

Source: T1
Title: Four renumbered T1 CRs
Agenda item: 5.1.3
Document for: Approval

In the previously presented T1 CRs to TSG T#26, four CRs were incorrectly numbered (number already used previously). This tdoc corrects this error.

The changed CRs are as follows:

34.121: CR 431 replaced by CR 477, CR 432 replaced by CR 478

34.123-1: CR 949 replaced by CR 1038

34.123-2: CR 168 replaced by CR 184

Consequently, it is proposed to un-approve the incorrectly numbered CR in the TSG T tdocs presented earlier, i.e.:

TP-040234, containing CRs to 34.121

TP-040235, containing CRs to 34.123-1

TP-040236, containing CRs to 34.123-2

And instead to approved the re-numbered CRs presented here.

All other CRs approved during the presentation of TP-040234, 235 and 236 should remain approved as such.

Doc-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Versi on- Curre nt	Versi on- New	Dc Le
TP-040234	34.121	477 34	-	Rel-5	Introduction of Test Tolerances to Event triggered reporting of multiple neighbours in AWGN propagation condition (Rel-4 and later), test 8.6.1.2A	F	5.5.0	5.6.0	T1
TP-040234	34.121	478 32	-	Rel-5	Addition of UMTS-850 Band V to chapter 4.	F	5.5.0	5.6.0	T1
TP-040235	34.123-1	1038 94	-	Rel-5	Modification of SIB5 content for package 4 testcase 14.4.2a.1 and	F	5.9.0	5.10.0	T1

		9			Addition of Specific Message Content for Radio Bearer Setup message in section 14.4.2a.				
TP-040236	34.123-2	18468	-	Rel-5	CR to 34.123-2 REL-5; New new radio bearer test case for the support Wideband AMR speech service	F	5.9.0	5.10.0	T1

CHANGE REQUEST

⌘ **34.121 CR 47731** ⌘ rev - ⌘ Current version: **5.5.0** ⌘

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

Proposed change affects: | UICC apps ME Radio Access Network Core Network


Title:	⌘ Introduction of Test Tolerances to Event triggered reporting of multiple neighbours in AWGN propagation condition (Rel-4 and later), test 8.6.1.2A		
Source:	⌘ Racal Instruments Wireless Solutions		
Work item code:	⌘	Date:	⌘ 06/10/2004
Category:	⌘ F	Release:	⌘ Rel-5
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) 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:	⌘ The Test requirements do not allow for the effects of test system uncertainties.
Summary of change:	⌘ a) Introduction of tables 8.6.1.2A.4, 8.6.1.2A.5 giving correct RF condtions for Rel-4 and later test. b) Revision of tables 8.6.1.2A.1, 8.6.1.2A.3 giving correct RF condtions for Rel-4 and later test. c) Revision of Annex F.1.5 table F.1.5 to define Test System Uncertainty. d) Revision of Annex F.2 table F2.4 to define Test Tolerances. e) Revision of Annex F.4 table F4.4 to refer to derivation of test requirements.
Consequences if not approved:	⌘ A Test system may incorrectly fail a good UE.

Clauses affected:	⌘ 8.6.1.2A and Annex F.										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">✓</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">✓</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">✓</td> </tr> </table> Other core specifications ⌘ Test specifications O&M Specifications	Y	N	⌘	✓	⌘	✓	⌘	✓		
Y	N										
⌘	✓										
⌘	✓										
⌘	✓										
Other comments:	⌘ The ðR99ÿ version of the test, 8.6.1.2, already includes Test Tolerances. A new section has been added in TR34.902 for this test.										

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.

8.6.1.2A Event triggered reporting of multiple neighbours in AWGN propagation condition (Rel-4 and later)

8.6.1.2A.1 Definition and applicability

In the event triggered reporting period the measurement reporting delay is defined as the time between any event that will trigger a measurement report until the UE starts to transmit over the Uu interface. This requirement assumes that the measurement report is not delayed by other RRC signalling on the DCCH. This measurement reporting delay excludes a delay uncertainty resulted when inserting the measurement report to the TTI of the uplink DCCH . The delay uncertainty is twice the TTI of the uplink DCCH.

The requirements and this test apply to the Rel-4 and later FDD UE.

8.6.1.2A.2 Minimum requirements

The requirements are the same as in sub clause 8.6.1.1A.2.

The normative reference for these requirements is TS 25.133 [2] clauses 8.1.2.2 and A.8.1.2.

8.6.1.2A.3 Test purpose

To verify that the UE meets the minimum requirements.

8.6.1.2A.4 Method of test

8.6.1.2A.4.1 Initial conditions

Test environment: normal; see clauses G.2.1 and G.2.2.

Frequencies to be tested: mid range; see clause G.2.4.

The initial test parameters are given in table 8.6.1.2A.4.1.

Table 8.6.1.2A.1: Cell specific initial test parameters for Event triggered reporting of multiple neighbours in AWGN propagation conditions

Parameter	Unit	Cell 1	Cell 2	Cell3
		T0	T0	T0
CPICH E_c/I_0	dB	-10	-10	-10
PCCPCH E_c/I_0	dB	-12	-12	-12
SCH E_c/I_0	dB	-12	-12	-12
PICH E_c/I_0	dB	-15	-15	-15
DPCH E_c/I_0	dB	-17	N/A	N/A
OCNS E_c/I_0	dB	-1.049	-0.941	-0.941
\hat{P}_{or}/I_{oc}	dB	0	-Inf	-Inf
C_r (Note 1)	<u>dBm</u>	<u>-85</u>	<u>-Inf</u>	<u>-Inf</u>
I_{oc}	dBm/ 3.84 MHz	-85		
CPICH E_c/I_0	dB	-13	-Inf	-Inf
Propagation Condition	AWGN			
<u>Note 1: The nominal C_r values, although not explicitly defined in 25.133 are added here since they are implied and need to be identified so that the test equipment can be configured.</u>				

The test parameters are given in table 8.6.1.2A.2 and 8.6.1.2A.3. In the measurement control information it is indicated to the UE that event-triggered reporting with Event 1A, 1C and 1B shall be used and the periodical reporting of the

events is not applied. The test consists of four successive time periods, with a time duration of T1, T2, T3 and T4 respectively. In the initial condition before the time T1 only Cell1 is active.

Table 8.6.1.2A.2: General test parameters for Event triggered reporting of multiple neighbours in AWGN propagation conditions

Parameter	Unit	Value	Comment
DCH parameters		DL and UL Reference Measurement Channel 12.2 kbps	As specified in C.3.1 and C.2.1
Power Control		On	
Active cell		Cell 1	
Reporting range	dB	3	Applicable for event 1A and 1B
Hysteresis	dB	0	
W		1	Applicable for event 1A and 1B
Replacement activation threshold		0	Applicable for event 1C
Reporting deactivation threshold		0	Applicable for event 1A
Time to Trigger	ms	0	
Filter coefficient		0	
Monitored cell list size		32	
T1	S	10	
T2	S	10	
T3	S	5	
T4	S	10	

Table 8.6.1.2A.3: Cell specific test parameters for Event triggered reporting of multiple neighbours in AWGN propagation condition

Parameter	Unit	Cell 1				Cell 2				Cell3			
		T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
CPICH E_c/I_{or}	dB	-10				-10				-10			
PCCPCH E_c/I_{or}	dB	-12				-12				-12			
SCH E_c/I_{or}	dB	-12				-12				-12			
PICH E_c/I_{or}	dB	-15				-15				-15			
DPCH E_c/I_{or}	dB	-17				N/A				N/A			
OCNS E_c/I_{or}	dB	-1.049				-0.941				-0.941			
\hat{P}_{or}/I_{oc}	dB	6.97	6.93	5.97	6.12	-Inf	9.43	6.97	7.62	5.97	6.93	-Inf	5.62
C_r (Note 1)	dBm	<u>78.03</u>	<u>78.07</u>	<u>79.03</u>	<u>78.88</u>	<u>-Inf</u>	<u>75.57</u>	<u>78.03</u>	<u>77.38</u>	<u>79.03</u>	<u>78.07</u>	<u>-Inf</u>	<u>79.38</u>
I_{oc}	dBm/ 3.84 MHz	-85											
CPICH E_c/I_o	dB	-13	-16	-14	-15.5	-Inf	-13.5	-13	-14	-14	-16	-Inf	-16
Propagation Condition		AWGN											
<p>Note 1: <u>The nominal C_r values, although not explicitly defined in 25.133 are added here since they are implied and need to be identified so that the test equipment can be configured.</u></p>													

8.6.1.2A.4.2 Procedure

- 1) The RF parameters are set up according to T0 [in table 8.6.1.2A.4](#).
- 2) The UE is switched on.
- 3) A call is set up according to the test procedure specified in TS 34.108 [3] sub clause 7.3.2.3.
- 4) SS shall transmit a MEASUREMENT CONTROL message.
- 5) 5 seconds after step4 has completed, the SS shall switch the power settings for T0 to T1 [in table 8.6.1.2A.5](#).

- 6) UE shall transmit a MEASUREMENT REPORT message for Cell 3 triggered by event 1A. The measurement reporting delay from the beginning of T1 shall be less than 880 ms. If the UE fails to report the event within the required delay, then a failure is recorded. If the reporting delay for this event is within the required limit, the number of successful tests is increased by one.
- 7) UE may transmit a MEASUREMENT REPORT message for Cell 3 triggered by event 1C. In case it doesn't this shall not be considered as a failure.
- 8) After 10 seconds from the beginning of T1, the SS shall switch the power settings from T1 to T2 [in table 8.6.1.2A.5](#).
- 9) UE shall transmit a MEASUREMENT REPORT message for Cell 2 triggered by event 1C. The measurement reporting delay from the beginning of T2 shall be less than 880 ms. If the UE fails to report the event within the required delay, then a failure is recorded. If the reporting delay for this event is within the required limit, the number of successful tests is increased by one.
- 10) UE shall transmit a MEASUREMENT REPORT message for Cell 2 triggered by event 1A. The measurement reporting delay from the beginning of T2 shall be less than 880 ms. If the UE fails to report the event within the required delay, then a failure is recorded. If the reporting delay for this event is within the required limit, the number of successful tests is increased by one.
- 11) UE may transmit a MEASUREMENT REPORT message for Cell 3 triggered by event 1C. In case it doesn't this shall not be considered as a failure.
- 12) After 10 seconds from the beginning of T2, the SS shall switch the power settings from T2 to T3 [in table 8.6.1.2A.5](#).
- 13) UE shall transmit a MEASUREMENT REPORT message for Cell 3 triggered by event 1B. The measurement reporting delay from the beginning of T3 shall be less than 280 ms. If the UE fails to report the event within the required delay, then a failure is recorded. If the reporting delay for this event is within the required limit, the number of successful tests is increased by one.
- 14) UE may transmit a MEASUREMENT REPORT message for Cell 2 triggered by event 1C. In case it doesn't this shall not be considered as a failure.
- 15) After 5 seconds from the beginning of T3, the SS shall switch the power settings from T3 to T4 [in table 8.6.1.2A.5](#).
- 16) UE shall transmit a MEASUREMENT REPORT message for Cell 3 triggered by event 1A. The measurement reporting delay from the beginning of T4 shall be less than 280 ms. If the reporting delay for this event is within the required limit, the number of successful tests is increased by one.
- 17) UE may transmit a MEASUREMENT REPORT message for Cell 2 triggered by event 1C. In case it doesn't this shall not be considered as a failure.
- 18) UE may transmit a MEASUREMENT REPORT message for Cell 3 triggered by event 1C. In case it doesn't this shall not be considered as a failure.
- 19) After 10 seconds from the beginning of T4, the UE is switched off.
- 20) Repeat steps 1-19 until the confidence level according to annex F.6.2 is achieved.

Specific Message Contents

All messages indicated above shall use the same content as described in the default message content in clause 9 of 34.108 [3], with the following exceptions:

MEASUREMENT CONTROL message:

Information Element/Group name	Value/Remark
Message Type (10.2.17)	
UE information elements -RRC transaction identifier -Integrity check info	0 Not Present
Measurement Information elements -Measurement Identity -Measurement Command (10.3.7.46) -Measurement Reporting Mode (10.3.7.49) -Measurement Report Transfer Mode -Periodical Reporting / Event Trigger Reporting Mode -Additional measurements list (10.3.7.1)	1 Modify AM RLC Event trigger Not Present
-CHOICE <i>Measurement type</i> -Intra-frequency measurement (10.3.7.36) -Intra-frequency measurement objects list (10.3.7.33) -Intra-frequency measurement quantity (10.3.7.38) -Filter coefficient (10.3.7.9) -CHOICE mode -Measurement quantity -Intra-frequency reporting quantity (10.3.7.41)	Intra-frequency measurement Not Present 0 FDD CPICH_Ec/N0
-Reporting quantities for active set cells (10.3.7.5) -Cell synchronisation information reporting indicator -Cell Identity reporting indicator -CHOICE mode -CPICH Ec/N0 reporting indicator -CPICH RSCP reporting indicator -Pathloss reporting indicator	TRUE (Note 1) TRUE FDD TRUE TRUE FALSE
-Reporting quantities for monitored set cells (10.3.7.5) -Cell synchronisation information reporting indicator -Cell Identity reporting indicator -CHOICE mode -CPICH Ec/N0 reporting indicator -CPICH RSCP reporting indicator -Pathloss reporting indicator	TRUE (Note 1) TRUE FDD TRUE TRUE FALSE
-Reporting quantities for detected set cells (10.3.7.5)	Not Present
-Reporting cell status (10.3.7.61) -Measurement validity (10.3.7.51) -CHOICE report criteria -Intra-frequency measurement reporting criteria (10.3.7.39) -Parameters required for each event	Not Present Not Present Intra-frequency measurement reporting criteria 3
-Intra-frequency event identity -Triggering condition 2 -Reporting Range Constant -Cells forbidden to affect Reporting Range -W -Hysteresis -Threshold used frequency -Reporting deactivation threshold -Replacement activation threshold -Time to trigger -Amount of reporting -Reporting interval -Reporting cell status	Event 1A Monitored set cells 3 dB Not Present 1.0 0 dB Not Present 0 Not Present 0 ms Not Present 0 ms (Note 2) Not Present
-Intra-frequency event identity -Triggering condition 1 -Reporting Range Constant -Cells forbidden to affect Reporting Range -W -Hysteresis -Threshold used frequency -Reporting deactivation threshold -Replacement activation threshold -Time to trigger -Amount of reporting -Reporting interval	Event 1B Active set cells and monitored set cells 3 dB Not Present 1.0 0 dB Not Present Not Present Not Present 0 ms Not Present 0 ms (Note 2)

Information Element/Group name	Value/Remark
-Reporting cell status	Not Present
-Intra-frequency event identity	Event 1C
-Triggering condition 2	Active set cells and monitored set cells
-Reporting Range Constant	Not present
-Cells forbidden to affect Reporting Range	Not Present
-W	Not present
-Hysteresis	0 dB
-Threshold used frequency	Not Present
-Reporting deactivation threshold	Not present
-Replacement activation threshold	0
-Time to trigger	0 ms
-Amount of reporting	Not Present
-Reporting interval	0 ms (Note 2)
-Reporting cell status	Not Present
Physical channel information elements	
-DPCH compressed mode status info (10.3.6.34)	Not Present
NOTE 1: The SFN-CFN observed time difference is calculated from the OFF and Tm parameters contained in the IE "Cell synchronisation information", TS 25.331, clause 10.3.7.6. According to TS 25.331, 8.6.7.7, this IE is included in MEASUREMENT REPORT if IE "Cell synchronisation information reporting indicator" in IE "Cell reporting quantities" TS 25.331, clause 10.3.7.5 is set to TRUE in MEASUREMENT CONTROL.	
NOTE 2: Reporting interval = 0 ms means no periodical reporting.	

MEASUREMENT REPORT message for Intra frequency test cases

This message is common for all intra frequency test cases is described in Annex I.

8.6.1.2A.5 Test requirements

For the test to pass, the total number of successful tests shall be at least 90%, of the cases with a confidence level of 95%. The number of successful tests shall be on an event level, i.e. the SS shall check how many events are reported successfully out of the total number of events checked.

Table 8.6.1.2A.4: Initial test requirements for Event triggered reporting of multiple neighbours in AWGN propagation conditions

Parameter	Unit	Cell 1	Cell 2	Cell3
		<u>T₀</u>	<u>T₀</u>	<u>T₀</u>
<u>CPICH E_c/I_or</u>	<u>dB</u>	<u>-9.3</u>	<u>-9.3</u>	<u>-9.3</u>
<u>PCCPCH E_c/I_or</u>	<u>dB</u>	<u>-11.3</u>	<u>-11.3</u>	<u>-11.3</u>
<u>SCH E_c/I_or</u>	<u>dB</u>	<u>-11.3</u>	<u>-11.3</u>	<u>-11.3</u>
<u>PICH E_c/I_or</u>	<u>dB</u>	<u>-14.3</u>	<u>-14.3</u>	<u>-14.3</u>
<u>DPCH E_c/I_or</u>	<u>dB</u>	<u>-16.3</u>	<u>N/A</u>	<u>N/A</u>
<u>OCNS E_c/I_or</u>	<u>dB</u>	<u>-1.26</u>	<u>-1.13</u>	<u>-1.13</u>
<u>\hat{P}_{or}/I_{oc}</u>	<u>dB</u>	<u>0</u>	<u>-Inf</u>	<u>-Inf</u>
<u>G_r</u>	<u>dBm</u>	<u>-85</u>	<u>-Inf</u>	<u>-Inf</u>
<u>I_{oc}</u>	<u>dBm/</u> <u>3.84</u> <u>MHz</u>		<u>-85</u>	
<u>CPICH E_c/I_o(Note 1)</u>	<u>dB</u>	<u>-12.3</u>	<u>-Inf</u>	<u>-Inf</u>
<u>Propagation Condition</u>		<u>AWGN</u>		
<u>Note 1: These parameters are not directly settable, but are derived by calculation from the settable parameters.</u>				

Table 8.6.1.2A.5: Test requirements for Event triggered reporting of multiple neighbours in AWGN propagation condition

Parameter	Unit	Cell 1				Cell 2				Cell3			
		T1	T2	T3	T4	T1	T2	T3	T4	T1	T2	T3	T4
<u>CPICH_Ec/lor</u>	<u>dB</u>	<u>-9.3</u>				<u>-9.3</u>				<u>-9.3</u>			
<u>PCCPCH_Ec/lor</u>	<u>dB</u>	<u>-11.3</u>				<u>-11.3</u>				<u>-11.3</u>			
<u>SCH_Ec/lor</u>	<u>dB</u>	<u>-11.3</u>				<u>-11.3</u>				<u>-11.3</u>			
<u>PICH_Ec/lor</u>	<u>dB</u>	<u>-14.3</u>				<u>-14.3</u>				<u>-14.3</u>			
<u>DPCH_Ec/lor</u>	<u>dB</u>	<u>-16.3</u>				<u>N/A</u>				<u>N/A</u>			
<u>OCNS_Ec/lor</u>	<u>dB</u>	<u>-1.26</u>				<u>-1.13</u>				<u>-1.13</u>			
<u>\hat{P}_{or}/I_{oc} (Note 1)</u>	<u>dB</u>	<u>7.0</u>	<u>6.9</u>	<u>6.0</u>	<u>6.1</u>	<u>-Inf</u>	<u>9.4</u>	<u>7.0</u>	<u>7.6</u>	<u>6.0</u>	<u>6.9</u>	<u>-Inf</u>	<u>5.6</u>
<u>G_r</u>	<u>dBm</u>	<u>-78.0</u>	<u>-78.1</u>	<u>-79.0</u>	<u>-78.9</u>	<u>-Inf</u>	<u>-75.6</u>	<u>-78.0</u>	<u>-77.4</u>	<u>-79.0</u>	<u>-78.1</u>	<u>-Inf</u>	<u>-79.4</u>
<u>I_{oc}</u>	<u>dBm/3.84 MHz</u>	<u>-85</u>											
<u>CPICH_Ec/lo</u> (Note 1)	<u>dB</u>	<u>-12.3</u>	<u>-15.3</u>	<u>-13.3</u>	<u>-14.8</u>	<u>-Inf</u>	<u>-12.8</u>	<u>-12.3</u>	<u>-13.3</u>	<u>-13.3</u>	<u>-15.3</u>	<u>-Inf</u>	<u>-15.3</u>
<u>Propagation Condition</u>	<u>AWGN</u>												
<u>Note 1: These parameters are not directly settable, but are derived by calculation from the settable parameters.</u>													

NOTE: If the above Test Requirement differs from the Minimum Requirement then the Test Tolerance applied for this test is non-zero. The Test Tolerance for this test is defined in clause F.2 and the explanation of how the Minimum Requirement has been relaxed by the Test Tolerance is given in clause F.4.

Annex F (normative): General test conditions and declarations

The requirements of this clause apply to all applicable tests in the present document.

Many of the tests in the present document measure a parameter relative to a value that is not fully specified in the UE specifications. For these tests, the Minimum Requirement is determined relative to a nominal value specified by the manufacturer.

When specified in a test, the manufacturer shall declare the nominal value of a parameter, or whether an option is supported.

In all the relevant clauses in this clause all Bit Error Ratio (BER), Block Error Ratio (BLER), False transmit format Detection Ratio (FDR) measurements shall be carried out according to the general rules for statistical testing in clause F.6.

F.1 Acceptable uncertainty of Test System

The maximum acceptable uncertainty of the Test System is specified below for each test, where appropriate. The Test System shall enable the stimulus signals in the test case to be adjusted to within the specified range, and the equipment under test to be measured with an uncertainty not exceeding the specified values. All ranges and uncertainties are absolute values, and are valid for a confidence level of 95 %, unless otherwise stated.

A confidence level of 95 % is the measurement uncertainty tolerance interval for a specific measurement that contains 95 % of the performance of a population of test equipment.

For RF tests it should be noted that the uncertainties in clause F.1 apply to the Test System operating into a nominal 50 ohm load and do not include system effects due to mismatch between the DUT and the Test System.

F.1.5 Requirements for support of RRM

Table F.1.5: Maximum Test System Uncertainty for Radio Resource Management Tests

Clause	Maximum Test System Uncertainty	Derivation of Test System Uncertainty
8.6.1.2 Event triggered reporting of multiple neighbours in AWGN propagation condition (R99)	<p><u>During T0 to T6:</u></p> $\frac{CPICH - E_c}{I_{or}} \quad \pm 0.1 \text{ dB}$ $I_{or} (1) \quad \pm 0.7 \text{ dB}$ $I_{oc} \quad \pm 1.0 \text{ dB}$ <p><u>During T1/T2, T3 and T6:</u></p> $I_{or} (3) \text{ relative to } I_{or} (1) \pm 0.3 \text{ dB}$ <p><u>During T3, T4/T5 and T6:</u></p> $I_{or} (2) \text{ relative to } I_{or} (1) \pm 0.3 \text{ dB}$	
	<p>Assumptions:</p> <p>a) The contributing uncertainties for lor(n), channel power ratio, and loc are derived according to ETR 273-1-2 [4], with a coverage factor of k=2.</p> <p>b) Within each cell, the uncertainty for lor(n), and channel power ratio are uncorrelated to each other.</p> <p>c) The relative uncertainties for lor(n) across different cells may have any amount of positive correlation from zero (uncorrelated) to one (fully correlated).</p> <p>d) Across different cells, the channel power ratio uncertainties may have any amount of positive correlation from zero (uncorrelated) to one (fully correlated).</p> <p>e) The uncertainty for loc and lor(1) may have any amount of positive correlation from zero (uncorrelated) to one (fully correlated).</p> <p>f) The absolute uncertainty of lor(1) and the relative uncertainty of lor(2, 3), are uncorrelated to each other.</p>	
8.6.1.2A Event triggered reporting of multiple neighbours in AWGN propagation condition (Rel-4 and later)	<p><u>During T0 to T4:</u></p> $\frac{CPICH - E_c}{I_{or}} \quad \pm 0.1 \text{ dB}$ $I_{or} (1) \quad \pm 0.7 \text{ dB}$ $I_{oc} \quad \pm 1.0 \text{ dB}$ <p><u>During T1, T2 and T4:</u></p> $I_{or} (3) \text{ relative to } I_{or} (1) \pm 0.3 \text{ dB}$ <p><u>During T2, T3 and T4:</u></p> $I_{or} (2) \text{ relative to } I_{or} (1) \pm 0.3 \text{ dB TBD}$ <p><u>Assumptions:</u> Same as 8.6.1.2</p>	

F.2 Test Tolerances (This clause is informative)

The Test Tolerances defined in this clause have been used to relax the Minimum Requirements in the present document to derive the Test Requirements.

The Test Tolerances are derived from Test System uncertainties, regulatory requirements and criticality to system performance. As a result, the Test Tolerances may sometimes be set to zero.

The test tolerances should not be modified for any reason e.g. to take account of commonly known test system errors (such as mismatch, cable loss, etc.).

F.2.4 Requirements for support of RRM

Table F.2.4: Test Tolerances for Radio Resource Management Tests

Clause	Test Tolerance
8.6.1.2 Event triggered reporting of multiple neighbours in AWGN propagation condition (R99)	During T0 to T6: +0.70 dB for all Cell 1 Ec/Ior ratios +0.70 dB for all Cell 2 Ec/Ior ratios +0.70 dB for all Cell 3 Ec/Ior ratios TBD
8.6.1.2A Event triggered reporting of multiple neighbours in AWGN propagation condition (Rel-4 and later)	<u>During T0 to T4:</u> <u>+0.70 dB for all Cell 1 Ec/Ior ratios</u> <u>+0.70 dB for all Cell 2 Ec/Ior ratios</u> <u>+0.70 dB for all Cell 3 Ec/Ior ratios</u> TBD

F.4 Derivation of Test Requirements (This clause is informative)

The Test Requirements in the present document have been calculated by relaxing the Minimum Requirements of the core specification using the Test Tolerances defined in clause F.2. When the Test Tolerance is zero, the Test Requirement will be the same as the Minimum Requirement. When the Test Tolerance is non-zero, the Test Requirements will differ from the Minimum Requirements, and the formula used for this relaxation is given in table F.4.

Table F.4.4: Derivation of Test Requirements (RRM tests)

Test	Test Parameters in TS 25.133	Test Tolerance (TT)	Test Requirement in TS 34.121
8.6.1.2 Event triggered reporting of multiple neighbours in AWGN propagation condition (R99)	Because the relationships between the Test system uncertainties and the Test Tolerances are complex, it is not possible to give a simple derivation of the Test Requirement in this document. The analysis is recorded in 3GPP TR 34 902 [24].		
	<u>During T0 to T6:</u> Cell 1, Cell 2 and Cell 3: CPICH_Ec/Ior = -10 dB PCCPCH_Ec/Ior = -12 dB SCH_Ec/Ior = -12 dB PICH_Ec/Ior = -15 dB	<u>During T0 to T6:</u> +0.70 dB +0.70 dB +0.70 dB +0.70 dB	<u>During T0 to T6:</u> Ec/Ior ratio + TT Ec/Ior ratio + TT Ec/Ior ratio + TT Ec/Ior ratio + TT
8.6.1.2A Event triggered reporting of multiple neighbours in AWGN propagation condition (Rel-4 and later)	<u>Because the relationships between the Test system uncertainties and the Test Tolerances are complex, it is not possible to give a simple derivation of the Test Requirement in this document. The analysis is recorded in 3GPP TR 34 902 [24].</u>		
	<u>During T0 to T4:</u> <u>Cell 1, Cell 2 and Cell 3:</u> <u>CPICH_Ec/Ior = -10 dB</u> <u>PCCPCH_Ec/Ior = -12 dB</u> <u>SCH_Ec/Ior = -12 dB</u> <u>PICH_Ec/Ior = -15 dB</u> TBD	<u>During T0 to T4:</u> <u>+0.70 dB</u> <u>+0.70 dB</u> <u>+0.70 dB</u> <u>+0.70 dB</u> TBD	<u>During T0 to T4:</u> <u>Ec/Ior ratio + TT</u> <u>Ec/Ior ratio + TT</u> <u>Ec/Ior ratio + TT</u> <u>Ec/Ior ratio + TT</u> TBD

CHANGE REQUEST

34.123-1 CR 1038949 rev - Current version: **5.9.0**

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

Title:	Modification of SIB5 content for package 4 testcase 14.4.2a.1 and Addition of Specific Message Content for Radio Bearer Setup message in section 14.4.2a.		
Source:	Anite		
Work item code:	TEI	Date:	14/09/2004
Category:	F	Release:	Rel-5
	<p>Use <u>one</u> of the following categories:</p> <p>F (correction)</p> <p>A (corresponds to a correction in an earlier release)</p> <p>B (addition of feature),</p> <p>C (functional modification of feature)</p> <p>D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>2 (GSM Phase 2)</p> <p>R96 (Release 1996)</p> <p>R97 (Release 1997)</p> <p>R98 (Release 1998)</p> <p>R99 (Release 1999)</p> <p>Rel-4 (Release 4)</p> <p>Rel-5 (Release 5)</p> <p>Rel-6 (Release 6)</p>

Reason for change:	<p>1) SIB6 Indicator</p> <p>Clause 14.4.2a.1 specifies that SIB5 and SIB6 content should be the same as per 34.108 section 6.1.1. The SIB5 content in section 6.1.1 of 34.108, has the SIB6 indicator set to TRUE, which suggests that SIB 6 should be present.</p> <p>However, 34.108 section 6.1.0a.4.1 indicates that in test cases where two S-CCPCH are present, SIB 6 should not be transmitted. Therefore, the SIB6 Indicator in SIB5 should be set to FALSE.</p> <p>2) Specific Message Content required for Radio Bearer Setup</p> <p>In the test cases under clause 14.4.2a two PS RABs are configured, which are mapped onto the same Transport Channel in UL and DL.</p> <p>Therefore, the Radio Bearer Setup message sent is necessarily different from that mentioned in TS 34.108 clause 9.</p>
Summary of change:	<p>1) Added Specific Message Content for SIB5 in which the 'SIB6 indicator' is set to 'FALSE'.</p> <p>2) Added specific message content for the Radio Bearer Setup message for this test case.</p>
Consequences if not approved:	Inconsistency will remain between 34.123-1 & 34.108

Clauses affected:	⌘	Section 14.4.2a, 14.4.2a.1.3										
Other specs affected:	⌘	<table border="1"><tr><td>Y</td><td>N</td></tr><tr><td></td><td>X</td></tr><tr><td></td><td>X</td></tr><tr><td></td><td>X</td></tr></table>	Y	N		X		X		X	Other core specifications	⌘
	Y	N										
		X										
	X											
	X											
		Test specifications										
		O&M Specifications										
Other comments:	⌘	Affects Rel-5, Rel-4 and R99 UEs.										

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

14.4.2a Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

Test to verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.2.4.3.2a.

This radio bearer configuration is tested with three different SYSTEM INFORMATION (BCCH) configurations:

1. The contents of System Information Block type 5 ~~and 6 as specified in TS 34.108, clause 6.1.1.~~ [shall be as per the message specific content.](#)

Two SCCPCHs are used in this SYSTEM INFORMATION configuration. The first SCCPCH carries the PCH and the second SCCPCH carries the FACH for two Interactive/Background 32 kbps PS RABs and the FACH for SRBs on CCCH/ DCCH/ BCCH.

This configuration is verified in test case 14.4.2a.1.

2. The contents of System Information Block type 5 as specified in TS 34.108, clause 6.1.3.

Three SCCPCHs are used in this SYSTEM INFORMATION configuration. The first SCCPCH carries the PCH and both the second and third SCCPCHs carry the FACH for two Interactive/Background 32 kbps PS RABs and the FACH for SRBs on CCCH/ DCCH/ BCCH.

This configuration is verified in test case 14.4.2a.2.

3. The contents of System Information Block type 5 and 6 as specified in TS 34.108, clause 6.1.2.

Three SCCPCHs are used in this SYSTEM INFORMATION configuration. The first SCCPCH carries the PCH. The second SCCPCH carries the FACH for CTCH (Cell Broadcast Service) and the FACH for SRBs on CCCH/ BCCH for idle mode UEs. The third SCCPCH carries the FACH for two Interactive/Background 32 kbps PS RABs and the FACH for SRBs on CCCH/ DCCH/ BCCH for connected mode UEs.

This configuration is verified in test case 14.4.2a.3.

[Specific Message Content for Radio Bearer Setup message to be used for these test cases:](#)

[Use the RADIO BEARER SETUP message as defined in \[9\] TS 34.108 clause 9, with the following exceptions:](#)

<u>Information Element</u>	<u>Value/remark</u>
- RAB information for setup	
- RAB info	(AM DTCH for PS domain)
- RAB identity	0000 0101B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.
- CN domain identity	PS domain
- NAS Synchronization Indicator	Not Present
- Re-establishment timer	useT315
- RB information to setup	
- RB identity	20
- PDCP Info	Not Present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- CHOICE SDU discard mode	No Discard
- MAX_DAT	15
- Transmission window size	128
- Timer_RST	500
- Max_RST	4
- Polling info	
- Timer_poll_prohibit	200
- Timer_poll	200
- Poll_PDU	Not Present
- Poll_SDU	4
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll_Windows	99
- Timer_poll_periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	128
- Downlink RLC status info	
- Timer_status_prohibit	200
- Timer_EPC	Not Present
- Missing PDU indicator	TRUE
- Timer_STATUS_periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBmuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	1
- Logical channel identity	7
- CHOICE RLC size list	Configured
- MAC logical channel priority	8
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	6
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	7
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	7
- CHOICE RLC size list	Explicit list
- RLC size index	Reference to TS34.108 clause 6 Parameter Set
- MAC logical channel priority	8
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	FACH

<u>Information Element</u>	<u>Value/remark</u>
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	7
- RAB identity	0000 0110B The first/ leftmost bit of the bit string contains the most significant bit of the RAB identity.
- CN domain identity	PS domain
- NAS Synchronization Indicator	Not Present
- Re-establishment timer	useT315
- RB information to setup	
- RB identity	24
- PDCP info	Not Present
- CHOICE RLC info type	RLC info
- CHOICE Uplink RLC mode	AM RLC
- Transmission RLC discard	
- CHOICE SDU discard mode	No Discard
- MAX_DAT	15
- Transmission window size	128
- Timer_RST	500
- Max_RST	4
- Polling info	
- Timer poll prohibit	200
- Timer poll	200
- Poll PDU	Not Present
- Poll SDU	4
- Last transmission PDU poll	TRUE
- Last retransmission PDU poll	TRUE
- Poll Windows	99
- Timer poll periodic	Not Present
- CHOICE Downlink RLC mode	AM RLC
- In-sequence delivery	TRUE
- Receiving window size	128
- Downlink RLC status info	
- Timer status prohibit	200
- Timer EPC	Not Present
- Missing PDU indicator	TRUE
- Timer STATUS periodic	Not Present
- RB mapping info	
- Information for each multiplexing option	2 RBMuxOptions
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	DCH
- UL Transport channel identity	1
- Logical channel identity	10
- CHOICE RLC size list	Configured
- MAC logical channel priority	8
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	DCH
- DL DCH Transport channel identity	6
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	10
- RLC logical channel mapping indicator	Not Present
- Number of uplink RLC logical channels	1
- Uplink transport channel type	RACH
- UL Transport channel identity	Not Present
- Logical channel identity	10
- CHOICE RLC size list	Explicit list
- RLC size index	Reference to TS34.108 clause 6 Parameter Set
- MAC logical channel priority	8
- Downlink RLC logical channel info	
- Number of downlink RLC logical channels	1
- Downlink transport channel type	FACH

<u>Information Element</u>	<u>Value/remark</u>
- DL DCH Transport channel identity	Not Present
- DL DSCH Transport channel identity	Not Present
- Logical channel identity	10

14.4.2a.1 One SCCPCH: Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRBs for CCCH + SRB for DCCH + SRB for BCCH

14.4.2a.1.1 Conformance requirement

See 14.2.4.1.

14.4.2a.1.2 Test purpose

To verify establishment and data transfer of reference radio bearer configuration as specified in TS 34.108, clause 6.10.2.4.3.2a and 6.10.2.4.4.2 for the case when two SCCPCHs are used in this SYSTEM INFORMATION configuration. The first SCCPCH carries the PCH and the second SCCPCH carries the FACH for two Interactive/Background 32 kbps PS RABs and the FACH for SRBs on CCCH/ DCCH/ BCCH.

To be able to test the downlink radio bearer using the UE loopback function, the reference radio bearer configuration according to TS 34.108, clause 6.10.2.4.4.2 (Interactive/Background 32 kbps PS RAB + Interactive/Background 32 kbps PS RAB + SRB for CCCH + SRB for DCCH on PRACH) is used in uplink.

14.4.2a.1.3 Method of Test

The contents of System Information Block type ~~5 and 6~~ shall be as ~~specified in TS 34.108, clause 6.1.1,~~ [per the specific message content below.](#)

See 14.1.1 for test procedure.

NOTE The test procedure for single radio bearer configurations is used as there are no uplink transport format combination for simultaneous data transmission on the PS radio bearers, nor any transport format combination for simultaneous data transmission and signalling.

Uplink TFS:

	TFI	RB7+RB8+SRB (2x32 kbps on RACH)
TFS	TF0, bits	1x168
	TF1, bits	1x360

Uplink TFCS:

TFCI	RB7 + RB8
UL_TFC0	TF0
UL_TFC1	TF1

Downlink TFS:

		SRBs	RB7 + RB8 (2x32 kbps)
TFS	TF0, bits	0x168	0x360
	TF1, bits	1x168	1x360
	TF2, bits	2x168	N/A

Downlink TFCS:

TFCI	(SRB, RB7+RB8)
DL_TFC0	(TF0, TF0)
DL_TFC1	(TF1, TF0)
DL_TFC2	(TF2, TF0)
DL_TFC3	(TF0, TF1)
DL_TFC4	(TF1, TF1)

Sub-tests:

Sub-test	Downlink TFCs Under test	Uplink TFCs Under test	Implicitely tested	Restricted UL TFCIs	UL RLC SDU size (note)	Test data size (note)
1	DL_TFC3	UL_TFC1	DL_TFC0, UL_TFC0	UL_TFC1, UL_TFC0	RB7: 312 bits RB8: 312 bits	RB7: 312 bits RB8: No data
2	DL_TFC3	UL_TFC1	DL_TFC0, UL_TFC0	UL_TFC1, UL_TFC0	RB7: 312 bits RB8: 312 bits	RB7: No data RB8: 312 bits

NOTE: See TS 34.109 [10] clause 5.3.2.6.2 for details regarding loopback of RLC SDUs.
RB7 and 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 paramater has been set to the payload size of the UL TF under test minus 8 bits (size of 7 bit length indicator and expansion bit).

[Specific Message Contents](#)

[Use the default parameter values for the system information block 5 with the same type specified in clause](#)

[6.1.1 of TS 34.108, with the following exceptions](#)

Information Element	Value/remark
- SIB6 indicator	FALSE

14.4.2a.1.4 Test Requirements

See 14.1.1 for definition of step 15

1. At step 15 the UE transmitted transport format shall be TF1 (1x360).
2. At step 15 the UE shall return
 - for sub test 1: an RLC SDU on RB7 having the same content as sent by SS
 - for sub test 2: an RLC SDU on RB8 having the same content as sent by SS

<<End OF Modified Section>>

CHANGE REQUEST

⌘ **34.121 CR 47832** ⌘ rev **-** ⌘ Current version: **5.5.0** ⌘

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Proposed change affects: UICC apps ⌘ ME Radio Access Network Core Network

Title:	⌘ Addition of UMTS-850 Band V to chapter 4.		
Source:	⌘ Nokia		
Work item code:	⌘ TEI	Date:	⌘ 16/10/2004
Category:	⌘ F	Release:	⌘ R5
	<i>Use <u>one</u> of the following categories:</i> 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 .		<i>Use <u>one</u> of the following releases:</i> 2 (GSM Phase 2) 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:	⌘ Channel numbers and frequency arrangement information for Band V (UMTS 850) is missing in 34.121
Summary of change:	⌘ This CR will introduce necessary general parameters (Channel numbers, frequencies etc) to chapter 4 for UMTS-850 band. This CR also does some editorial changes to align 25.101 and 34.121.
Consequences if not approved:	⌘ 34.121 tests cannot be performed in Band V.

Clauses affected:	⌘ 4.3, 4.4.3, 4.4.4														
Other specs affected:	<table border="1" style="border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> <td></td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> <td>Other core specifications</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> <td>Test specifications</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> <td>O&M Specifications</td> </tr> </table>	Y	N			X	Other core specifications		X	Test specifications		X	O&M Specifications	⌘	
Y	N														
	X	Other core specifications													
	X	Test specifications													
	X	O&M Specifications													
Other comments:	⌘ This CR is to be treated as release independent.														

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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.

4.3 TXñRX frequency separation

- a) UTRA/FDD is designed to operate with the following TX-RX frequency separation.

Operating Band	TX-RX frequency separation
I	190 MHz
II	80 MHz
III	95 MHz
<u>V</u>	<u>45 MHz</u>
VI	45 MHz -

- b) UTRA/FDD can support both fixed and variable transmit to receive frequency separation.
- c) The use of other transmit to receive frequency separations in existing or other frequency bands shall not be precluded.

4.4 Channel arrangement

4.4.1 Channel spacing

The nominal channel spacing is 5 MHz, but this can be adjusted to optimise performance in a particular deployment scenario.

4.4.2 Channel raster

The channel raster is 200 kHz, ~~which~~ for all bands ~~except Band II and Band VI~~ which means that the centre frequency must be an integer multiple of 200 kHz. ~~In Band II, 12 additional centre frequencies are specified according to the table in 4.1a and the centre frequencies for these channels are shifted 100 kHz relative to the normal raster. In Band VI, additional centre frequencies are specified according to Table 4.1b and the centre frequencies for these channels are shifted 100 kHz relative to the normal raster.~~ In addition a number of additional centre frequencies are specified according to table 4.1a, which means that the centre frequencies for these channels are shifted 100 kHz relative to the general raster.

4.4.3 Channel number

The carrier frequency is designated by the UTRA Absolute Radio Frequency Channel Number (UARFCN). The values of the UARFCN are as follows.

Table 4.1: UARFCN definition (general)

UPLINK (UL) UE transmit, Node B receive		DOWNLINK (DL) UE receive, Node B transmit	
UARFCN	Carrier frequency [MHz] (F_{UL}) (Note 1)	UARFCN	Carrier frequency [MHz] (F_{DL}) (Note 2)
$N_u = 5 * F_{UL}$	$0.0 \text{ MHz} \leq F_{UL} \leq 3276.6 \text{ MHz}$	$N_d = 5 * F_{DL}$	$0.0 \text{ MHz} \leq F_{DL} \leq 3276.6 \text{ MHz}$
Note 1: F_{UL} is the uplink frequency in MHz			
Note 2: F_{DL} is the downlink frequency in MHz			

Table 4.1a: UARFCN definition (additional channels)

Band	UPLINK (UL) UE transmit, Node B receive		DOWNLINK (DL) UE receive, Node B transmit	
	UARFCN	Carrier frequency [MHz] (F_{UL})	UARFCN	Carrier frequency [MHz] (F_{DL})
I	-	-	-	-
II	$N_u = 5 * (F_{UL} \hat{n} 1850.1 \text{ MHz})$	1852.5, 1857.5, 1862.5, 1867.5, 1872.5, 1877.5, 1882.5, 1887.5, 1892.5, 1897.5, 1902.5, 1907.5	$N_d = 5 * (F_{DL} \hat{n} 1850.1 \text{ MHz})$	1932.5, 1937.5, 1942.5, 1947.5, 1952.5, 1957.5, 1962.5, 1967.5, 1972.5, 1977.5, 1982.5, 1987.5
III	-	-	-	-
V	$N_u = 5 * (F_{UL} \hat{n} 670.1 \text{ MHz})$	826.5, 827.5, 831.5, 832.5, 837.5, 842.5	$N_d = 5 * (F_{DL} \hat{n} 670.1 \text{ MHz})$	871.5, 872.5, 876.5, 877.5, 882.5, 887.5
VI	$N_u = 5 * (F_{UL} \hat{n} 670.1 \text{ MHz})$	832.5, 837.5	$N_d = 5 * (F_{DL} \hat{n} 670.1 \text{ MHz})$	877.5, 882.5

Uplink	$N_u = 5 * F_{\text{uplink}}$	$0,0 \text{ MHz} \leq F_{\text{uplink}} \leq 3\ 276,6 \text{ MHz}$ where F_{uplink} is the uplink frequency in MHz
Downlink	$N_d N_d = 5 * F_{\text{downlink}}$	$0,0 \text{ MHz} \leq F_{\text{downlink}} \leq 3\ 276,6 \text{ MHz}$ where F_{downlink} is the downlink frequency in MHz

Table 4.1a: UARFCN definition (Band II additional channels)

	UARFCN	Carrier frequency [MHz]
Uplink	$N_u = 5 * (F_{\text{uplink}} \hat{n} 1850.1 \text{ MHz})$	$F_{\text{uplink}} = 1852.5, 1857.5, 1862.5, 1867.5,$ 1872.5, 1877.5, 1882.5, 1887.5, 1892.5, 1897.5, 1902.5, 1907.5
Downlink	$N_d = 5 * (F_{\text{downlink}} \hat{n} 1850.1 \text{ MHz})$	$F_{\text{downlink}} = 1932.5, 1937.5, 1942.5, 1947.5,$ 1952.5, 1957.5, 1962.5, 1967.5, 1972.5, 1977.5, 1982.5, 1987.5

Table 4.1b: UARFCN definition (Band VI additional channels)

	UARFCN	Carrier frequency [MHz]
Uplink	$N_u = 5 * (F_{\text{uplink}} \hat{n} 670.1 \text{ MHz})$	$F_{\text{uplink}} = 832.5, 837.5$
Downlink	$N_d = 5 * (F_{\text{downlink}} \hat{n} 670.1 \text{ MHz})$	$F_{\text{downlink}} = 877.5, 882.5$

4.4.4 UARFCN

The following UARFCN range shall be supported for each paired band.

Table 4.2: UTRA Absolute Radio Frequency Channel Number

Operating Band	Uplink UE transmit, Node B receive	Downlink UE receive, Node B transmit
I	9 612 to 9 888	10 562 to 10 838
II	9 262 to 9 538 and 12, 37, 62, 87, 112, 137, 162, 187, 212, 237, 262, 287	9 662 to 9 938 and 412, 437, 462, 487, 512, 537, 562, 587, 612, 637, 662, 687
III	8562 to 8913	9037 to 9388
<u>V</u>	<u>4132 to 4233</u> and <u>782, 787, 807,</u> <u>812, 837, 862</u>	<u>4357 to 4458</u> and <u>1007, 1012, 1032,</u> <u>1037, 1062, 1087</u>
VI	4162 to 4188 and 812, 837	4387 to 4413 and 1037, 1062

CHANGE REQUEST

34.123-2 CR 18468 rev - Current version: **5.9.0**

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

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

Title:	CR to 34.123-2 REL-5; New new radio bearer test case for the support Wideband AMR speech service		
Source:	Vodafone Group		
Work item code:	AMRWB	Date:	18/10/2004
Category:	F	Release:	Rel-5
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: 2 (GSM Phase 2) 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:	Radio bearer test case for Wideband AMR is added.
Summary of change:	Applicability statement for the following test case is added: 14.2.62 Conversational / speech / UL:(12.65 8.85 6.6) DL:(12.65 8.85 6.6) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + DL:0.15 kbps SRB#5 for DCCH
Consequences if not approved:	No applicability statement exist for the new test case

Clauses affected:	4										
Other specs Affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications Test specifications O&M Specifications	Y	N	X	X	X	X	X	X		
Y	N										
X	X										
X	X										
X	X										
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.

<Start of first modified section>

4 Recommended test case applicability

[Ö]

Table 1: Applicability of tests

Clause	Title	Release	Applicability	Comments
[Ö]				
RADIO BEARER SERVICES				
	<i>Combinations on DPCH</i>			
[Ö]				
14.2.58	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.	R99	FFS	
14.2.59	Void	Rel-5	FFS	
14.2.60	Void	Rel-5	FFS	
14.2.61	Void	Rel-5	FFS	
14.2.62	Void Conversational / speech / UL:(12.65 8.85 6.6) DL:(12.65 8.85 6.6) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + DL:0.15 kbps SRB#5 for DCCH	Rel-5	C387 FFS	UE supporting FDD and reference radio bearer configuration "Conversational / speech / UL:(12.65 8.85 6.6) DL:(12.65 8.85 6.6) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + DL:0.15 kbps SRB#5 for DCCH"
14.2.63.1	Interactive or background / UL:64 DL:768 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH/ 10 ms TTI	Rel-5	Cxxx	UE supporting FDD and reference radio bearer configuration "Interactive or background / UL:64 DL:768 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH/ 10 ms TTI "
14.2.63.2	Interactive or background / UL:64 DL:768 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 20 ms TTI	Rel-5	Cyyy	UE supporting FDD and reference radio bearer configuration "Interactive or background / UL:64 DL:768 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 20 ms TTI"
[Ö]				

<End of modified section>

<Start of first modified section>

C01 IF A.1/1 THEN R ELSE N/A
C02 IF A.1/2 OR A.1/3 THEN R ELSE N/A
C03 IF A.1/3 THEN R ELSE N/A
C04 IF A.1/1 AND A.2/2 THEN R ELSE N/A
C05 IF A.1/1 AND A.1/4 THEN R ELSE N/A
C06 IF A.1/1 AND A.3/2 THEN R ELSE N/A
C07 IF A.1/1 AND A.20/27 THEN R ELSE N/A
C08 Void
C09 IF A.1/1 AND NOT A.20/3 THEN R ELSE N/A
C10 IF A.20/4 THEN R ELSE N/A
C11 IF A.20/5 THEN R ELSE N/A
C12 IF A.3/2 THEN R ELSE N/A
C13 IF A.2/1 OR A.2/2 OR A.10/2 THEN R ELSE N/A
C14 IF A.20/4 OR A.20/5 THEN R ELSE N/A
C15 Void
C16 Void
C17 IF A.3/2 AND A.20/7 THEN R ELSE N/A
C18 IF A.2/3 THEN R ELSE N/A
C19 Void
C20 IF A.2/4 THEN R ELSE N/A
C21 IF A.20/8 AND A.3/1 THEN R ELSE N/A
C22 IF A.20/9 AND A.3/1 THEN R ELSE N/A
C23 IF A.3/1 THEN R ELSE N/A
C24 IF A.20/11 AND A.3/1 THEN R ELSE N/A
C25 IF A.20/12 AND A.3/1 THEN R ELSE N/A
C26 IF A.2/5 THEN R ELSE N/A
C27 IF A.2/6 THEN R ELSE N/A
C28 IF A.20/8 AND A.3/2 THEN R ELSE N/A
C29 IF A.20/9 AND A.3/2 THEN R ELSE N/A
C30 IF A.3/2 AND A.20/31 THEN R ELSE N/A
C31 IF A.20/11 AND A.20/31 AND A.3/2 THEN R ELSE N/A
C32 IF A.20/12 AND A.20/31 AND A.3/2 THEN R ELSE N/A
C33 IF A.20/13 AND A.3/1 THEN R ELSE N/A
C34 IF A.20/14 AND A.2/4 AND A.3/1 THEN R ELSE N/A
C35 IF A.20/15 AND A.3/1 THEN R ELSE N/A
C36 IF A.20/16 AND A.3/1 THEN R ELSE N/A
C37 IF A.20/13 AND A.3/2 THEN R ELSE N/A
C38 IF A.20/14 AND A.2/6 THEN R ELSE N/A
C39 Void
C40 Void
C41 IF (NOT A.20/17) AND (NOT A.20/6) AND A.20/5 THEN R ELSE N/A
C42 IF A.1/1 AND A.3/2 AND A.20/27 THEN R ELSE N/A
C43 Void
C44 Void
C45 Void
C46 IF A.3/2 AND A.20/41 THEN R ELSE N/A
C47 Void
C48 Void
C49 Void
C50 IF A.20/37 AND A.1/4 AND (A.1/2 OR A.1/3) THEN R ELSE N/A
C51 Void
C52 IF (A.1/2 OR A.1/3) AND A.3/2 THEN R ELSE N/A
C53 IF (A.1/2 OR A.1/3) AND A.20/27 THEN R ELSE N/A
C54 IF (A.1/2 OR A.1/3) AND A.3/2 AND A.20/27 THEN R ELSE N/A
C55 Void
C56 IF (A.1/2 OR A.1/3) AND A.1/4 THEN R ELSE N/A
C57 IF A.1/1 AND A.18c/5a THEN R ELSE N/A
C58 IF A.1/1 AND A.18c/7a THEN R ELSE N/A
C59 IF ((A.1/2 OR A.1/3) AND A.1/4) AND (A.2/1 OR A.2/2) THEN R ELSE N/A
C60 IF ((A.1/2 OR A.1/3) AND A.1/4) AND A.3/1 AND (A.4/1 OR A.4/2 OR A.4/3 OR A.4/4 OR A.4/5 OR A.4/6 OR A.4/7 OR A.4/8 OR A.4/9 OR A.4/10 OR A.4/11 OR A.4/12 OR A.4/13 OR A.4/14 OR A.4/15 OR A.4/16 OR A.4/17 OR A.4/18 OR A.4/19 OR A.4/20 OR A.4/21) THEN R ELSE N/A
C61 IF A.1/1 AND A.18e/4 AND A.2/7 THEN R ELSE N/A
C62 IF A.3/2 AND A.20/7 AND A.20/26 THEN R ELSE N/A
C63 IF A.3/2 AND A.20/7 AND A.20/26 AND A.20/41 THEN R ELSE N/A
C64 IF A.1/1 AND A.18e/5 THEN R ELSE N/A
C65 IF A.1/1 AND A.18f/2 THEN R ELSE N/A
C66 IF A.18a/7 THEN R ELSE N/A

C67 IF A.18b/6 OR A.18b/9 THEN R ELSE N/A
C68 IF A.1/3 AND A.18g/9 THEN R ELSE N/A
C69 IF A.1/3 AND A.18g/10 THEN R ELSE N/A
C70 IF A.1/3 AND A.18g/11 THEN R ELSE N/A
C71 IF A.1/3 AND A.18g/12 THEN R ELSE N/A
C72 IF A.1/3 AND A.18g/13.1 THEN R ELSE N/A
C73 IF A.1/3 AND A.18g/13.2 THEN R ELSE N/A
C74 IF A.1/3 AND A.18g/14.1 THEN R ELSE N/A
C75 IF A.1/3 AND A.18g/14.2 THEN R ELSE N/A
C76 IF A.1/1 AND A.18c/23a.2 THEN R ELSE N/A
C77 IF A.3/2 AND A.20/42 THEN R ELSE N/A
C78 IF A.3/3 AND A.20/42 THEN R ELSE N/A
C79 IF A.3/2 AND A.20/35 THEN R ELSE N/A
C80 void
C81 void
C82 void
C83 void
C84 void
C85 void
C86 void
C87 void
C88 IF A.3/3 THEN R ELSE N/A.
C89 IF (A.1/1 AND A.1/4) AND A.3/2 AND A.20/26 THEN R ELSE N/A
C90 IF A.1/1 AND A.3/3 THEN R ELSE N/A
C91 IF (A.1/2 OR A.1/3) AND A.3/3 THEN R ELSE N/A
C92 Void
C93 IF A.20/29 THEN R ELSE N/A
C94 IF A.20/29 AND A.20/30 THEN R ELSE N/A
C95 IF A.1/1 AND A.1/4 AND (A.2/1 OR A.2/2) AND A.3/1 THEN R ELSE N/A
C96 IF A.2/2 THEN R ELSE N/A
C97 IF (A.1/1 AND A.1/4) AND A.3/1 AND (A.4/1 OR A.4/2 OR A.4/3 OR A.4/4 OR A.4/5 OR A.4/6 OR A.4/7 OR A.4/8 OR A.4/9 OR A.4/10 OR A.4/11 OR A.4/12 OR A.4/13 OR A.4/14 OR A.4/15 OR A.4/16 OR A.4/17 OR A.4/18 OR A.4/19 OR A.4/20 OR A.4/21) THEN R ELSE N/A
C98 IF A.3/1 OR A.3/3 THEN R ELSE N/A.
C99 IF (A.3/1 OR A.3/3) AND A.20/36 THEN R ELSE N/A.
C100 IF (A.3/1 OR A.3/3) AND A.7/30 THEN R ELSE N/A.
C101 IF A.2/3 AND A.2/4 THEN R ELSE N/A
C102 IF A.2/5 AND A.2/6 THEN R ELSE N/A
C103 IF A.3/3 AND (NOT A.20/38) THEN R ELSE N/A
C104 IF A.20/37 AND A.1/1 THEN R ELSE N/A
C105 IF A.20/37 AND (A.1/1 AND A.1/4) THEN R ELSE N/A
C106 void
C107 IF A.1/1 AND A.18c/1 THEN R ELSE N/A
C108 IF A.1/1 AND A.18c/2 THEN R ELSE N/A
C109 IF A.1/1 AND A.18c/3 THEN R ELSE N/A
C110 IF A.1/1 AND A.18c/4 THEN R ELSE N/A
C111 IF A.1/1 AND A.18c/5 THEN R ELSE N/A
C112 IF A.1/1 AND A.18c/6 THEN R ELSE N/A
C113 IF A.1/1 AND A.18c/7 THEN R ELSE N/A
C114 IF A.1/1 AND A.18c/8 THEN R ELSE N/A
C115 IF A.1/1 AND A.18c/9 THEN R ELSE N/A
C116 IF A.1/1 AND A.18c/10 THEN R ELSE N/A
C117 IF A.1/1 AND A.18c/11 THEN R ELSE N/A
C118 IF A.1/1 AND A.18c/12 THEN R ELSE N/A
C119 IF A.1/1 AND A.18c/13.1 THEN R ELSE N/A
C120 IF A.1/1 AND A.18c/13.2 THEN R ELSE N/A
C121 IF A.1/1 AND A.18c/14.1 THEN R ELSE N/A
C122 IF A.1/1 AND A.18c/14.2 THEN R ELSE N/A
C123 IF A.1/1 AND A.18c/15 THEN R ELSE N/A
C124 IF A.1/1 AND A.18c/16 THEN R ELSE N/A
C125 IF A.1/1 AND A.18c/17 THEN R ELSE N/A
C126 IF A.1/1 AND A.18c/18 THEN R ELSE N/A
C127 IF A.1/1 AND A.18c/19 THEN R ELSE N/A
C128 Void
C129 Void
C130 Void
C131 IF A.1/1 AND A.18c/23.1 THEN R ELSE N/A
C132 IF A.1/1 AND A.18c/23.2 THEN R ELSE N/A
C133 IF A.1/1 AND A.18c/23.3 THEN R ELSE N/A
C134 IF A.1/1 AND A.18c/23.4 THEN R ELSE N/A

C135 IF A.1/1 AND A.18c/24.1 THEN R ELSE N/A
C136 IF A.1/1 AND A.18c/25.1 THEN R ELSE N/A
C137 IF A.1/1 AND A.18c/25.2 THEN R ELSE N/A
C138 IF A.1/1 AND A.18c/25.3 THEN R ELSE N/A
C139 IF A.1/1 AND A.18c/25.4 THEN R ELSE N/A
C140 IF A.1/1 AND A.18c/26 THEN R ELSE N/A
C141 IF A.1/1 AND A.18c/27 THEN R ELSE N/A
C142 IF A.1/1 AND A.18c/28 THEN R ELSE N/A
C143 IF A.1/1 AND A.18c/29 THEN R ELSE N/A
C144 IF A.1/1 AND A.18c/30 THEN R ELSE N/A
C145 IF A.1/1 AND A.18c/31.1 THEN R ELSE N/A
C146 IF A.1/1 AND A.18c/31.2 THEN R ELSE N/A
C147 IF A.1/1 AND A.18c/32.1 THEN R ELSE N/A
C148 IF A.1/1 AND A.18c/32.2 THEN R ELSE N/A
C149 IF A.1/1 AND A.18c/33.1 THEN R ELSE N/A
C150 IF A.1/1 AND A.18c/33.2 THEN R ELSE N/A
C151 IF A.1/1 AND A.18c/34.1 THEN R ELSE N/A
C152 IF A.1/1 AND A.18c/34.2 THEN R ELSE N/A
C153 IF A.1/1 AND A.18c/35.1 THEN R ELSE N/A
C154 IF A.1/1 AND A.18c/35.2 THEN R ELSE N/A
C155 IF A.1/1 AND A.18c/36.1 THEN R ELSE N/A
C156 IF A.1/1 AND A.18c/36.2 THEN R ELSE N/A
C157 IF A.1/1 AND A.18c/37.1 THEN R ELSE N/A
C158 IF A.1/1 AND A.18c/37.2 THEN R ELSE N/A
C159 IF A.1/1 AND A.18c/38.1 THEN R ELSE N/A
C160 IF A.1/1 AND A.18c/38.2 THEN R ELSE N/A
C161 IF A.1/1 AND A.18c/38.3 THEN R ELSE N/A
C162 IF A.1/1 AND A.18c/38.4 THEN R ELSE N/A
C163 IF A.1/1 AND A.18c/39.1 THEN R ELSE N/A
C164 IF A.1/1 AND A.18c/39.2 THEN R ELSE N/A
C165 IF A.1/1 AND A.18c/39.3 THEN R ELSE N/A
C166 IF A.1/1 AND A.18c/39.4 THEN R ELSE N/A
C167 IF A.1/1 AND A.18c/40 THEN R ELSE N/A
C168 IF A.1/1 AND A.18c/41 THEN R ELSE N/A
C169 IF A.1/1 AND A.18c/42.1 THEN R ELSE N/A
C170 IF A.1/1 AND A.18c/42.2 THEN R ELSE N/A
C171 IF A.1/1 AND A.18c/43.1 THEN R ELSE N/A
C172 IF A.1/1 AND A.18c/43.2 THEN R ELSE N/A
C173 IF A.1/1 AND A.18c/44.1 THEN R ELSE N/A
C174 IF A.1/1 AND A.18c/44.2 THEN R ELSE N/A
C175 IF A.1/1 AND A.18c/45 THEN R ELSE N/A
C176 IF A.1/1 AND A.18c/46 THEN R ELSE N/A
C177 Void
C178 Void
C179 IF A.1/1 AND A.18c/49.1 THEN R ELSE N/A
C180 IF A.1/1 AND A.18c/49.2 THEN R ELSE N/A
C181 IF A.1/1 AND A.18c/50.1 THEN R ELSE N/A
C182 IF A.1/1 AND A.18c/50.2 THEN R ELSE N/A
C183 IF A.1/1 AND A.18c/51.1 THEN R ELSE N/A
C184 IF A.1/1 AND A.18c/51.2 THEN R ELSE N/A
C185 IF A.1/1 AND A.18c/52.1 THEN R ELSE N/A
C186 IF A.1/1 AND A.18c/52.2 THEN R ELSE N/A
C187 IF A.1/1 AND A.18c/53.1 THEN R ELSE N/A
C188 IF A.1/1 AND A.18c/53.2 THEN R ELSE N/A
C189 IF A.1/1 AND A.18c/54 THEN R ELSE N/A
C190 Void
C191 IF A.1/1 AND A.18d/1.1 THEN R ELSE N/A
C192 IF A.1/1 AND A.18d/1.2 THEN R ELSE N/A
C193 IF A.1/1 AND A.18d/2.1 THEN R ELSE N/A
C194 IF A.1/1 AND A.18d/2.2 THEN R ELSE N/A
C195 IF A.1/1 AND A.18d/3.1 THEN R ELSE N/A
C196 IF A.1/1 AND A.18d/3.2 THEN R ELSE N/A
C197 IF A.1/1 AND A.18d/4.1 THEN R ELSE N/A
C198 IF A.1/1 AND A.18d/4.2 THEN R ELSE N/A
C199 IF A.1/1 AND A.18d/5.1 THEN R ELSE N/A
C200 IF A.1/1 AND A.18d/5.2 THEN R ELSE N/A
C201 IF A.1/1 AND A.18d/6.1 THEN R ELSE N/A
C202 IF A.1/1 AND A.18d/6.2 THEN R ELSE N/A
C203 IF A.1/1 AND A.18e/1 THEN R ELSE N/A
C204 IF A.1/1 AND A.18e/2 THEN R ELSE N/A

C205 IF A.1/1 AND A.18e/3 THEN R ELSE N/A
C206 IF A.1/1 AND A.18f/1 THEN R ELSE N/A
C207 IF A.1/1 AND A.18c/24.2 THEN R ELSE N/A
C208 IF A.1/2 AND A.2/2 THEN R ELSE N/A
C209 IF A.20/37 AND A.1/2 THEN R ELSE N/A
C210 void
C211 IF A.3/3 AND A.20/39 THEN R ELSE N/A
C212 IF A.3/2 AND A.20/40 THEN R ELSE N/A
C213 IF A.3/2 AND A.19a/1 THEN R ELSE N/A
C214 IF A.3/2 AND A.19a/1 AND A.19a/3 AND A.19a/4 THEN R ELSE N/A
C215 IF A.3/2 AND A.19a/1 AND A.19a/2 THEN R ELSE N/A
C216 IF A.3/2 AND A.2/7 AND A.19b/1 THEN R ELSE N/A
C217 IF A.3/2 AND A.19b/1 AND A.19b/3 THEN R ELSE N/A
C218 IF A.3/2 AND A.2/7 AND A.19b/1 AND A.19b/2 THEN R ELSE N/A
C219 IF A.3/2 AND A.2/7 THEN R ELSE N/A
C220 IF A.1/3 AND A.18g/1 THEN R ELSE N/A
C221 IF A.1/3 AND A.18g/2 THEN R ELSE N/A
C222 IF A.1/3 AND A.18g/3 THEN R ELSE N/A
C223 IF A.1/3 AND A.18g/4 THEN R ELSE N/A
C224 IF A.1/3 AND A.18g/5 THEN R ELSE N/A
C225 IF A.1/3 AND A.18g/6 THEN R ELSE N/A
C226 IF A.1/3 AND A.18g/7 THEN R ELSE N/A
C227 IF A.1/3 AND A.18g/8 THEN R ELSE N/A
C228 IF A.1/1 AND A.3/3 AND A.7/28 THEN R ELSE N/A
C291 IF A.1/3 AND A.18g/15 THEN R ELSE N/A
C292 IF A.1/3 AND A.18g/16 THEN R ELSE N/A
C293 IF A.1/3 AND A.18g/17 THEN R ELSE N/A
C294 IF A.1/3 AND A.18g/18 THEN R ELSE N/A
C295 IF A.1/3 AND A.18g/19 THEN R ELSE N/A
C296 IF A.1/3 AND A.18g/23.1 THEN R ELSE N/A
C297 IF A.1/3 AND A.18g/23.2 THEN R ELSE N/A
C298 IF A.1/3 AND A.18g/23.3 THEN R ELSE N/A
C299 IF A.1/3 AND A.18g/23.4 THEN R ELSE N/A
C300 IF A.1/3 AND A.18g/24.1 THEN R ELSE N/A
C301 IF A.1/3 AND A.18g/24.2 THEN R ELSE N/A
C302 IF A.1/3 AND A.18g/25.1 THEN R ELSE N/A
C303 IF A.1/3 AND A.18g/25.2 THEN R ELSE N/A
C304 IF A.1/3 AND A.18g/25.3 THEN R ELSE N/A
C305 IF A.1/3 AND A.18g/25.4 THEN R ELSE N/A
C306 IF A.1/3 AND A.18g/26 THEN R ELSE N/A
C307 IF A.1/3 AND A.18g/27 THEN R ELSE N/A
C308 IF A.1/3 AND A.18g/28 THEN R ELSE N/A
C309 IF A.1/3 AND A.18g/29 THEN R ELSE N/A
C310 IF A.1/3 AND A.18g/30 THEN R ELSE N/A
C311 IF A.3/2 AND A.20/26 THEN R ELSE N/A
C312 IF A.1/3 AND A.18g/31.1 THEN R ELSE N/A
C313 IF A.1/3 AND A.18g/31.2 THEN R ELSE N/A
C314 IF A.1/3 AND A.18g/32.1 THEN R ELSE N/A
C315 IF A.1/3 AND A.18g/32.2 THEN R ELSE N/A
C316 IF A.1/3 AND A.18g/33.1 THEN R ELSE N/A
C317 IF A.1/3 AND A.18g/33.2 THEN R ELSE N/A
C318 IF A.1/3 AND A.18g/34.1 THEN R ELSE N/A
C319 IF A.1/3 AND A.18g/34.2 THEN R ELSE N/A
C320 IF A.1/3 AND A.18g/35.1 THEN R ELSE N/A
C321 IF A.1/3 AND A.18g/35.2 THEN R ELSE N/A
C322 IF A.1/3 AND A.18g/36.1 THEN R ELSE N/A
C323 IF A.1/3 AND A.18g/36.2 THEN R ELSE N/A
C324 IF A.1/3 AND A.18g/37.1 THEN R ELSE N/A
C325 IF A.1/3 AND A.18g/37.2 THEN R ELSE N/A
C326 IF A.1/3 AND A.18g/38.1 THEN R ELSE N/A
C327 IF A.1/3 AND A.18g/38.2 THEN R ELSE N/A
C328 IF A.1/3 AND A.18g/38.3 THEN R ELSE N/A
C329 IF A.1/3 AND A.18g/38.4 THEN R ELSE N/A
C330 IF A.1/3 AND A.18g/39.1 THEN R ELSE N/A
C331 IF A.1/3 AND A.18g/39.2 THEN R ELSE N/A
C332 IF A.1/3 AND A.18g/39.3 THEN R ELSE N/A
C333 IF A.1/3 AND A.18g/39.4 THEN R ELSE N/A
C334 IF A.1/3 AND A.18g/40 THEN R ELSE N/A
C335 IF A.1/3 AND A.18g/41 THEN R ELSE N/A
C336 IF A.1/3 AND A.18g/42.1 THEN R ELSE N/A
C337 IF A.1/3 AND A.18g/42.2 THEN R ELSE N/A
C338 IF A.1/3 AND A.18g/43.1 THEN R ELSE N/A

C339	IF A.1/3 AND A.18g/43.2 THEN R ELSE N/A
C340	IF A.1/3 AND A.18g/44.1 THEN R ELSE N/A
C341	IF A.1/3 AND A.18g/44.2 THEN R ELSE N/A
C342	IF A.1/3 AND A.18g/45 THEN R ELSE N/A
C343	IF A.1/3 AND A.18g/46 THEN R ELSE N/A
C344	IF A.1/3 AND A.18g/49.1 THEN R ELSE N/A
C345	IF A.1/3 AND A.18g/49.2 THEN R ELSE N/A
C346	IF A.1/3 AND A.18g/50.1 THEN R ELSE N/A
C347	IF A.1/3 AND A.18g/50.2 THEN R ELSE N/A
C348	IF A.1/3 AND A.18g/51.1 THEN R ELSE N/A
C349	Void
C350	IF A.1/3 AND A.18g/52.1 THEN R ELSE N/A
C351	IF A.1/3 AND A.18g/52.2 THEN R ELSE N/A
C352	IF A.1/3 AND A.18g/53.1 THEN R ELSE N/A
C353	IF A.1/3 AND A.18g/53.2 THEN R ELSE N/A
C354	IF A.1/3 AND A.18g/54 THEN R ELSE N/A
C355	IF A.1/3 AND A.18h/1 THEN R ELSE N/A
C356	IF A.1/1 AND A.3/1 THEN R ELSE N/A
C357	IF (A.1/2 OR A.1/3) AND A.3/1 THEN R ELSE N/A
C358	IF A.1/1 AND A.3/2 AND A.20/26 THEN R ELSE N/A
C359	IF A.1/1 AND A.3/3 AND (A.18a/8 OR A.18a/9 OR A.18a/10) THEN R ELSE N/A
C360	IF (A.1/1 AND A.18c/26) AND (A.1/4 AND A.1/5) THEN R ELSE N/A
C361	IF A.1/3 AND A.18h/2 THEN R ELSE N/A
C362	IF A.1/3 AND A.18h/3 THEN R ELSE N/A
C363	IF A.1/3 AND A.18i/1 THEN R ELSE N/A
C364	IF A.1/2 OR A.1/3 AND A.20/26 THEN R ELSE N/A
C365	IF A.1/1 AND A.2/2 AND A.18a/12 THEN R ELSE N/A
C366	IF A.1/1 AND A.18a/12 THEN R ELSE N/A
C367	Void
C368	IF A.1/1 AND (A.18a/8 OR A.18a/9 OR A.18a/10) THEN R ELSE N/A
C369	IF (A.1/1 AND A.1/4) AND A.3/1 AND (A.18a/8 OR A.18a/9 OR A.18a/10) THEN R ELSE N/A
C370	Void
C371	IF A.1/1 AND A.18a/13 THEN R ELSE N/A
C372	IF A.1/1 AND A.18a/13 AND (A.18 b.1/7 OR A.18 b.1/10) THEN R ELSE N/A
C373	IF C374 THEN O ELSE (IF A.1/1 AND A.18a/13 AND A.18 f.1/1 THEN R ELSE N/A)
C374	IF A.1/1 AND A.18a/13 AND A.18 f.1/2 THEN R ELSE N/A
C375	IF (A.1/1 AND A.1/4) AND A.3/1 AND (A.4/1 OR A.4/2 OR A.4/5 OR A.4/6 OR A.4/7 OR A.4/11 OR A.4/12) THEN R ELSE N/A
C376	IF (A.1/1 AND A.1/4) AND A.3/1 AND (A.4/2 OR A.4/3 OR A.4/4 OR A.4/5 OR A.4/7 OR A.4/8 OR A.4/9 OR A.4/10 OR A.4/12 OR A.4/13 OR A.4/14 OR A.4/15 OR A.4/16 OR A.4/17 OR A.4/18 OR A.4/19 OR A.4/20 OR A.4/21) THEN R ELSE N/A
C377	IF A.1/3 AND A.18c/63.1 THEN R ELSE N/A
C378	IF A.1/3 AND A.18c/63.2 THEN R ELSE N/A
C379	IF A.3/2 AND A.20/63 THEN R ELSE N/A
C380	IF A.1/1 AND A.1/4 AND (A.2/1 OR A.2/2) AND A.3/1 AND A.18a/13 THEN R ELSE N/A
C381	IF (A.1/1 AND A.18c/26) AND (A.1/4 AND A.1/5) AND A.18a/13 THEN R ELSE N/A
C382	IF A.3/2 AND A.19a/5 THEN R ELSE N/A
C383	IF A.1/1 AND A.2/2 AND A.18a/13 THEN R ELSE N/A
C384	IF A.1/1 AND A.18a/13 THEN R ELSE N/A
C385	IF A.1/1 AND A.18a/13 AND (A.18a/9 OR A.18a/10) THEN R ELSE N/A
C386	IF A.1/1 AND A.18f.2/1 THEN R ELSE N/A
C387	IF A.1/1 AND A.18c/62 THEN R ELSE N/A

<End of modified section>

<Start of first modified section>

Table A.18c: FDD interoperability radio bearer capabilities for combinations on DPCH.

Item	FDD interoperability radio bearer configuration for combination on DPCH	Ref.	Applicability (Minimum UE radio access capability)		Comments
			Parameter	Value	
[0]					

Item	FDD interoperability radio bearer configuration for combination on DPCH	Ref.	Applicability (Minimum UE radio access capability)		Comments
			Parameter	Value	
[Ö]					
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.	34.108 6.10.2.4.1.58			
59	Void				
60	Void				
61	Void				
62	Void Conversational / speech / UL:(12.65 8.85 6.6) DL:(12.65 8.85 6.6) kbps / CS RAB + UL:3.4 DL:3.4 kbps SRBs for DCCH + DL:0.15 kbps SRB#5 for DCCH	34.108 6.10.2.4.1.62	DL Max TB bits	640	
			DL Max CC TB bits	640	
			DL Max TC TB bits	N/A	
			DL Max TrCHs	4	
			DL Max CCTrCH	1	
			DL Max TTI TB	4	
			DL Max TFS	32	
			DL Max TF	32	
			DL TC	N/A	
			UL Max TB bits	640	
			UL Max CC TB bits	640	
			UL Max TC TB bits	N/A	
			UL Max TrCHs	4	
			UL Max TTI TB	4	
			UL Max TFS	32	
			UL Max TF	32	
			UL TC	N/A	
			Other required UE radio access capability	None	
63.1	Interactive or background / UL:64 DL:768 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH/ 10 ms TTI	34.108 6.10.2.4.1.63	DL Max TB bits	10240	
			DL Max CC TB bits	640	
			DL Max TC TB bits	10240	
			DL Max TrCHs	8	
			DL Max CCTrCH	2	
			DL Max TTI TB	64	
			DL Max TFS	256	
			DL Max TF	128	
			DL TC	Yes	
			UL Max TB bits	3840	
			UL Max CC TB bits	640	
			UL Max TC TB bits	3840	
			UL Max TrCHs	8	
			UL Max TTI TB	8	
			UL Max TFS	32	
			UL Max TF	32	
			UL TC	Yes	
			Other required UE radio access capability	None	
63.2	Interactive or background / UL:64 DL:768 kbps / PS RAB + UL:3.4 DL: 3.4 kbps SRBs for DCCH / 20 ms TTI	34.108 6.10.2.4.1.63	DL Max TB bits	10240	
			DL Max CC TB bits	640	
			DL Max TC TB bits	10240	

Item	FDD interoperability radio bearer configuration for combination on DPCH	Ref.	Applicability (Minimum UE radio access capability)		Comments
			Parameter	Value	
[Ö]					
			DL Max TrCHs	8	
			DL Max CCTrCH	2	
			DL Max TTI TB	64	
			DL Max TFS	256	
			DL Max TF	128	
			DL TC	Yes	
			UL Max TB bits	3840	
			UL Max CC TB bits	640	
			UL Max TC TB bits	3840	
			UL Max TrCHs	8	
			UL Max TTI TB	8	
			UL Max TFS	32	
			UL Max TF	32	
			UL TC	Yes	
			Other required UE radio access capability	None	
<p>NOTE: To enable UE loopback of test data for the FDD interoperability reference radio bearer configurations having zero rate in uplink or downlink (items 18 to 22, items 47 to 49 and items 54 and 55 in table A.18c) the "Streaming / unknown / UL:14,4 kbps / CS RAB" and "Streaming / unknown / DL:14,4 kbps / CS RAB" have been used instead of the zero-rate uplink and downlink configuration. The impact on the UE radio access capability has been taken into account in the applicability statement for those items.</p>					

<End of modified section>