		CHANGE REQUEST		CR-Form-v3
ж	34	.109 CR 010r1 ^{# rev} - [#]	Current versi	^{ion:} 4.0.0 [#]
For <u>HELP</u> on u	sing t	this form, see bottom of this page or look at the	pop-up text	over the X symbols.
Proposed change a	affect	<i>ts:</i> 牂 (U)SIM ME/UE <mark>Ⅹ</mark> Radio Acc	cess Network	Core Network
Title: %	Exp bea	panding UE test loop buffering capabilities to er arers	nable testing	of 2048 kbps radio
Source: ೫	Eric	csson		
Work item code: ೫	TEI		Date: ೫	2001-06-13
Category: ೫	F		Release: ೫	REL-4
	Use Deta be fo	one of the following categories: F (essential correction) A (corresponds to a correction in an earlier release, B (Addition of feature), C (Functional modification of feature) D (Editorial modification) iled explanations of the above categories can und in 3GPP TR 21.900.	Use <u>one</u> of 1 2 () R96 R97 R98 R99 REL-4 REL-5	the following releases: (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)
Reason for change	»: #	Current specification of the CLOSE UE TEST for selecting the UL RLC SDU size to 16383 I bearers for 2048 kbps data rates then UL RLC is needed. E.g. for reference radio bearer configuration " DL:2048 kbps / PS RAB / 20 ms TTI" in test of required UL RLC SDU size is 41984 bits. Backward Compatibility Analysis: The CR is back functionality is added.	LOOP mess bits. To enab C SDU size t Interactive o case 14.2.35.	sage limits the range le testing of radio bigger than 16383 bits r background / UL:64 2 of TS 34.123-1 the ttible. No new
Summary of chang	ye:	 References to TS 25.306 and TS 34.123- For the CLOSE UE TEST LOOP messag RLC SDU size parameter has been chan 	-2 added to li le the maxim ged from 163	st of references um value for the UL 383 to 65535.
Consequences if not approved:	ж	The UE test loop function will not be possible radio bearers.	to use for te	sting of 2048 kbps
Clauses affected:	ж	2 and 6.2		
Other specs affected:	Ħ	Other core specifications#Test specificationsO&M Specifications		
Other comments:	ж			

How to create CRs using this form:

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

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <u>ftp://www.3gpp.org/specs/</u> For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

2 References

The following documents contain provisions that, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.
- [1] 3GPP TS 24.007: "Mobile radio interface signalling layer 3; General aspects".
- [2] 3GPP TS 24.008: "Digital cellular telecommunications system (Phase 2+); Mobile radio interface layer 3 specification".
- [3] 3GPP TS 25.101: "UE Radio transmission and reception (FDD)".
- [4] 3GPP TS 25.102: "UE Radio transmission and reception (TDD)".
- [5] 3GPP TS 25.331: "Radio Resource Control; Protocol Specification".
- [6] 3GPP TR 21.905: "3G Vocabulary".
- [7] 3GPP TS 31.101: "UICC Physical and Logical Characteristics".
- [8] 3GPP TS 34.121: "Terminal Conformance Specification; Radio transmission and reception (FDD)".
- [9] 3GPP TS 34.122: "Terminal Conformance Specification; Radio transmission and reception (TDD)".
- [10] 3GPP TS 34.108: "Reference test environment".
- [11] 3GPP TS 25.211: "Physical channels and mapping of transport channels onto physical channels (FDD)".
- [12] 3GPP TS 25.133: "Requirements for support of RRM (FDD)".
- [13] 3GPP TS 04.14: "Individual equipment type requirements and interworking; Special conformance testing functions".
- [14] 3GPP TS 27.005: "Use of Data Terminal Equipment Data Circuit terminating; Equipment (DTE DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)".
- [15] 3GPP TS 27.007: "AT command set for 3G User Equipment (UE)".
- [16] 3GPP TS 27.060: "Mobile Stations (MS) supporting packet switched services".
- [17]
 3GPP TS 34.123-2: "User Equipment (UE) conformance specification; Part 2: Implementation

 Conformance Statement (ICS) proforma specification".3GPP TS 34.123-2: "Mobile Station (MS)

 Conformance Specification, Part 2 ICS".

[18] 3GPP TS 25.306: "UE Radio Access Capabilities"

6.2 CLOSE UE TEST LOOP

This message is only sent in the direction SS to UE.

Information Element	Reference	Presence	Format	Length
Protocol discriminator	[1] TS 24.007,	М	V	1/2
	11.2.3.1.1			
Skip indicator	[1] TS 24.007,	М	V	1/2
	11.2.3.1.2			
Message type		М	V	1
UE test loop mode		M	V	1
UE test loop mode 1 LB setup		С	LV	1-13

where message type is:

8	7	6	5	4	3	2	1	bit no.
0	1	0	0	0	0	0	0	octet 1

where UE test loop mode is:

8	7	6	5	4	3	2	1	bit no.
0	0	0	0	0	Y1	X2	X1	octet 1

X2=0 and X1=0 then UE test loop mode 1 loop back scheme according to 5.3.2.6 shall be performed by the UE (loopback of RLC SDUs or PDCP SDUs).

X2=0 and X1=1 then UE test loop mode 2 loop back scheme according to 5.3.2.7 shall be performed by the UE (loopback of transport block data and CRC bits).

Y1 =0 then the DCCH dummy transmission according to 5.3.2.8 shall be disabled.

Y1 =1 then the DCCH dummy transmission according to 5.3.2.8 shall be enabled.

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where UE test loop mode 1 LB setup is:



N is the number of LB entities in the LB setup list and is less than or equal to 4.

where LB setup list is:



where LB Setup RB IE#k is:

8	7	6	5	4	3	2	1	bit no.
<u>Z15</u> 0	<u>Z14</u> 0	Z13	Z12	Z11	Z10	Z9	Z8	octet 1
Z7	Z6	Z5	Z4	Z3	Z2	Z1	Z0	octet 2
	Reserved		Q4	Q3	Q2	Q1	Q0	octet 3

Z153..Z0 = Uplink RLC SDU size in bits 0..<u>6553516383</u> (binary coded, Z153 is most significant bit and Z0 least significant bit), see Note 1.

Q4..Q0 = RB identity number, 5..32 (binary coded, Q4 is most significant bit and Q0 least significant bit), where RB identity identifies the radio bearer, see [5] TS 25.331. The range is limited to 5..32 due to RB0 to RB4 are reserved for signalling radio bearers.

NOTE 1: The parameter UL RLC SDU size is only applicable for UE test loop mode 1 and for radio bearers not using the PDCP protocol layer, see 5.3.2.6.2. <u>The UE capability for the parameter UL RLC SDU size is</u> stated by the UE manufacturer as an Implementation Conformations Statement (ICS) as defined in [17] <u>TS 34.123-2</u>, clause A.4.3.1 table A.13. The UE Total RLC AM buffer size according to the UE Radio Access Capabilities defined in [18] TS 25.306 shall not be exceeded.

	CR-Form-v3
ж	34.109 CR 009r1 ^{# rev} - [#] Current version: 3.3.0 [#]
For <u>HELP</u> on us	sing this form, see bottom of this page or look at the pop-up text over the st symbols.
Proposed change a	nffects: # (U)SIM ME/UE X Radio Access Network Core Network
Title: #	Expanding UE test loop buffering capabilities to enable testing of 2048 kbps radio bearers
Source: ೫	Ericsson
Work item code: ೫	TEI Date: 米 2001-06-13
Category: Ж	F Release: # R99
Reason for change	Use one of the following categories: Use one of the following releases: F (essential correction) 2 (GSM Phase 2) A (corresponds to a correction in an earlier release) R96 (Release 1996) B (Addition of feature), R97 (Release 1997) C (Functional modification of feature) R98 (Release 1998) D (Editorial modification) R99 (Release 1999) Detailed explanations of the above categories can REL-4 (Release 4) be found in 3GPP TR 21.900. REL-5 (Release 5) : # Current specification of the CLOSE UE TEST LOOP message limits the range for selecting the UL RLC SDU size to 16383 bits. To enable testing of radio bearers for 2048 kbps data rates then UL RLC SDU size bigger than 16383 bits is needed. E.g. for reference radio bearer configuration "Interactive or background / UL:64 DL:2048 kbps / PS RAB / 20 ms TTI" in test case 14.2.35.2 of TS 34.123-1 the required UL RLC SDU size is 41984 bits. Backward Compatibility Analysis: The CR is backwards compatible. No new functionality is added.
Summary of chang	 e:# References to TS 25.306 and TS 34.123-2 added to list of references For the CLOSE UE TEST LOOP message the maximum value for the UL RLC SDU size parameter has been changed from 16383 to 65535.
Consequences if not approved:	# The UE test loop function will not be possible to use for testing of 2048 kbps radio bearers.
Clauses affected:	# 2 and 6.2
Other specs affected:	# Other core specifications # Test specifications O&M Specifications
Other comments:	ж

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Message type		М	V	1
UE test loop mode		M	V	1
UE test loop mode 1 LB setup		С	LV	1-13

where message type is:

8	7	6	5	4	3	2	1	bit no.
0	1	0	0	0	0	0	0	octet 1

where UE test loop mode is:

8	7	6	5	4	3	2	1	bit no.
0	0	0	0	0	Y1	X2	X1	octet 1

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Y1 =0 then the DCCH dummy transmission according to 5.3.2.8 shall be disabled.

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where UE test loop mode 1 LB setup is:



N is the number of LB entities in the LB setup list and is less than or equal to 4.

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where LB Setup RB IE#k is:

8	7	6	5	4	3	2	1	bit no.
<u>Z15</u> 0	<u>Z14</u> 0	Z13	Z12	Z11	Z10	Z9	Z8	octet 1
Z7	Z6	Z5	Z4	Z3	Z2	Z1	Z0	octet 2
	Reserved		Q4	Q3	Q2	Q1	Q0	octet 3

Z153..Z0 = Uplink RLC SDU size in bits 0..<u>6553516383</u> (binary coded, Z153 is most significant bit and Z0 least significant bit), see Note 1.

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NOTE 1: The parameter UL RLC SDU size is only applicable for UE test loop mode 1 and for radio bearers not using the PDCP protocol layer, see 5.3.2.6.2. <u>The UE capability for the parameter UL RLC SDU size is</u> stated by the UE manufacturer as an Implementation Conformations Statement (ICS) as defined in [17] <u>TS 34.123-2</u>, clause A.4.3.1 table A.13. The UE Total RLC AM buffer size according to the UE Radio Access Capabilities defined in [18] TS 25.306 shall not be exceeded.