3GPP TSG RAN Meeting #28 **RP-050201**
Quebec, Canada, 1 - 3 June 2005

Title **CRs (R99 and Cat A to later Releases) to 25.101**
Source **3GPP TSG RAN WG4 (Radio)**
Agenda Item **7.5.3**

WG Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R4-050326	25.133	733		F	R99	3.20.0	Removing of event triggered reporting testcase in fading A.8.1.4	TEI
R4-050394	25.133	744		F	R99	3.20.0	Removal of UTRA carrier RSSI relative accuracy testcase	TEI
R4-050395	25.133	745		A	Rel-4	4.14.0	Removal of UTRA carrier RSSI relative accuracy testcase	TEI
R4-050396	25.133	746		A	Rel-5	5.14.0	Removal of UTRA carrier RSSI relative accuracy testcase	TEI

3GPP TSG RAN WG4 (Radio) Meeting #35 **R4-050326**

Athens, Greece 9 - 13 May 2005

CR-Form-v7.1

CHANGE REQUEST

⌘ **25.133** **CR** **733** ⌘ **rev** ⌘ Current version: **3.20.0** ⌘

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

Title:	⌘	Removal of testcase A.8.1.4 in 25.133 Rel-99.
Source:	⌘	3GPP TSG RAN WG4 (Radio)
Work item code:	⌘	TEI
Date:	⌘	16/05/2005
Category:	⌘	**F**
Release:	⌘	R99

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.

Use one of the following releases:

Ph2	*(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)*
Rel-7	*(Release 7)*

Reason for change:	⌘	In R4-040379 TS25133CR655rev2, which is R99 only CR for changing test case of event triggered reporting with event 1B, was approved. In R4-040455, three of the testcases (A.8.1.1, A.8.1.2 and A.8.1.3) were changed so that the triggering of the events did not change the event triggering condition from the intended conditions. However in A.8.1.4, the environment is fading and the intention is to measure when the cell with lowest power is entering and leaving the reporting range, however that range is not well defined in this situation when the new cell is included in the active set. Therefore it is not possible to change this testcase in the same way as the other testcases. Instead it is proposed to remove the testcase A.8.1.4.
Summary of change:	⌘	The testcase in A.8.1.4 is removed
Consequences if not approved:	⌘	A good UE might fail the test

Clauses affected:	⌘	A.8.1.4			
Other specs affected:	⌘	Y / N	Other core specifications	⌘	
		N			
		Y	Test specifications		34.121
		N	O&M Specifications		
Other comments:	⌘				

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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.

A.8.1 FDD intra frequency measurements

A.8.1.1 Event triggered reporting in AWGN propagation conditions

A.8.1.1.1 Test Purpose and Environment

The purpose of this test is to verify that the UE makes correct reporting of an event. This test will partly verify the requirements in section 8.1.2 and 9.1.

The test parameters are given in Table A.8.1 and A.8.2 below. In the measurement control information it is indicated to the UE that event-triggered reporting with Event 1A and 1B shall be used and that CPICH Ec/Io and SFN-CFN observed time difference shall be reported together with Event 1A. The test consists of four successive time periods, with a time duration of T1, T2 T3 and T4 respectively. During time duration T1, the UE shall not have any timing information of cell 2.

Table A.8.1: General test parameters for Event triggered reporting in AWGN propagation conditions

Parameter	Unit	Value	Comment
DCH parameters		DL Reference Measurement Channel 12.2 kbps	As specified in TS 25.101 section A.3.1
Power Control		On	
Active cell		Cell 1	
Reporting range	dB	3	Applicable for event 1A and 1B
Hysteresis	dB	0	
W		0	Applicable for event 1A and 1B
Reporting deactivation threshold		0	Applicable for event 1A
Time to Trigger	ms	0	
Filter coefficient		0	
Monitored cell list size		24	
T1	s	5	
T2	s	5	
T3	s	1	
T4	s	5	

Table A.8.2: Cell specific test parameters for Event triggered reporting in AWGN propagation conditions

Parameter	Unit	Cell 1				Cell 2			
		T1	T2	T3	T4	T1	T2	T3	T4
CPICH_Ec/Ior	dB	-10				-10			
PCCPCH_Ec/Ior	dB	-12				-12			
SCH_Ec/Ior	dB	-12				-12			
PICH_Ec/Ior	dB	-15				-15			
DPCH_Ec/Ior	dB	Note 1				N/A		Note 1	
OCNS		Note 2				-0.941		Note 2	
$\hat{I}_{or}/I_{oc}$	dB	0	6.97	6.97	0	-Infinity	5.97	5.97	-Infinity
I_{oc}	dBm/3.84 MHz	-70							
CPICH_Ec/Io	dB	-13	-13	-13	-13	-Infinity	-14	-14	-Infinity
Propagation Condition		AWGN							
Note 1 The DPCH level is controlled by the power control loop Note 2 The power of the OCNS channel that is added shall make the total power from the cell to be equal to I_{or}.									

The test shall be performed in the following way:

During time period T1:

The test is started at the beginning of T1 with cell 1 active.

During time period T2:

UTRAN shall after the Event 1A triggered measurement is reported send an Active Set Update command with activation time "start of T3" adding cell 2 to the active set.

The Active Set Update message shall be sent to the UE so that the whole message is available at the UE the RRC procedure delay prior to the beginning of T3.

A.8.1.1.2 Test Requirements

The UE shall send one Event 1A triggered measurement report, with a measurement reporting delay less than 800 ms from the beginning of time period T2.

The UE shall send one Event 1B triggered measurement report, with a measurement reporting delay less than 200 ms from the beginning of time period T4.

The UE shall not send event triggered measurement reports, as long as the reporting criteria are not fulfilled.

The rate of correct events observed during repeated tests shall be at least 90%.

A.8.1.2 Event triggered reporting of multiple neighbours in AWGN propagation condition

A.8.1.2.1 Test Purpose and Environment

The purpose of this test is to verify that the UE makes correct reporting of events. This test will partly verify the requirements in section 8.1.2 and 9.1.

The test parameters are given in Table A.8.3 and A.8.4. 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 CPICH Ec/Io and SFN-CFN observed time difference shall be reported together with Event 1A. The test consists of six successive time periods, with a time duration of T1, T2, T3, T4, T5 and T6 respectively. In the initial condition before the time T1 only Cell1 is active.

Table A.8.3: General test parameters for Event triggered reporting of multiple neighbours in AWGN propagation conditions

Parameter	Unit	Value	Comment
DCH parameters		DL Reference Measurement Channel 12.2 kbps	As specified in TS 25.101 section A.3.1
Power Control		On	
Active cell		Cell 1	
Reporting range	dB	3	Applicable for event 1A and 1B
Hysteresis	dB	0	
W		0	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	1	
T3	s	10	
T4	s	4	
T5	s	1	
T6	s	10	

Table A.8.4: 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	T5	T6	T1	T2	T3	T4	T5	T6	T1	T2	T3	T4	T5	T6
CPICH_Ec/Ior	dB	-10						-10						-10					
PCCPCH_Ec/Ior	dB	-12						-12						-12					
SCH_Ec/Ior	dB	-12						-12						-12					
PICH_Ec/Ior	dB	-15						-15						-15					
DPCH_Ec/Ior	dB	Note 1						N/A						N/A	Note 1				N/A
OCNS_Ec/Ior	dB	Note 2						-0.941						-0.941	Note 2				-0.941
		Cell 1						Cell 2						Cell3					
		T1	T2	T3	T4	T5	T6	T1	T2	T3	T4	T5	T6	T1	T2	T3	T4	T5	T6
$\hat{I}_{or}/I_{oc}$	dB	6.97		6.93	5.97		6.12	-Inf		9.43	6.97		7.62	5.97		6.93	-Inf		5.62
I_{oc}	dBm/ 3.84 MHz	-85																	
CPICH_Ec/Io	dB	-13		-16	-14		-15.5	-Inf		-13.5	-13		-14	-14		-16	-Inf		-16
Propagation Condition	AWGN																		
Note 1 The DPCH level is controlled by the power control loop Note 2 The power of the OCNS channel that is added shall make the total power from the cell to be equal to I_{or}																			

The test shall be performed in the following way:

During time period T1:

The test is started at the beginning of T1 with cell 1 active.

UTRAN shall after the Event 1A triggered measurement is reported send an Active Set Update command with activation time “start of T2” adding cell 3 to the active set.

The Active Set Update message shall be sent to the UE so that the whole message is available at the UE the RRC procedure delay prior to the beginning of T2.

During time period T4:

UTRAN shall after the Event 1B triggered measurement is reported send an Active Set Update command with activation time "start of T5" removing cell 3 from the active set.

The Active Set Update message shall be sent to the UE so that the whole message is available at the UE the RRC procedure delay prior to the beginning of T5.

A.8.1.2.2 Test Requirements

a) The UE shall send one Event 1A triggered measurement report for Cell3, with a measurement reporting delay less than 800 ms from the beginning of time period T1.

b) The UE may send one Event 1C triggered measurement report for Cell3 after the beginning of the time period T1.

c) The UE shall send one Event 1C triggered measurement report for Cell2, with a measurement reporting delay less than 800 ms from the beginning of time period T3.

d) The UE shall send one Event 1A triggered measurement report for Cell2, with a measurement reporting delay less than 800 ms from the beginning of time period T3.

e) The UE shall send one Event 1B triggered measurement report for Cell3, with a measurement reporting delay less than 200 ms from the beginning of time period T4.

f) The UE shall send one Event 1A triggered measurement report for Cell3, with a measurement reporting delay less than 200 ms from the beginning of time period T6.

g) The UE may send one Event 1C triggered measurement report for Cell2 after the beginning of the time period T6.

h) The UE may send one Event 1C triggered measurement report for Cell3 after the beginning of the time period T6.

i) The UE shall not send event triggered measurement reports, as long as the reporting criteria are not fulfilled.

The rate of correct events observed during repeated tests shall be at least 90%.

A.8.1.3 Event triggered reporting of two detectable neighbours in AWGN propagation condition

A.8.1.3.1 Test Purpose and Environment

The purpose of this test is to verify that the UE makes correct reporting of events. This test will partly verify the requirements in section 8.1.2 and 9.1.

The test parameters are given in Table A.8.5 and A.8.6. In the measurement control information it is indicated to the UE that event-triggered reporting with Event 1A and 1B shall be used and the periodical reporting of the events is not applied. The CPICH Ec/Io and SFN-CFN observed time difference shall be reported together with Event 1A. The test consists of five successive time periods, with a time duration of T1, T2, T3, T4 and T5 respectively. In the initial condition before the time T1 only Cell1 is active.

Table A.8.5: General test parameters for Event triggered reporting of two detectable neighbours in AWGN propagation condition

Parameter	Unit	Value	Comment
DCH parameters		DL Reference Measurement Channel 12.2 kbps	As specified in TS 25.101 section A.3.1
Power Control		On	
Active cell		Cell 1	
Reporting range	dB	3	Applicable for event 1A and 1B
Hysteresis	dB	0	
W		0	Applicable for event 1A and 1B
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	1	
T4	s	10	
T5	s	10	

Table A.8.6: Cell specific test parameters for Event triggered reporting of two detectable neighbours in AWGN propagation condition

Parameter	Unit	Cell 1					Cell 2					Cell3				
		T1	T2	T3	T4	T5	T1	T2	T3	T4	T5	T1	T2	T3	T4	T5
CPICH_Ec/Ior	dB	-10					-10					-10				
PCCPCH_Ec/Ior	dB	-12					-12					-12				
SCH_Ec/Ior	dB	-12					-12					-12				
PICH_Ec/Ior	dB	-15					-15					-15				
DPCH_Ec/Ior	dB	Note 1					N/A		Note 1			N/A				
OCNS_Ec/Ior	dB	Note 2					-0.941		Note 2			-0.941				
$\hat{I}_{or}/I_{oc}$	dB	14.55	28.51		14.45	28.51	-Inf	27.51		13.95	21.51	8.05	21.51		13.95	27.51
I_{oc}	dBm/ 3.84 MHz	-85														
CPICH_Ec/Io	dB	-11	-13		-14.5	-13	-Inf	-14.0		-15	-20	-17.5	-20		-15	-14
Propagation Condition	AWGN															

Note 1: The DPCH level is controlled by the power control loop
Note 2 : The power of the OCNS channel that is added shall make the total power from the cell to be equal to I_{or}

The test shall be performed in the following way:

During time period T1:

The test is started at the beginning of T1 with cell 1 active.

During time period T2:

UTRAN shall after the Event 1A triggered measurement is reported send an Active Set Update command with activation time “start of T3” adding cell 2 to the active set.

The Active Set Update message shall be sent to the UE so that the whole message is available at the UE the RRC procedure delay prior to the beginning of T3.

A.8.1.3.2 Test Requirements

a) The UE shall send one Event 1A triggered measurement report for Cell2, with a measurement reporting delay less than 800 ms from the beginning of time period T2.

b) The UE shall send one Event 1A triggered measurement report for Cell3, with a measurement reporting delay less than 200 ms from the beginning of time period T4.

c) The UE shall send one Event 1B triggered measurement report for Cell2, with a measurement reporting delay less than 200 ms from the beginning of time period T5.

d) The UE shall not send event triggered measurement reports, as long as the reporting criteria are not fulfilled.

The rate of correct events observed during repeated tests shall be at least 90%.

A.8.1.4 Correct reporting of neighbours in fading propagation condition

A.8.1.4.1 Test Purpose and Environment

The purpose of this test is to verify that the UE performs sufficient layer 1 filtering of the measurements, see section 9.1, which are the base for the event evaluation. The test is performed in fading propagation conditions. This test will partly verify the requirements in section 8.1.2.

The test parameters are given in Table A.8.7 and A.8.8.In the measurement control information it is indicated to the UE that event triggered reporting with Event 1A and Event 1B shall be used and that CPICH Ec/Io and SFN-CFN observed time difference shall be reported together with Event 1A. The test consists of two successive time periods, each with a time duration of T1, T2 and T3 respectively.

The TTI of the uplink DCCH shall be 20ms.

Table A.8.7: General test parameters for correct reporting of neighbours in fading propagation condition

Parameter	Unit	Value	Comment
DCH parameters		DL Reference Measurement Channel 12.2 kbps	As specified in TS 25.101 section A.3.1
Power Control		On	
Active cell		Cell 1	
Reporting range	dB	0	Applicable for event 1A and 1B
Hysteresis	dB	0	
W		1	Applicable for event 1A and 1B
Reporting deactivation threshold		0	Applicable for event 1A
Time to Trigger	ms	120	
Filter coefficient		0	
Monitored cell list size		24	Signalled before time T1.
T1	s	200	
T2	s	1	
T3	s	201	

Table A.8.8: Cell specific test parameters for correct reporting of neighbours in fading propagation condition

Parameter	Unit	Cell 1			Cell 2		
		T1	T2	T3	T1	T2	T3
CPICH_Ec/Ior	dB	-10			-10		
PCCPCH_Ec/Ior	dB	-12			-12		
SCH_Ec/Ior	dB	-12			-12		
PICH_Ec/Ior	dB	-15			-15		
DPCH_Ec/Ior	dB	Note 1			N/A	Note 1	
OCNS		Note 2			-0.941	Note 2	
$\hat{I}_{or}/I_{oc}$	dB	7.29		3.29	3.29		7.29
I_{oc}	dBm/3.84 MHz	-70					
CPICH_Ec/Io	dB	-12		-16	-16		-12
Propagation Condition	Case 5 as specified in Annex B of TS25.101						
Note 1 The DPCH level is controlled by the power control loop Note 2 The power of the OCNS channel that is added shall make the total power from the cell to be equal to I_{or}							

The test shall be performed in the following way:

During time period T1:

The test is started at the beginning of T1 with cell 1 active.

UTRAN shall during T1 send an Active Set Update command with activation time "start of T2" adding cell 2 to the active set.

The Active Set Update message shall be sent to the UE so that the whole message is available at the UE the RRC procedure delay prior to the beginning of T2.

A.8.1.4.2 Test Requirements

a) The number of received event 1A reports during time period T1 shall be less than 60.

b) During the first 1 s of time period T3 no event reports shall be counted.

c) The number of received event 1B reports counted from 1s after the beginning of time period T3 until the end of time period T3 shall be less than 60.

3GPP TSG RAN WG4 (Radio) Meeting #35 **R4-050394**

Athens, Greece 9 - 13 May 2005

CR-Form-v7

CHANGE REQUEST

⌘ **25.133** **CR** **744** ⌘ **rev** ⌘ Current version: **3.20.0** ⌘

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

Title:	⌘	Removal of UTRA carrier RSSI relative accuracy testcase
Source:	⌘	3GPP TSG RAN WG4 (Radio)
Work item code:	⌘	TEI
Date:	⌘	16/05/2005
Category:	⌘	**F**
Release:	⌘	R99

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)*
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Use one 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:	⌘	In RAN4#34, liason statement R4-050153 from T1 highlighted problems with the avaliable signalling to implement UTRA carrier relative accuracy. As there is no mechanism in release 99 to periodically report intrafrequency RSSI, RAN4 could not find a way to measure relative accuracy of RSSI between the serving cell and a neighbour cell (R4-050225) it is proposed to remove this testcase from appendix A of 25.133. A minor error in the test case is also corrected. The test case referenced section 9.1.2 (CPICH Ec/Io accuracy requirements), however the correct section in chapter 9 for UTRA carrier RSSI accuracy is section 9.1.3. **Isolated impact analysis :** Since only a test case is removed, there is no impact to the UE implementation. Since there is no mechanism in release 99 to report intrafrequency RSSI, existing UTRAN implementations should also be unaffected by the removal of this test case
Summary of change:	⌘	- Correction of referece from section 9.1.2 to section 9.1.3 - Removal of the words “relative accuracy” and clarification that only absolute accuracy is tested.
Consequences if not approved:	⌘	RAN5 remains unable to define any test case to measure UTRA carrier RSSI relative accuracy, and the test case remains suspended by RAN5 indefinitely.

Clauses affected:	⌘	A.9.1.3			
Other specs affected:	⌘	**Y**	**N**		
			X	Other core specifications	⌘
		X		Test specifications	34.121
			X	O&M Specifications	

Other comments: ⌘

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A.9.1.3 UTRA Carrier RSSI

A.9.1.3.1 Test Purpose and Environment

The purpose of this test is to verify that the UTRA Carrier RSSI measurement accuracy is within the specified limits. This test will verify the requirements in section 9.1.3. In this case both cells are in different frequency and compressed mode is applied. The gap length is 7, detailed definition is in TS 25.101 annex A.5, Set 1 of Table A.22. UTRA Carrier RSSI accuracy requirements are tested by using test parameters in Table A.9.5.

Table A.9.5: UTRA Carrier RSSI Inter frequency test parameters

Parameter	Unit	Test 1		Test 2		Test 3	
		Cell 1	Cell 2	Cell 1	Cell 2	Cell 1	Cell 2
UTRA RF Channel number		Channel 1	Channel 2	Channel 1	Channel 2	Channel 1	Channel 2
CPICH_Ec/Ior	dB	-10		-10		-10	
PCCPCH_Ec/Ior	dB	-12		-12		-12	
SCH_Ec/Ior	dB	-12		-12		-12	
PICH_Ec/Ior	dB	-15		-15		-15	
DPCH_Ec/Ior	dB	-15	-	-6	-	-6	-
OCNS_Ec/Ior	dB	-1.11	-0.94	-2.56	-0.94	-2.56	-0.94
Ioc	dBm/ 3.84 MHz	-52.22	-52.22	-70.27	-70.27	-94.46	-94.46
Îor/Ioc	dB	-1.75	-1.75	-4.7	-4.7	-9.54	-9.54
CPICH Ec/Io, Note 1	dBm	-14.0	-14.0	-16.0	-16.0	-20.0	-20.0
Io, Note 1	dBm/3.84 MHz	-50	-50	-69	-69	-94	-94
Propagation condition	-	AWGN		AWGN		AWGN	
NOTE 1: CPICH Ec/Io and Io levels have been calculated from other parameters for information purposes. They are not settable parameters themselves.							
Tests shall be done sequentially. Test 1 shall be done first. After test 1 has been executed test parameters for tests 2 and 3 shall be set within 5 seconds so that UE does not loose the Cell 2 in between the tests.							

A.9.1.3.2 Test Requirements

The UTRA Carrier RSSI measurement accuracy shall meet the requirements in section 9.1.3. The effect of assumed thermal noise and noise generated in the receiver (–99 dBm) shall be added into the required absolute accuracy defined in Section ~~9.1.2~~ 9.1.3 as shown in Table A.9.5A.

Table A.9.5A: UTRA Carrier RSSI absolute ~~and relative~~ accuracy

Parameter	Unit	Accuracy [dB]		Conditions
		Normal condition	Extreme condition	Io [dBm/3.84 MHz]
UTRA Carrier RSSI	dBm	-4…5.2	-7…8.2	-94…-87
	dBm	± 4	± 7	-87...-70
	dBm	± 6	± 9	-70...-50

3GPP TSG RAN WG4 (Radio) Meeting #35 **R4-050395**

Athens, Greece 9 - 13 May 2005

CR-Form-v7

CHANGE REQUEST

⌘ **25.133** **CR** **745** ⌘**rev** ⌘ Current version: **4.14.0** ⌘

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

Title:	⌘	Removal of UTRA carrier RSSI relative accuracy testcase
Source:	⌘	3GPP TSG RAN WG4 (Radio)
Work item code:	⌘	TEI
Date:	⌘	16/05/2005
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Release:	⌘	Rel-4

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Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	In RAN4#34, liason statement R4-050153 from T1 highlighted problems with the avaliable signalling to implement UTRA carrier relative accuracy. As there is no mechanism in release 4 to periodically report intrafrequency RSSI, RAN4 could not find a way to measure relative accuracy of RSSI between the serving cell and a neighbour cell (R4-050225) it is proposed to remove this testcase from appendix A of 25.133. A minor error in the test case is also corrected. The test case referenced section 9.1.2 (CPICH Ec/Io accuracy requirements), however the correct section in chapter 9 for UTRA carrier RSSI accuracy is section 9.1.3. **Isolated impact analysis :** Since only a test case is removed, there is no impact to the UE implementation. Since there is no mechanism in release 4 to report intrafrequency RSSI, existing UTRAN implementations should also be unaffected by the removal of this test case
Summary of change:	⌘	- Correction of referece from section 9.1.2 to section 9.1.3 - Removal of the words “relative accuracy” and clarification that only absolute accuracy is tested.
Consequences if not approved:	⌘	RAN5 remains unable to define any test case to measure UTRA carrier RSSI relative accuracy, and the test case remains suspended by RAN5 indefinitely.

Clauses affected:	⌘	A.9.1.3			
Other specs affected:	⌘	**Y** / **N**	Other core specifications	⌘	
		☐ / ☒			
		☒ / ☐	Test specifications		34.121
		☐ / ☒	O&M Specifications		

Other comments: ⌘

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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.

A.9.1.3 UTRA Carrier RSSI

A.9.1.3.1 Test Purpose and Environment

The purpose of this test is to verify that the UTRA Carrier RSSI measurement accuracy is within the specified limits. This test will verify the requirements in section 9.1.3. In this case both cells are in different frequency and compressed mode is applied. The gap length is 7, detailed definition is in TS 25.101 annex A.5, Set 1 of Table A.22. UTRA Carrier RSSI accuracy requirements are tested by using test parameters in Table A.9.5.

Table A.9.5: UTRA Carrier RSSI Inter frequency test parameters

Parameter	Unit	Test 1		Test 2		Test 3	
		Cell 1	Cell 2	Cell 1	Cell 2	Cell 1	Cell 2
UTRA RF Channel number		Channel 1	Channel 2	Channel 1	Channel 2	Channel 1	Channel 2
CPICH_Ec/Ior	dB	-10		-10		-10	
PCCPCH_Ec/Ior	dB	-12		-12		-12	
SCH_Ec/Ior	dB	-12		-12		-12	
PICH_Ec/Ior	dB	-15		-15		-15	
DPCH_Ec/Ior	dB	-15	-	-6	-	-6	-
OCNS_Ec/Ior	dB	-1.11	-0.94	-2.56	-0.94	-2.56	-0.94
Ioc	dBm/ 3.84 MHz	-52.22	-52.22	-70.27	-70.27	-94.46	-94.46
Îor/Ioc	dB	-1.75	-1.75	-4.7	-4.7	-9.54	-9.54
CPICH Ec/Io, Note 1	dBm	-14.0	-14.0	-16.0	-16.0	-20.0	-20.0
Io, Note 1	dBm/3.84 MHz	-50	-50	-69	-69	-94	-94
Propagation condition	-	AWGN		AWGN		AWGN	
NOTE 1: CPICH Ec/Io and Io levels have been calculated from other parameters for information purposes. They are not settable parameters themselves.							
Tests shall be done sequentially. Test 1 shall be done first. After test 1 has been executed test parameters for tests 2 and 3 shall be set within 5 seconds so that UE does not loose the Cell 2 in between the tests.							

A.9.1.3.2 Test Requirements

The UTRA Carrier RSSI measurement accuracy shall meet the requirements in section 9.1.3. The effect of assumed thermal noise and noise generated in the receiver (–99 dBm) shall be added into the required absolute accuracy defined in Section ~~9.1.2~~ 9.1.3 as shown in Table A.9.5A.

Table A.9.5A: UTRA Carrier RSSI absolute ~~and relative~~ accuracy

Parameter	Unit	Accuracy [dB]		Conditions
		Normal condition	Extreme condition	Io [dBm/3.84 MHz]
UTRA Carrier RSSI	dBm	-4…5.2	-7…8.2	-94…-87
	dBm	± 4	± 7	-87...-70
	dBm	± 6	± 9	-70...-50

3GPP TSG RAN WG4 (Radio) Meeting #35 **R4-050396**

Athens, Greece 9 - 13 May 2005

CR-Form-v7

CHANGE REQUEST

⌘ **25.133** **CR** **746** ⌘ **rev** ⌘ Current version: **5.14.0** ⌘

*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:	⌘	Removal of UTRA carrier RSSI relative accuracy testcase
Source:	⌘	3GPP TSG RAN WG4 (Radio)
Work item code:	⌘	TEI
Date:	⌘	16/05/2005
Category:	⌘	**A**
Release:	⌘	Rel-5

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.

Use one 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:	⌘	In RAN4#34, liason statement R4-050153 from T1 highlighted problems with the avaliable signalling to implement UTRA carrier relative accuracy. As there is no mechanism in release 5 to periodically report intrafrequency RSSI, RAN4 could not find a way to measure relative accuracy of RSSI between the serving cell and a neighbour cell (R4-050225) it is proposed to remove this testcase from appendix A of 25.133. A minor error in the test case is also corrected. The test case referenced section 9.1.2 (CPICH Ec/Io accuracy requirements), however the correct section in chapter 9 for UTRA carrier RSSI accuracy is section 9.1.3. **Isolated impact analysis :** Since only a test case is removed, there is no impact to the UE implementation. Since there is no mechanism in release 5 to report intrafrequency RSSI, existing UTRAN implementations should also be unaffected by the removal of this test case
Summary of change:	⌘	- Correction of referece from section 9.1.2 to section 9.1.3 - Removal of the relative accuracy test requirements table and clarification that only absolute accuracy is tested.
Consequences if not approved:	⌘	RAN5 remains unable to define any test case to measure UTRA carrier RSSI relative accuracy, and the test case remains suspended by RAN5 indefinitely.

Clauses affected:	⌘	A.9.1.3			
Other specs affected:	⌘	**Y** / **N**	Other core specifications	⌘	
		☐ / ☒			
		☒ / ☐	Test specifications		34.121
		☐ / ☒	O&M Specifications		

Other comments: ⌘

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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.

A.9.1.3 UTRA Carrier RSSI

A.9.1.3.1 Test Purpose and Environment

The purpose of this test is to verify that the UTRA Carrier RSSI measurement accuracy is within the specified limits. This test will verify the requirements in section 9.1.3. In this case both cells are in different frequency and compressed mode is applied. The gap length is 7, detailed definition is in TS 25.101 annex A.5, Set 1 of Table A.22. UTRA Carrier RSSI accuracy requirements are tested by using test parameters in Table A.9.5.

Table A.9.5: UTRA Carrier RSSI Inter frequency test parameters

Parameter		Unit	Test 1		Test 2		Test 3	
			Cell 1	Cell 2	Cell 1	Cell 2	Cell 1	Cell 2
UTRA RF Channel number			Channel 1	Channel 2	Channel 1	Channel 2	Channel 1	Channel 2
CPICH_Ec/Ior		dB	-10		-10		-10	
PCCPCH_Ec/Ior		dB	-12		-12		-12	
SCH_Ec/Ior		dB	-12		-12		-12	
PICH_Ec/Ior		dB	-15		-15		-15	
DPCH_Ec/Ior		dB	-15	-	-6	-	-6	-
OCNS_Ec/Ior		dB	-1.11	-0.94	-2.56	-0.94	-2.56	-0.94
Ioc	Band I	dBm/ 3.84 MHz	-52.22	-52.22	-70.27	-70.27	-94.46	-94.46
	Band II						-92.46	-92.46
	Band III						-91.46	-91.46
Îor/Ioc		dB	-1.75	-1.75	-4.7	-4.7	-9.54	-9.54
CPICH Ec/Io, Note 1		dBm	-14.0	-14.0	-16.0	-16.0	-20.0	-20.0
Io, Note 1	Band I	dBm/3.84 MHz	-50	-50	-69	-69	-94	-94
	Band II						-92	-92
	Band III						-91	-91
Propagation condition		-	AWGN		AWGN		AWGN	
NOTE 1: CPICH Ec/Io and Io levels have been calculated from other parameters for information purposes. They are not settable parameters themselves.								
Tests shall be done sequentially. Test 1 shall be done first. After test 1 has been executed test parameters for tests 2 and 3 shall be set within 5 seconds so that UE does not loose the Cell 2 in between the tests.								

A.9.1.3.2 Test Requirements

The UTRA Carrier RSSI measurement accuracy shall meet the absolute requirements in section 9.1.3. The effect of assumed thermal noise and noise generated in the receiver (–99 dBm for frequency band I, -97dBm for frequency band II and –96dBm for frequency band III) shall be added into the required accuracy defined in Section ~~9.1.2~~ 9.1.3 as shown in Table A.9.5A and Table A.9.5A1.

Table A.9.5A: UTRA Carrier RSSI absolute accuracy

Parameter	Unit	Accuracy [dB]		Conditions
		Normal condition	Extreme condition	Io [dBm/3.84 MHz]
UTRA Carrier RSSI	DBm	±4 (Note 1)	±7 (Note 1)	-94…-70 (Band I) -92…-70 (Band II) -91…-70 (Band III)
	DBm	± 6	± 9	-70...-50
Note 1: Impact from RF noise floor is test case dependent and has not been considered. Noise floor shall be considered in T1 test case				

Table A9.5A1: UTRA Carrier RSSI relative accuracy

Parameter	Unit	Accuracy [dB]		Conditions
		Normal condition	Extreme condition	Io [dBm/3.84 MHz]
UTRA Carrier RSSI	DBm	± 7 (Note 1)	± 11(Note 1)	-94…-70 (Band I) -92…-70 (Band II) -91…-70 (Band III)
Note 1: Impact from RF noise floor is test case dependent and has not been considered. Noise floor shall be considered in T1 test case				