this location area

12.2.1.5a.1 Definition

12.2.1.5a.2 Conformance requirement

- 1) If the network rejects a PS attach procedure from the User Equipment with the cause 'roaming not allowed in this location area' the User Equipment shall:
 - 1.1 not perform PS attach when in the same location area.
 - 1.2 delete the stored RAI, PS-CKSN, P-TMSI and P-TMSI signature.
 - 1.3 store the LA in the 'forbidden location areas for roaming' list.
 - 1.4 perform PS attach when a new location area is entered.
 - 1.5 Periodically search for its HPLMN.
- 2) The User Equipment shall reset the list of 'Forbidden location areas for roaming' when switched off or when the USIM is removed.
- 3) The UE shall be capable of storing at least 10 entries in the list of 'Forbidden location areas for roaming'.

Reference

3GPP TS 24.008 clause 4.7.3.1.

12.2.1.5a.3 Test purpose

Test purpose 1

To test that on receipt of a rejection using the 'roaming not allowed in this location area' cause code, the UE ceases trying to attach on that location area. Successful PS attach procedure is possible in other location areas.

Test purpose 2

To test that if the UE is switched off or the USIM is removed the list of 'forbidden location areas for roaming' is cleared.

Test purpose 3

To test that at least 6 entries can be held in the list of 'forbidden location areas for roaming' (the requirement in 3GPP TS 24.008 is to store at least 10 entries. This is not fully tested by the third procedure).

Test purpose 4

To test that if a cell of the Home PLMN is available then the UE returns to it in preference to any other available cell.

12.2.1.5a.4 Method of test

12.2.1.5a.4.1 Test procedure 1

Initial condition

System Simulator:

Three cells (not simultaneously activated), cell A in MCC2/MNC1/LAC1/RAC1 (RAI-2, Not HPLMN), cell B in

MCC2/MNC1/LAC2/RAC1 (RAI-6, Not HPLMN) and cell C in MCC2/MNC1/LAC1/RAC2 (RAI-7, Not HPLMN).

All three cells are operating in network operation mode II.

The SIB1 IE "CN domain specific NAS system information", for the CS Domain, is set to value "00 00" (T3212 value is set to 0 and ATT flag is set to FALSE) in all cells.

User Equipment:

The UE has a valid P-TMSI-1 and RAI-2.

Related ICS/IXIT statements

Support of PS service Yes/No
UE operation mode C
UE operation mode A
Switch off on button
Yes/No
Yes/No

Automatic PS attach procedure at switch on or power on Yes/No

Test procedure

The SS rejects a PS attach with the cause value 'Roaming not allowed in this location area'. A new attempt for a PS attach is not possible. Successful PS attach / detach procedures are performed in another location area. A new attempt for a PS attach is performed in the 1st location area. This attempt shall not succeed, as the LA is on the forbidden list.

Expected Sequence

Step	Direction	Message	Comments
	UE SS SS		The following messages are sent and shall be
			received on cell A.
1	UE		The UE is set in UE operation mode C (see ICS). If UE operation mode C not supported,
			goto step 19.
2	SS		Set the cell type of cell A to the "Serving cell".
			Set the cell type of cell B to the "Non-Suitable cell".
			Set the cell type of cell C to the "Non-Suitable
			cell".
3	UE		(see note) The UE is powered up or switched on and
			initiates an attach (see ICS). Cell A is preferred
3a		Void	by the UE.
3b	SS	Void	SS checks that the IE "Establishment cause" in
			the received RRC CONNECTION REQUEST
4	->	ATTACH REQUEST	message is set to "Registration". Attach type = 'GPRS attach'
		ATT ACT REQUEST	Mobile identity = P-TMSI-1
_		ATTACH REJECT	Old Routing area identity = RAI-2
5	<-	ATTACH REJECT	GMM cause = 'Roaming not allowed in this location area'
6	UE		No ATTACH REQUEST sent to SS
6a	SS		(SS waits 30 seconds). The SS releases the RRC connection.
Ua Ua	33		The following messages are sent and shall be
_			received on cell B.
7	SS		Set the cell type of cell A to the "Non-Suitable cell".
			Set the cell type of cell B to the "Serving cell".
			(see note)
8 9	UE UE	Registration on CS	Cell B is preferred by the UE. See TS 34.108
		3	This is applied only for UE in UE operation
			mode A. Parameter mobile identity is IMSI.
			SS checks Mobile identity = IMSI
10	UE		SS allocates Mobile identity = TMSI-1.
10	UE		The UE initiates an attach automatically, by MMI or by AT command.
10a	SS		SS checks that the IE "Establishment cause" in
			the received RRC CONNECTION REQUEST message is set to "Registration".
11	->	ATTACH REQUEST	Attach type = 'GPRS attach'
11a	<-	AUTHENTICATION AND	Mobile identity = IMSI
l la		CIPHERING REQUEST	
11b	->	AUTHENTICATION AND	
11c	SS	CIPHERING RESPONSE	The SS starts integrity protection.
12	<-	ATTACH ACCEPT	Attach result = 'GPRS only attached'
			Allocated P-TMSI = P-TMSI-1 P-TMSI Signature = P-TMSI-1 signature
			Routing area identity = RAI-6
13	->	ATTACH COMPLETE	The CC releases the DDC server there
13a 14	SS UE		The SS releases the RRC connection. The UE initiates a PS detach (without power
			off) by MMI or by AT command .
14a	SS		SS checks that the IE "Establishment cause" in any received RRC CONNECTION REQUEST
			message is set to "Detach".
15 16	-> <-	DETACH ACCEPT	Detach type = 'normal detach, GPRS detach'
10	,	DETACH ACCEPT	

16a	SS	The SS releases the RRC connection.			
17	SS	The following messages are sent and shall be received on cell C. Set the cell type of cell B to the "Non-Suitable cell".			
18 19	UE UE	Set the cell type of cell C to the "Serving cell". (see note) Cell C is preferred by the UE. No ATTACH REQUEST sent to SS (SS waits 30 seconds). The UE is switched off or power is removed (see ICS)			
20	UE	UE is switched off.			
21	SS	Set the cell type of cell C to the "Non-Suitable cell". (see note)			
22	UE	The UE is set in UE operation mode A if supported (see ICS) and the test is repeated from step 2 to step 20.			
NOTE:					

12.2.1.5a.4.2 Test procedure 2

Initial condition

System Simulator:

One cell in MCC2/MNC1/LAC1/RAC1 (RAI-2, Not HPLMN) operating in network operation mode II. The SIB1 IE "CN domain specific NAS system information", for the CS Domain, is set to value "00 00" (T3212 value is set to 0 and ATT flag is set to FALSE).

User Equipment:

The UE has a valid P-TMSI-1 and RAI-2.

Related ICS/IXIT statements

Support of PS service Yes/No UE operation mode C Yes/No

UE operation mode A Yes/No (only if mode C not supported)

Switch off on button Yes/No

Automatic PS attach procedure at switch on or power on Yes/No

Test procedure

The SS rejects a PS attach updating with the cause value 'Roaming not allowed in this location area'. The UE is switched off for 10 s and switched on again. The SS check that a PS attach is possible on the cell on which the PS attach had been rejected.

If USIM removal is possible without switching off: The SS rejects a PS attach with the cause value 'Roaming not allowed in this location area'. The USIM is removed and inserted in the UE. The SS check that a PS attach is possible on the cell on which the PS attach had been rejected.

Expected Sequence

Step	Direction	Message	Comments
-:	UE SS		
1	UE		If UE operation mode C is supported, the UE is set in UE operation mode C (see ICS). If UE operation mode C is not supported, the UE is set in UE operation mode A.
2	UE		The UE is powered up or switched on and initiates an attach (see ICS).
2a 2b	SS	Void	SS checks that the IE "Establishment cause" in the received RRC CONNECTION REQUEST message is set to "Registration".
3	->	ATTACH REQUEST	Attach type = 'GPRS attach' Mobile identity = P-TMSI-1
4	<-	ATTACH REJECT	Old Routing area identity = RAI-2 GMM cause = 'Roaming not allowed in this location area'
5	UE		No ATTACH REQUEST sent to the SS (SS waits 30 seconds).
5a 6	SS UE		The SS releases the RRC connection. If possible (see ICS) switch off is performed. Otherwise the power is removed.
7	UE		The UE is powered up or switched on and initiates an attach (see ICS).
8 8a	SS		SS checks that the IE "Establishment cause" in the received RRC CONNECTION REQUEST message is set to "Registration".
8b	UE	Registration on CS	See TS 34.108 This is applied only for UE in UE operation mode A. Parameter mobile identity is IMSI- SS allocates Mobile identity = TMSI-1.
9	->	ATTACH REQUEST	Attach type = 'GPRS attach' Mobile identity = IMSI
9a	<-	AUTHENTICATION AND CIPHERING REQUEST	
9b	->	AUTHENTICATION AND CIPHERING RESPONSE	
9c 10	SS <-	ATTACH ACCEPT	The SS starts integrity protection. Attach result = 'GPRS only attached' Allocated P-TMSI = P-TMSI-1 P-TMSI Signature = P-TMSI-1 signature Routing area identity = RAI-2
11 11a	-> SS	ATTACH COMPLETE	The SS releases the RRC connection.

12.3.2.7 PS detach / rejected / Roaming not allowed in this location area

- 12.3.2.7.1 Definition
- 12.3.2.7.2 Conformance requirement
 - 1) If the network performs a PS detach procedure with the cause 'Roaming not allowed in this location area' the User Equipment shall:
 - 1.1 delete any RAI, P-TMSI, P-TMSI signature and PS ciphering key sequence number.
 - 1.2 set the GPRS update status to GU3 ROAMING NOT ALLOWED.
 - 1.3 reset the attach attempt counter.
 - 1.4 store the LAI in the list of "forbidden location areas for roaming".

- 1.5 perform a PLMN selection.
- 2) If the UE is IMSI attached via MM procedures, the UE shall in addition:
 - 2.1 delete any TMSI, LAI and ciphering key sequence number.
 - 2.2 reset the location update attempt counter.

Reference

3GPP TS 24.008 clauses 4.7.4.2.

12.3.2.7.3 Test purpose

To test the behaviour of the UE if the network orders the PS detach procedure with the cause 'Roaming not allowed in this location area'.

12.3.2.7.4 Method of test

Initial condition

System Simulator:

Three cells (not simultaneously activated), cell A in MCC2/MNC1/LAC1/RAC2 (RAI-2, Not HPLMN), cell B in MCC2/MNC1/LAC1/RAC2 (RAI-7, Not HPLMN), cell C in MCC2/MNC1/LAC2/RAC1 (RAI-6, Not HPLMN).

All cells are operating in network operation mode I.

User Equipment:

The UE has a valid IMSI.

Related ICS/IXIT statements

Support of PS service Yes/No
UE operation mode A Yes/No
Switch off on button Yes/No

Automatic PS attach procedure at switch on or power on Yes/No

Test procedure

The SS orders a PS detach with the cause value 'Roaming not allowed in this location area'. The SS checks that the UE does not perform combined PS attach while in the location area, performs PS attach when a new location area is entered and deletes the list of forbidden LAs when switched off. CS services are not possible unless an IMSI attach procedure is performed.

Expected Sequence

Step	Direction UE SS	Message	Comments
	SS		The following messages are sent and shall be
			received on cell A.
1	SS		Set the cell type of cell A to the "Serving cell".
			Set the cell type of cell B to the "Non-Suitable cell".
			Set the cell type of cell C to the "Non-Suitable
			cell".
2	UE		(see note) The UE is set in UE operation mode A (see
			ICS).
3	UE		The UE is powered up or switched on and
			initiates an attach (see ICS). Cell A is preferred by the UE.
4	->	ATTACH REQUEST	Attach type = 'Combined GPRS/IMSI attach'
			Mobile identity = IMSI
4a	<-	AUTHENTICATION AND	TMSI status = no valid TMSI available
	,	CIPHERING REQUEST	
4b	->	AUTHENTICATION AND	
4c	SS	CIPHERING RESPONSE	The SS starts integrity protection.
5	<-	ATTACH ACCEPT	Attach result = 'Combined GPRS/IMSI attached'
			Allocated P-TMSI = P-TMSI-1
			P-TMSI Signature = P-TMSI-1 signature MS identity = TMSI-1
			Routing area identity = RAI-2
6	->	ATTACH COMPLETE	Detack time - Iro attack not required!
7	<-	DETACH REQUEST	Detach type = 're-attach not required' Cause 'Roaming not allowed in this location
			area '
9	-> UE	DETACH ACCEPT	No LOCATION UPDATING REQ with type
9	06		'IMSI attach' is sent to the SS
4.0		DA ONIO TYPE 4	(SS waits 30 seconds).
10	<-	PAGING TYPE1	Mobile identity = TMSI-1 Paging order is for CS services.
11	UE		The UE shall not initiate an RRC connection.
40		PAGING TYPE1	This is checked during 3 seconds.
12	<-	PAGING TIPET	Mobile identity = P-TMSI-1 Paging order is for PS services.
13	UE		No response from the UE to the request.
			This is checked for 10 seconds
			The following messages are sent and shall be received on cell B.
14	SS		Set the cell type of cell A to the "Non-Suitable
			cell". Set the cell type of cell B to the "Serving cell".
			(see note)
15	UE		Cell B is preferred by the UE.
16	UE		The UE initiates an attach automatically, by MMI or by AT command.
17	UE		No ATTACH REQUEST sent to SS
10	UE		(SS waits 30 seconds)
18	UE		No LOCATION UPDATING REQ with type 'IMSI attach' is sent to the SS
			(SS waits 30 seconds).
19	<-	PAGING TYPE1	Mobile identity = TMSI-1 Paging order is for CS services.
20	UE		The UE shall not initiate an RRC connection.
		DA OINIO TYPE 1	This is checked during 3 seconds.
21	<-	PAGING TYPE1	Mobile identity = P-TMSI-1 Paging order is for PS services.
22			No response from the UE to the request.
			This is checked for 10 seconds

Step	Direction UE SS	Message	Comments
23	SS		The following messages are sent and shall be received on cell C. Set the cell type of cell B to the "Non-Suitable
			cell". Set the cell type of cell C to the "Serving cell". (see note)
24	UE		Cell C is preferred by the UE. Step 25 is only performed for non-auto attach UE.
25	UE	Registration on CS	See TS34.108 Parameter mobile identity is IMSI.
26	UE		The UE initiates an attach automatically (See ICS), by MMI or AT command.
27	->	ATTACH REQUEST	Attach type = 'Combined GPRS/IMSI attach' Mobile identity = IMSI TMSI status = no valid TMSI available
28	<-	ATTACH ACCEPT	Attach result = 'Combined GPRS/IMSI attached' Allocated P-TMSI = P-TMSI1 P-TMSI Signature = P-TMSI-1 signature MS identity = TMSI-1 Routing area identity = RAI-6
29 30	-> <-	ATTACH COMPLETE PAGING TYPE1	Mobile identity = TMSI-1
	,-		Paging order is for CS services.
31 32	-> <-	RRC CONNECTION REQUEST RRC CONNECTION SETUP	
33	->	RRC CONNECTION SETUP	
34 35	-> <-	PAGING RESPONSE RRC CONNECTION RELEASE	Mobile identity = TMSI-1 After sending of this message, the SS waits for disconnection of the CS signalling link.
36	->	RRC CONNECTION RELEASE COMPLETE	3
37	<-	PAGING TYPE1	Mobile identity = P-TMSI-1 Paging order is for PS services.
38 39	-> <-	RRC CONNECTION REQUEST RRC CONNECTION SETUP	
40	->	RRC CONNECTION SETUP	
41	->	SERVICE REQUEST	service type = "paging response"
42 43	<- ->	RRC CONNECTION RELEASE RRC CONNECTION RELEASE COMPLETE	
44	UE	OOWII EETE	The UE is switched off or power is removed (see ICS).
45	->	DETACH REQUEST	Message not sent if power is removed. Detach type = 'power switched off, combined GPRS / IMSI detach'
45a	SS		The SS releases the RRC connection. If no RRC CONNECTION RELEASE COMPLETE message have been received within 1 second then the SS shall consider the UE as switched off.
			The following messages are sent and shall be received on cell B.
46	UE		Set the cell type of cell B to the "Serving cell". Set the cell type of cell C to the "Non-Suitable cell".
47	UE		(see note) Cell B is preferred by the UE. The UE is powered up or switched on and initiates an attach (see ICS). Step 48 is only performed for non-auto attach UE.

Step	Direction UE SS	Message	Comments		
48	UE	Registration on CS	See TS34.108		
			Parameter mobile identity is TMSI-1		
			SS allocates Mobile identity = TMSI-1.		
49	UE		UE initiates an attach automatically (see ICS),		
		ATTA OLI DEGLIEGE	by MMI or AT commands.		
50	->	ATTACH REQUEST	Attach type = 'Combined GPRS/IMSI attach'		
			Mobile identity = P-TMSI-1 Old Routing area identity = RAI-6		
			TMSI status = valid TMSI available or IE not		
			present		
51	<-	ATTACH ACCEPT	Attach result = 'Combined GPRS/IMSI attached'		
			Allocated P-TMSI = P-TMSI-2		
			P-TMSI Signature = P-TMSI-2 signature		
			MS identity = TMSI-2		
52	->	ATTACH COMPLETE	Routing area identity = RAI-7		
53	- <i>-</i> /	PAGING TYPE1	Mobile identity = TMSI-2		
	-	THE THE	Paging order is for CS services.		
54	->	RRC CONNECTION REQUEST			
55	<-	RRC CONNECTION SETUP			
56	->	RRC CONNECTION SETUP			
	_	COMPLETE	Makila idantita. TMOLO		
57 58	-> <-	PAGING RESPONSE RRC CONNECTION RELEASE	Mobile identity = TMSI-2 After sending of this message, the SS waits for		
30	\-	INTO CONNECTION RELEASE	disconnection of the CS signalling link.		
59	->	RRC CONNECTION RELEASE	also similar and a signaming mini		
		COMPLETE			
60	<-	PAGING TYPE1	Mobile identity = P-TMSI-2		
64		DDC CONNECTION DECLIEST	Paging order is for PS services.		
61 62	-> <-	RRC CONNECTION REQUEST RRC CONNECTION SETUP			
63	->	RRC CONNECTION SETUP			
		COMPLETE			
64	->	SERVICE REQUEST	service type = "paging response"		
65	<-	RRC CONNECTION RELEASE			
66	->	RRC CONNECTION RELEASE COMPLETE			
67	UE	CONFLETE	The UE is switched off or power is removed		
3,	<u> </u>		(see ICS).		
68	->	DETACH REQUEST	Message not sent if power is removed.		
			Detach type = 'power switched off, combined		
			GPRS / IMSI detach'		
69	SS		The SS releases the RRC connection. If no		
			RRC CONNECTION RELEASE COMPLETE message have been received within 1 second		
			then the SS shall consider the UE as switched		
			off.		
NOTE:			rving cell" are specified in TS34.108 clause 6.1		
	"Reference Radio Conditions for signalling test cases only".				

Specific message contents

None.

12.3.2.7.5 Test requirements

At step4, when the UE is powered up or switched on, UE shall:

- initiate the PS attach procedure with the information elements specified in the above Expected Sequence.

At step8, when the UE receive the DETACH REQUEST message (Detach type = 're-attach not required', Cause = 'Roaming not allowed in this location area') from SS, UE shall:

- send the DETACH ACCEPT message.

UE shall perform the following action depending on UE location.

1) UE is in the same location area.

At step9 and 18, UE shall:

- not perform location updating procedure.

At step11 and 20, when the UE receives the paging message for CS domain, UE shall:

- not respond to the paging message for PS domain.

At step13 and 22, when the UE receives the paging message for PS domain, UE shall:

- not respond to the paging message for PS domain.

At step17, UE shall;

- not perform PS attach procedure.

2) UE is in the new location area.

At step27, UE shall;

perform the combined PS attach procedure.

At step34, when the UE receives the paging message for CS domain with Mobile identity = IMSI, UE shall;

- respond to the paging message for CS domain by sending the PAGING RESPONSE message.

At step41, when the UE receives the paging message for PS domain with Mobile identity = P-TMSI-1, UE shall:

- respond to the paging message for PS domain by sending the SERVICE REQUEST message.

At step50, when the UE is powered up or switched on, UE shall:

- initiate the PS attach procedure with the information elements specified in the above Expected Sequence

At step57, when the UE receives the paging message for CS domain with Mobile identity = IMSI, UE shall;

- respond to the paging message for CS domain by sending the PAGING RESPONSE message.

At step64, when the UE receives the paging message for PS domain with Mobile identity = P-TMSI-1, UE shall:

- respond to the paging message for PS domain by sending the SERVICE REQUEST message.

12.4.1.2 Routing area updating / rejected / IMSI invalid / illegal ME

12.4.1.2.1 Definition

12.4.1.2.2 Conformance requirement

- 1) If the network rejects a routing area updating procedure from the User Equipment with the cause 'Illegal ME', the User Equipment shall consider USIM invalid for PS services until power is switched off or USIM is removed.
- 2) If the network rejects a routing area updating procedure from the User Equipment with the cause 'Illegal ME', the User Equipment shall delete the stored RAI, PS-CKSN, P-TMSI and P-TMSI signature.

Reference

3GPP TS 24.008 clause 4.7.5.1.

12.4.1.2.3 Test purpose

To test the behaviour of the UE if the network rejects the routing area updating procedure of the UE with the cause 'Illegal ME'.

12.4.1.2.4 Method of test

Initial condition

System Simulator:

Three cells (not simultaneously activated), cell A in MCC1/MNC1/LAC1/RAC1 (RAI-1), cell B in MCC1/MNC1/LAC1/RAC2 (RAI-4), cell C in MCC2/MNC1/LAC1/RAC1 (RAI-2). All three cells are operating in network operation mode II (in case of UE operation mode A) The SIB1 IE "CN domain specific NAS system information", for the CS Domain, is set to value "00 00" (T3212 value is set to 0 and ATT flag is set to FALSE) in all cells.

NB: i) Cell C will be mapped to Cell 4 as found in TS 34.108 clause 6.1.4.1.

User Equipment:

The UE has a valid P-TMSI-1 and RAI-1.

Related ICS/IXIT statements

Support of PS service Yes/No UE operation mode C Yes/No

UE operation mode A Yes/No (only if mode C not supported) USIM removal possible without powering down Yes/No

Switch off on button Yes/No

Automatic PS attach procedure at switch on or power on Yes/No

Test procedure

The SS rejects a routing area updating with the cause value 'Illegal ME'. The SS checks that the UE does not perform PS attach in the same or another PLMN.

Expected Sequence

Step	Direction	Message	Comments
_	UE SS	_	
1	UE		The following messages are sent and shall be received on cell A. The UE is set in UE operation mode C (see ICS).
2	SS		The SS is set in network operation mode II.
2	33		Set the cell type of cell A to the "Serving cell". Set the cell type of cell B to the "Non-Suitable cell". Set the cell type of cell C to the "Non-Suitable cell".
3	UE		(see note) The UE is powered up or switched on and initiates an attach (see ICS). Cell A is preferred by the UE.
3a		Void	
4	->	ATTACH REQUEST	Attach type = 'GPRS attach' Mobile identity = P-TMSI-1 Old Routing area identity = RAI-1
4a	<-	AUTHENTICATION AND	old reduing area identity TV ii T
4b	->	CIPHERING REQUEST AUTHENTICATION AND CIPHERING RESPONSE	
4c	SS		The SS starts integrity protection.
5	<-	ATTACH ACCEPT	No new mobile identity assigned.P-TMSI and P- TMSI signature not included. Attach result = 'GPRS only attached' Routing area identity = RAI-1
			The following messages are sent and shall be
6	SS		received on cell B. Set the cell type of cell A to the "Suitable neighbour cell". Set the cell type of cell B to the "Serving cell".
			(see note)
7 8	UE ->	ROUTING AREA UPDATE REQUEST	Cell B is preferred by the UE. Update type = 'RA updating'
9	<-	ROUTING AREA UPDATE	Old Routing area identity = RAI-1 GMM cause = 'Illegal ME'
10	<-	PAGING TYPE1	Mobile identity = P-TMSI-1 PAGING TYPE1 (used for NW-mode II).
11	UE		Paging order is for PS services. No response from the UE to the request. This is checked for 10 seconds.
12	SS		The following messages are sent and shall be received on cell C. Set the cell type of cell B to the "Non-Suitable cell". Set the cell type of cell A to the "Non-Suitable
13 14	UE UE		cell". Set the cell type of cell C to the "Serving cell". (see note) Cell C is preferred by the UE. No ATTACH REQUEST sent to the SS (SS waits 30 seconds).
15	UE		If possible (see ICS) USIM removal is performed. Otherwise if possible (see ICS) switch off is performed. Otherwise the power is
16	UE		removed. The UE gets the USIM replaced, is powered up or switched on and initiates an attach (see ICS).
16a			Step 16b is only performed by UE in operation mode A

16b	UE	Registration on CS	See TS 34.108 Parameter mobile identity is IMSI.		
17	->	ATTACH REQUEST	SS allocates Mobile identity = TMSI-1. Attach type = 'GPRS attach' Mobile identity = IMSI		
17a	<-	AUTHENTICATION AND CIPHERING REQUEST			
17b	->	AUTHENTICATION AND CIPHERING RESPONSE			
17c	SS		The SS starts integrity protection.		
18	<-	ATTACH ACCEPT	Attach result = 'GPRS only attached' Allocated P-TMSI = P-TMSI-1 P-TMSI Signature = P-TMSI-1 signature Routing area identity = RAI-2		
19	->	ATTACH COMPLETE	realing area realing and a		
NOTE:	NOTE: The definitions for "Non-Suitable cell", "Suitable neighbour cell" and "Serving cell" are specified in TS34.108 clause 6.1 "Reference Radio Conditions for signalling test cases only".				

Specific message contents

None.

12.4.1.2.5 Test requirements

At step4, when the UE is powered up or switched on, UE shall:

- initiate the PS attach procedure with the information elements specified in the above Expected Sequence.

At step8, UE shall;

- initiate the routing area updating procedure with the information elements specified in the above Expected Sequence.

At step11, after the routing area updating procedure is rejected with GMM cause = 'Illegal ME', UE shall;

- not respond to the paging message for PS domain.

At step14, UE shall,

- not initiate PS attach procedure.

At step17, after the UE is powered up or USIM is replaced, UE shall;

- initiate the PS attach procedure.

12.6.1.2 Authentication rejected by the network

12.6.1.2.1 Definition

12.6.1.2.2 Conformance requirement

Upon receipt of an AUTHENTICATION AND CIPHERING REJECT message, the UE shall set the PS update status to GU3 ROAMING NOT ALLOWED and shall delete the P-TMSI, P-TMSI signature, RAI and PS ciphering key sequence number stored.

The USIM shall be considered as invalid until switching off or the USIM is removed.

If the AUTHENTICATION AND CIPHERING REJECT message is received, the UE shall abort any GMM procedure, shall stop the timers T3310 and T3330 (if running) and shall enter state GMM-DEREGISTERED.

Reference

3GPP TS 24.008 clauses 4.7.7.5.

12.6.1.2.3 Test purpose

To test the behaviour of the UE if the network rejects the authentication and ciphering procedure.

12.6.1.2.4 Method of test

Initial condition

System Simulator:

Two cells (not simultaneously activated), cell A in MCC1/MNC1/LAC1/RAC1 (RAI-1), cell B in MCC1/MNC1/LAC1/RAC2 (RAI-4).

Both cells are operating in network operation mode II.

The SIB1 IE "CN domain specific NAS system information", for the CS Domain, is set to value "00 00" (T3212 value is set to 0 and ATT flag is set to FALSE) in both cells.

User Equipment:

The UE has a valid IMSI.

Related ICS/IXIT statements

Support of PS service Yes/No
UE operation mode A
UE operation mode C
Switch off on button
Yes/No
Yes/No

Automatic PS attach procedure at switch on or power on Yes/No

Test procedure

The test sequence is repeated for K = 1, 2.

A complete PS attach procedure is performed. The SS rejects the following authentication and ciphering procedure. The UE is paged with its IMSI and shall not respond.

The Cell is changed into a new Routing Area.

The SS checks that the UE does not perform normal routing area updating.

The SS then checks that the UE does not perform a PS detach.

The SS checks that the UE does not perform a PS Attach procedure.

Expected Sequence

The test sequence is repeated for k = 1, 2

For k = 1, the UE is set in UE operation mode C. If MS operation mode C not supported then k = 2.

For k = 2 the UE is set in UE operation mode A.

Step	Direction	Message	Comments
	UE SS		The following messages are sent and about
1	SS		The following messages are sent and shall be received on cell A. Set the cell type of cell A to the "Serving cell". Set the cell type of cell B to the "Non-Suitable cell".
2	UE		(see note) The UE is powered up or switched on and initiates an attach (see ICS).
2a 2b	SS	Void	SS checks that the IE "Establishment cause" in the received RRC CONNECTION REQUEST
3	->	ATTACH REQUEST	message is set to "Registration". Attach type = 'GPRS attach' Mobile identity = IMSI
4		Void	
5 6	<-	Void AUTHENTICATION AND CIPHERING REQUEST	Request authentication. Set PS-CKSN-1
7	->	AUTHENTICATION AND	RES
8	<-	CIPHERING RESPONSE AUTHENTICATION AND CIPHERING REJECT	
8a	SS		The SS releases the RRC connection and waits
9	<-	PAGING TYPE1	5s to allow the UE to read system information. Mobile identity = IMSI Paging order is for PS services.
10	UE		No response from the UE to the request. This is checked for 10 seconds.
11	SS		The following messages are sent and shall be received on cell B. Set the cell type of cell A to the "Non-Suitable cell". Set the cell type of cell B to the "Serving cell".
12 13	UE UE		(see note) Cell B is preferred by the MS. No ROUTING AREA UPDATE REQUEST sent to the SS
14	UE		(SS waits 30 seconds). The UE initiates an attach by MMI or by AT
15	UE		command. No ATTACH REQUEST sent to the SS (SS waits 30 seconds).
16 17	UE SS		The UE is switched off (see ICS). No DETACH REQUEST sent to the SS
18			(SS waits 30 seconds). The UE is powered up or switched on and initiates an attach (see ICS). Step 19 is only performed for k =2
19	UE	Registration on CS	Parameter mobile identity is IMSI See TS 34.108 SS checks Mobile identity = IMSI.
19a	SS		SS allocates Mobile identity = TMSI-1. SS checks that the IE "Establishment cause" in the received RRC CONNECTION REQUEST
20	->	ATTACH REQUEST	message is set to "Registration". Attach type = 'GPRS attach' Mobile identity = IMSI
20a	<-	AUTHENTICATION AND CIPHERING REQUEST	
20b	->	AUTHENTICATION AND CIPHERING RESPONSE	
20c	SS		The SS starts integrity protection.

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21	<-	ATTACH ACCEPT	Attach result = 'GPRS only attached' Allocated P-TMSI = P-TMSI-1 P-TMSI Signature = P-TMSI-1 signature Routing area identity = RAI-4	
22	->	ATTACH COMPLETE	,	
22a	SS		The SS releases the RRC connection.	
23	UE		The UE is switched off or power is removed. (see ICS)	
23a	SS		SS checks that the IE "Establishment cause" in any received RRC CONNECTION REQUEST	
24	->	DETACH REQUEST	message is set to "Detach". Message not sent if power is removed.	
24a	SS		If the power was not removed, the SS releases	
			the RRC connection. If no RRC CONNECTION	
			RELEASE COMPLETE message have been received within 1 second then the SS shall	
			consider the UE as switched off .	
25	UE		If k=1 then the test is repeated for k=2.	
NOTE:	The definitions for "Non-Suitable celll" and "Serving cell" are specified in TS34.108 clause 6.1			
	"Reference Radio Conditions for signalling test cases only".			

Specific message contents

None.

12.6.1.2.5 Test requirements

At step3, when the UE is powered on or switched on, UE shall:

- initiate the PS attach procedure with information elements specified in the above Expected Sequence.

At step9, when the UE receives the AUTHENTICATION AND CIPHERING REJECT message, UE shall:

- not respond paging message for PS domain.

At step13, when the RF level of the attached cell is lower than the RF level of the new cell, UE shall:

- not perform normal routing area updating.

At step17, when the UE is switched off, UE shall:

- not perform PS detach procedure.

3GPP TSG-R5 WG1 Meeting #27 Bath, England, 25th Apr – 29th Apr 2005

Tdoc **≋**R5-050876

CHANGE REQUEST			
3	4.123-1 CR 1248	Current version: 5.11.1	
For <u>HELP</u> on u	sing this form, see bottom of this page or look at the	he pop-up text over the 発 symbols.	
Proposed change a	affects: │ UICC apps <mark>緩</mark>	Access Network Core Network	
Title:	CR to 34.123-1 Rel-5: Correction to WI-012 RLC	test case 7.2.3.28	
Source:	3GPP TSG RAN WG5 (Testing)		
Work item code: ₩	TEI	<i>Date:</i> ≋ 18/05/2005	
Category: 器	F Use one of the following categories: F (correction) A (corresponds to a correction in an earlier release B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.	Release: Use one of the following releases: 2 (GSM Phase 2) se) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6)	
Reason for change	retransmit any PDUs. The current prints one PDU, which is expanded in necessary number of PDUs in uplint SDU size have been choosen to be standard mechanism for checking Pretransmission is done by the UE. A	rose use a downlink SDU size fitting uplink such that the UE transmit the k. In TTCN the downlink and uplink equal to enable the use of the RLC DU content to verify that no	
Summary of chang	• The DL and UL SDU sizes have been Poll_PDU * AM_7_PayloadSize) – 1		
Consequences if not approved:	₩ Misalignment between TTCN and prose		
Clauses affected:	光 7.2.3.28.4		
Other specs affected:	Y N Other core specifications 米 Test specifications O&M Specifications		
Other comments:	## Affects R99, Rel-4 and Rel-5; This CR has been approved on the RAN5 e-	-mail reflector as R5-050501r1.doc	

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>

7.2.3.28 Status reporting / Abnormal conditions / Reception of LIST SUFI with Length set to zero

7.2.3.28.1 Definition

Peer RLCs use STATUS PDUs to manage flow control and retransmission. On a STATUS report PDU with an invalid LIST SUFI the RLC must behave as specified. Incorrect behaviour may result in degradation of QoS, or failure of the UE to communicate.

7.2.3.28.2 Conformance requirement

The List super-field

The List Super-Field consists of a type identifier field (LIST), a list length field (LENGTH) and a list of LENGTH number of pairs as shown in figure 9.11 below:

Type = LIST
LENGTH
SN ₁
L ₁
SN ₂
L ₂
SN _{LENGTH}
L _{LENGTH}

Figure 9.11: The List fields in a STATUS PDU

LENGTH

Length: 4 bits

The number of (SN_i, L_i) -pairs in the super-field of type LIST. The value "0000" is invalid and the list is discarded.

Reference

TS 25.322 clause 9.2.2.11.4.

7.2.3.28.3 Test purpose

To verify that if a STATUS PDU is received with a LIST SUFI and the LENGTH field is set to "0000" that the list is discarded.

7.2.3.28.4 Method of test

Initial conditions

The generic procedure for Radio Bearer establishment (clause 7.1.3 of TS 34.108) is executed, with all the parameters as specified in the procedure, with the exception that the default Radio Access Bearer is replaced with the RAB defined for AM 7-bit "Length Indicator" tests in clause 7.2.3.1.

The following RLC parameter values are used in place of the values in clause 7.2.3.1:

Uplink RLC	
Polling info	
Poll_PDU	4

These settings apply to both the uplink and downlink DTCH.

The Radio Bearer is placed in UE test loop mode 1 with the UL SDU size set to (23 * Poll_PDU * AM_7_PayloadSize) – 1 bytes.

Test procedure

- a) The SS sends an SDU of size (2 * Poll_PDU * AM_7_PayloadSize) 1. See note 1.
- b) The SS monitors the received (looped back) PDUs for a poll request.
- c) The SS responds to the poll request by transmitting a STATUS PDU with a LIST SUFI. The list contains an indication that two PDUs were not received, but has the length field set to "0000".
- d) The SS continues to monitor the received PDUs to verify that none are retransmitted.
- e) The SS may optionally release the radio bearer.

NOTE 1. The DL SDU size has been choosen to simplify TTCN implementation. If the number of PDUs in downlink and uplink is the same then the RLC standard mechanism for checking PDU content can be used to verify that no retransmission is done by the UE.

Expected sequence

Step	Direction		Message	Comments
	UE S	SS	-	
1	+		DOWNLINK RLC PDU	SDU 1 (start)
2	+			SS continues to transmit RLC PDUs
3 4 5	← DOWNLINK RLC PE → UPLINK RLC PDU → UPLINK RLC PDU			SDU 1 (end) SDU 1 (start)
6	→ SS continues to receive RLC		SS continues to receive RLC PDUs	
7 8			SN = Poll_PDU - 1, Poll LIST(LENGTH = "0000", SN = 1, SN = 2)	
9	→ SS continues to receive RLC		SS continues to receive RLC PDUs	
10 11	<i>→ ←</i>		UPLINK RLC PDU STATUS PDU	Poll Normal reply
12	→			SS continues to receive RLC PDUs
13 14	\rightarrow		UPLINK RLC PDU RB RELEASE	SDU 1 (end) Optional step

NOTE 1: The Expected Sequence shown is infomative.

The UPLINK and DOWNLINK PDU flows may overlap, but are shown separate for clarity. Information such as SDU, PDU or Sequence numbers given in the comments column shall be considered informative only, for test case development purposes.

7.2.3.28.5 Test requirements

No RLC PDUs shall be retransmitted by the UE.

<END OF MODIFIED SECTION>

3GPP TSG-R5 Meeting #27 Bath, UK, 25th – 29th April 2005

Tdoc **≋***R5-050878* Agenda 8.8.7

		CHANG	SE REQ	JEST			CR-Form-v7
	34.123-1	CR 1249	жrev	- # C	Current versi	^{ion:} 5.11.1	[H
For <u>HELP</u> on	using this for	m, see bottom of		·			nbols.
Proposed chang	e affects:	JICC apps <mark>Ж</mark>	ME X	Radio Acc	ess Networ	k Core Ne	etwork
Title:	₩ Correction	ns to WI-10 P4 ap	proved GMM	test case	12.2.1.5a Te	est Procedures	1 & 2
Source:	<mark>ജ 3GPP TS</mark>	<mark>G RAN WG5 (Te</mark>	sting)				
Work item code:	署 TEI				Date: ₩	16/05/2005	
Category:	F (con A (cor B (add C (fun D (edi Detailed ex	the following categorection) responds to a correlition of feature), ctional modification forial modification) blanations of the ab	ection in an ear	ier release)	2 R96 R97 R98 R99 Rel-4	Rel-5 the following rele (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)	eases:

Reason for change:

As per TS 24.008 section 4.7.3.1.4:

13 (Roaming not allowed in this location area).

The MS shall delete any RAI, P-TMSI, P-TMSI signature and GPRS ciphering key sequence number, shall set the GPRS update status to GU3 ROAMING NOT ALLOWED (and shall store it according to clause 4.1.3.2) and shall reset the attach attempt counter. The state is changed to GMM-DEREGISTERED.LIMITED-SERVICE or optionally to GMM-DEREGISTERED.PLMN-SEARCH

The MS shall store the LAI in the list of "forbidden location areas for roaming".

If no RR connection exists, the MS shall perform the following additional actions immediately. If the MS is operating in MS operation mode A and an RR connection exists, the MS shall perform these actions when the RR connection is subsequently released:

- If the MS is IMSI attached, the MS shall set the update status to U3 ROAMING NOT ALLOWED, shall delete any TMSI, LAI and ciphering key sequence number and shall reset the location update attempt counter. The new MM state is MM IDLE.
- The MS shall perform a PLMN selection according to 3GPP TS 23.122.

In this test case when Attach Request is rejected with cause 'Roaming not allowed in this location area' no RR connection (physical circuit switched domain connection – see definition in TS 24.008 section 2.2.2) exists between the UE and network.

Changes in R5-05988r1

Following Attach Reject, SS is waiting for 30 seconds to verify UE doesn't reinitiate Attach Request before releasing RRC connection. TS 24.008 is

ambiguous about UE behaviour when PS Signalling connection or RRC
Connection is not released by the network after Attach Reject with cause #13. UE
may perform PLMN selection after Attach reject and hence won't respond to RRC
Connection Release Request received from the network. Test sequence expects
RRC Connection Release Request Complete message, thus incorrectly failing a
conformant UE.

Summary of change:

Revised order of test steps 6 and 6a (Test Procedure 1) and test steps 5 and 5a
(Test Procedure 2) to avoid UE locally releasing RRC connection following
initiation of PLMN search.
Editorial corrections.

Consequences if
not approved:

Clauses affected: # 12.2.1.5a.4.1 and 12.2.1.5a.4.2

Other specs # X Other core specifications # Test specifications O&M Specifications

Other comments: # This CR affects R99 & later releases.

TCN change required.

Revision of R5-050973 & R5-050988; The CR has been approved on the RAN5 email reflector as R5-050988r1.doc

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.

12.2.1.5a PS attach / rejected / roaming not allowed in this location area

12.2.1.5a.1 Definition

12.2.1.5a.2 Conformance requirement

- 1) If the network rejects a PS attach procedure from the User Equipment with the cause 'roaming not allowed in this location area' the User Equipment shall:
 - 1.1 not perform PS attach when in the same location area.
 - 1.2 delete the stored RAI, PS-CKSN, P-TMSI and P-TMSI signature.
 - 1.3 store the LA in the 'forbidden location areas for roaming' list.
 - 1.4 perform PS attach when a new location area is entered.
 - 1.5 Periodically search for its HPLMN.
- The User Equipment shall reset the list of 'Forbidden location areas for roaming' when switched off or when the USIM is removed.
- 3) The UE shall be capable of storing at least 10 entries in the list of 'Forbidden location areas for roaming'.

Reference

3GPP TS 24.008 clause 4.7.3.1.

12.2.1.5a.3 Test purpose

Test purpose 1

To test that on receipt of a rejection using the 'roaming not allowed in this location area' cause code, the UE ceases trying to attach on that location area. Successful PS attach procedure is possible in other location areas.

Test purpose 2

To test that if the UE is switched off or the USIM is removed the list of 'forbidden location areas for roaming' is cleared.

Test purpose 3

To test that at least 6 entries can be held in the list of 'forbidden location areas for roaming' (the requirement in 3GPP TS 24.008 is to store at least 10 entries. This is not fully tested by the third procedure).

Test purpose 4

To test that if a cell of the Home PLMN is available then the UE returns to it in preference to any other available cell.

12.2.1.5a.4 Method of test

12.2.1.5a.4.1 Test procedure 1

Initial condition

System Simulator:

Three cells (not simultaneously activated), cell A in MCC2/MNC1/LAC1/RAC1 (RAI-2, Not HPLMN), cell B in

MCC2/MNC1/LAC2/RAC1 (RAI-6, Not HPLMN) and cell C in MCC2/MNC1/LAC1/RAC2 (RAI-7, Not HPLMN).

All three cells are operating in network operation mode II.

The SIB1 IE "CN domain specific NAS system information", for the CS Domain, is set to value "00 00" (T3212 value is set to 0 and ATT flag is set to FALSE) in all cells.

User Equipment:

The UE has a valid P-TMSI-1 and RAI-2.

Related ICS/IXIT statements

Support of PS service Yes/No
UE operation mode C
UE operation mode A
Switch off on button
Yes/No
Yes/No

Automatic PS attach procedure at switch on or power on Yes/No

Test procedure

The SS rejects a PS attach with the cause value 'Roaming not allowed in this location area'. A new attempt for a PS attach is not possible. Successful PS attach / detach procedures are performed in another location area. A new attempt for a PS attach is performed in the 1st location area. This attempt shall not succeed, as the LA is on the forbidden list.

Expected Sequence

	Step	Direction	Message	Comments
		UE SS		
		SS		The following messages are sent and shall be received on cell A.
ı	1	UE		The UE is set in UE operation mode C (see ICS). If UE operation mode C not supported, goto step 2249.
l	2	SS		Set the cell type of cell A to the "Serving cell". Set the cell type of cell B to the "Non-Suitable cell".
				Set the cell type of cell C to the "Non-Suitable cell". (see note)
	3	UE		The UE is powered up or switched on and initiates an attach (see ICS). Cell A is preferred by the UE.
	3a		Void	
	3b	SS		SS checks that the IE "Establishment cause" in the received RRC CONNECTION REQUEST message is set to "Registration".
	4	->	ATTACH REQUEST	Attach type = 'GPRS attach' Mobile identity = P-TMSI-1
	5	<-	ATTACH REJECT	Old Routing area identity = RAI-2 GMM cause = 'Roaming not allowed in this location area'
	6	UE SS		The SS releases the RRC connection No ATTACH REQUEST sent to SS
	6a	<u>UE</u> SS		(SS waits 30 seconds). The SS releases the RRC connection.No ATTACH REQUEST sent to SS (SS waits 30
				seconds)
				The following messages are sent and shall be received on cell B.
	7	SS		Set the cell type of cell A to the "Non-Suitable cell". Set the cell type of cell B to the "Serving cell".
	8	UE		(see note) Cell B is preferred by the UE.
	9	UE	Registration on CS	See TS 34.108 This is applied only for UE in UE operation
	10	ПЕ		mode A. Parameter mobile identity is IMSI. The LIE initiates an attack systematically, by
	10	UE		The UE initiates an attach automatically, by MMI or by AT command.
	10a	SS		SS checks that the IE "Establishment cause" in the received RRC CONNECTION REQUEST message is set to "Registration".
	11	->	ATTACH REQUEST	Attach type = 'GPRS attach' Mobile identity = IMSI
	11a	<-	AUTHENTICATION AND CIPHERING REQUEST	,
	11b	->	AUTHENTICATION AND CIPHERING RESPONSE	
	11c 12	SS <-	ATTACH ACCEPT	The SS starts integrity protection. Attach result = 'GPRS only attached' Allocated P-TMSI = P-TMSI-1
				P-TMSI Signature = P-TMSI-1 signature Routing area identity = RAI-6
	13 13a	-> SS	ATTACH COMPLETE	The SS releases the RRC connection.

14	UE		The UE initiates a PS detach (without power off) by MMI or by AT command .	
14a	SS		SS checks that the IE "Establishment cause" in any received RRC CONNECTION REQUEST message is set to "Detach".	
15	->	DETACH REQUEST	Detach type = 'normal detach, GPRS detach'	
16	<-	DETACH ACCEPT		
16a	SS		The SS releases the RRC connection.	
17	SS		The following messages are sent and shall be received on cell C. Set the cell type of cell B to the "Non-Suitable cell".	
			Set the cell type of cell C to the "Serving cell". (see note)	
18 19	UE UE		Cell C is preferred by the UE. No ATTACH REQUEST sent to SS	
			(SS waits 30 seconds).	
			The UE is switched off or power is removed (see ICS)	
20	UE		UE is switched off.	
21	SS		Set the cell type of cell C to the "Non-Suitable cell".	
			(see note)	
22	UE		The UE is set in UE operation mode A if	
			supported (see ICS) and the test is repeated	
			from step 2 to step 20.	
NOTE:	The definitions for "Non-Suitable cell" and "Serving cell" are specified in TS34.108 clause 6.1			
	"Reference Radio Conditions for signalling test cases only".			

12.2.1.5a.4.2 Test procedure 2

Initial condition

System Simulator:

One cell in MCC2/MNC1/LAC1/RAC1 (RAI-2, Not HPLMN) operating in network operation mode II.

The SIB1 IE "CN domain specific NAS system information", for the CS Domain, is set to value "00 00" (T3212 value is set to 0 and ATT flag is set to FALSE).

User Equipment:

The UE has a valid P-TMSI-1 and RAI-2.

Related ICS/IXIT statements

Support of PS service Yes/No UE operation mode C Yes/No

UE operation mode A Yes/No (only if mode C not supported)

Switch off on button Yes/No

Automatic PS attach procedure at switch on or power on Yes/No

Test procedure

The SS rejects a PS attach updating with the cause value 'Roaming not allowed in this location area'. The UE is switched off for 10 s and switched on again. The SS check that a PS attach is possible on the cell on which the PS attach had been rejected.

If USIM removal is possible without switching off: The SS rejects a PS attach with the cause value 'Roaming not allowed in this location area'. The USIM is removed and inserted in the UE. The SS check that a PS attach is possible on the cell on which the PS attach had been rejected.

Expected Sequence

Step	Direction	Message	Comments	
	UE SS	j		
1	UE		If UE operation mode C is supported, the UE is set in UE operation mode C (see ICS). If UE	
			operation mode C is not supported, the UE is set in UE operation mode A.	
2	UE		The UE is powered up or switched on and initiates an attach (see ICS).	
2a 2b	SS	Void	SS checks that the IE "Establishment cause" in	
			the received RRC CONNECTION REQUEST message is set to "Registration".	
3	->	ATTACH REQUEST	Attach type = 'GPRS attach' Mobile identity = P-TMSI-1	
4	<-	ATTACH REJECT	Old Routing area identity = RAI-2 GMM cause = 'Roaming not allowed in this	
5	<u>ss</u> ue		location area' The SS releases the RRC connection	
_			No ATTACH REQUEST sent to the SS (SS waits 30 seconds).	
5a	<u>UE</u> SS		No ATTACH REQUEST sent to the SS (SS waits 30 seconds) The SS releases the RRC	
6	UE		connection. If possible (see ICS) switch off is performed.	
			Otherwise the power is removed.	
7	UE		The UE is powered up or switched on and initiates an attach (see ICS).	
8		Void	initiales an attach (see 103).	
8a	SS	Volu	SS checks that the IE "Establishment cause" in	
- Ou			the received RRC CONNECTION REQUEST	
			message is set to "Registration".	
8b	UE	Registration on CS	See TS 34.108	
			This is applied only for UE in UE operation mode A.	
			Parameter mobile identity is IMSI.	
9	->	ATTACH REQUEST	Attach type = 'GPRS attach' Mobile identity = IMSI	
9a	<-	AUTHENTICATION AND CIPHERING REQUEST		
9b	->	AUTHENTICATION AND CIPHERING RESPONSE		
9c	SS	SI TIETATO TALOF OTTOE	The SS starts integrity protection.	
10	- -	ATTACH ACCEPT	Attach result = 'GPRS only attached'	
			Allocated P-TMSI = P-TMSI-1	
1			P-TMSI Signature = P-TMSI-1 signature	
1			Routing area identity = RAI-2	
11	->	ATTACH COMPLETE		
11a	SS		The SS releases the RRC connection.	