

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

RP-050212

Title CRs (Rel-5 & Rel-6) to 25.133 for the removal of Observed time difference to GSM cell
Source 3GPP TSG RAN WG4 (Radio)
Agenda Item 7.7.3

WG Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R4-050409	25.133	748		C	Rel-5	5.14.0	Feature Clean Up: Removal of Observed time difference to GSM cell	TEI5
R4-050410	25.133	749		C	Rel-6	6.9.0	Feature Clean Up: Removal of Observed time difference to GSM cell	TEI6

Athens, Greece 9 - 13 May 2005

CR-Form-v7

CHANGE REQUEST

⌘ **25.133 CR 748** ⌘ 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:	⌘ Feature Clean Up: Removal of Observed time difference to GSM cell		
Source:	⌘ 3GPP TSG RAN WG4 (Radio)		
Work item code:	⌘ TEI5	Date:	⌘ 16/05/2005
Category:	⌘ C	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:	⌘ RAN#27 decision on Feature Clean-up		
Summary of change:	⌘ Requirements and test case of Observed time difference to GSM cell measurement is removed.		
	Isolated Impact Analysis Functionality removed: Observed time difference to GSM cell Isolated impact statement: Since functionality is removed, UE implementations are not affected. Would affect UTRAN implementations supporting the removed functionality.		
Consequences if not approved:	⌘ Introduction of new features and evolution of the existing feature remain slow also in the future.		

Clauses affected:	⌘ 9.1.10 and A.9.1.7										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td>Y</td> <td>N</td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td>X</td> <td></td> </tr> <tr> <td></td> <td>X</td> </tr> </table>	Y	N	X		X			X	Other core specifications Test specifications O&M Specifications	⌘ 25.215, 25.331, 25.302 34.121
Y	N										
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.

9.1.9.2.2 UE Rx-Tx time difference type 2 measurement report mapping

The reporting range is for *UE Rx-Tx time difference type2* is from 768 ... 1280 chip.

In table 9.28 the mapping of measured quantity is defined. The range in the signalling may be larger than the guaranteed accuracy range.

Table 9.28

Reported value	Measured quantity value	Unit
RX-TX_TIME_0000	UE Rx-Tx Time difference type 2 < 768.000	chip
RX-TX_TIME_0001	768.000 ≤ UE Rx-Tx Time difference type 2 < 768.0625	chip
RX-TX_TIME_0002	768.0625 ≤ UE Rx-Tx Time difference type 2 < 768.1250	chip
RX-TX_TIME_0003	768.1250 ≤ UE Rx-Tx Time difference type 2 < 768.1875	chip
...
RX-TX_TIME_8189	1279.7500 ≤ UE Rx-Tx Time difference type 2 < 1279.8125	chip
RX-TX_TIME_8190	1279.8125 ≤ UE Rx-Tx Time difference type 2 < 1279.8750	chip
RX-TX_TIME_8191	1279.8750 ≤ UE Rx-Tx Time difference type 2	chip

9.1.10 ~~Observed time difference to GSM cell~~ Void

~~NOTE:—This measurement is used to determine the system time difference between UTRAN and GSM cells.~~

~~The requirements in this section are valid for terminals supporting UTRA and GSM.~~

9.1.10.1 ~~Measurement requirement~~

~~The measurement period for CELL_DCH state is equal to the maximum time between two successive BSIC re-confirmations for one particular GSM cell according to sub-clause 8.1.2.5.2.~~

~~The accuracy requirement in table 9.29 is valid in the conditions defined in sub-clause 8.1.2.5.2.~~

Table 9.29

Parameter	Unit	Accuracy [chip]	Conditions
Observed time difference to GSM cell	chip	±20	

9.1.10.2 ~~Observed time difference to GSM cell measurement report mapping~~

~~The reporting range is for *Observed time difference to GSM cell* is from 0 ... 3060/13 ms.~~

~~In table 9.30 the mapping of measured quantity is defined. The range in the signalling may be larger than the guaranteed accuracy range.~~

Table 9.30

Reported value	Measured quantity value	Unit
GSM_TIME_0000	0 ≤ Observed time difference to GSM cell < 1x3060/(4096x13)	ms
GSM_TIME_0004	1x3060/(4096x13) ≤ Observed time difference to GSM cell < 2x3060/(4096x13)	ms
GSM_TIME_0002	2x3060/(4096x13) ≤ Observed time difference to GSM cell < 3x3060/(4096x13)	ms
GSM_TIME_0003	3x3060/(4096x13) ≤ Observed time difference to GSM cell < 4x3060/(4096x13)	ms
...
GSM_TIME_4093	4093x3060/(4096x13) ≤ Observed time difference to GSM cell < 4094x3060/(4096x13)	ms
GSM_TIME_4094	4094x3060/(4096x13) ≤ Observed time difference to GSM cell < 4095x3060/(4096x13)	ms
GSM_TIME_4095	4095x3060/(4096x13) ≤ Observed time difference to GSM cell < 3060/13	ms

9.1.11 P-CCPCH RSCP

NOTE: This measurement is used for handover between UTRA FDD and UTRA TDD.

The requirements in this section are valid for terminals supporting this capability.

The measurement period for CELL_DCH state can be found in sub clause 8.1.2.4. The measurement period for CELL_FACH state can be found in sub clause 8.4.2.4.

9.1.11.1 Absolute accuracy requirements

9.1.11.1.1 3.84 Mcps TDD Option

The accuracy requirement in table 9.31 is valid under the following conditions:

$$P\text{-CCPCH_RSCP} \geq -102 \text{ dBm.}$$

$$\left| \frac{I_o}{\hat{I}_{or}} \right|_{in \text{ dB}} - \left(\frac{P - CCPCH - E_c}{I_{or}} \right)_{in \text{ dB}} \leq 8 \text{ dB}$$

Table 9.31: P-CCPCH_RSCP Inter frequency absolute accuracy

Parameter	Unit	Accuracy [dB]		Conditions I _o [dBm/3.84 MHz]
		Normal conditions	Extreme conditions	
P-CCPCH_RSCP	dBm	± 6	± 9	-94...-70
	dBm	± 8	± 11	-70...-50

*****NEXT MODIFIED SECTIONS*****

A.9.1.6.2.2 Test Requirements

The UE Rx-Tx time difference type 2 measurement accuracy shall meet the requirements in section 9.1.9.2.

A.9.1.7 ~~Observed time difference to GSM cell~~ Void

~~A.9.1.7.1 Test Purpose and Environment~~

~~The purpose of this test is to verify that the Observed time difference to GSM cell measurement accuracy is within the specified limits. This test will verify the requirements in section 9.1.10.~~

~~Note: The requirement scenario is FFS.~~

~~A.9.1.7.2 Test Requirements~~

~~Note: Requirements will be added when the requirement scenario is defined.~~

A.9.1.8 P-CCPCH RSCP

A.9.1.8.1 Test Purpose and Environment

The purpose of this test is to verify that the P-CCPCH RSCP measurement accuracy is within the specified limits. This test will verify the requirements in section 9.1.11 and applies to UE supporting this capability.

Athens, Greece 9 - 13 May 2005

CR-Form-v7	
CHANGE REQUEST	
⌘ 25.133 CR 749 ⌘ rev ⌘ Current version: 6.9.0 ⌘	

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:	⌘ Feature Clean Up: Removal of Observed time difference to GSM cell		
Source:	⌘ 3GPP TSG RAN WG4 (Radio)		
Work item code:	⌘ TEI6	Date:	⌘ 16/05/2005
Category:	⌘ C	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (editorial modification)		R99 (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Rel-4 (Release 4)
			Rel-5 (Release 5)
			Rel-6 (Release 6)

Reason for change:	⌘ RAN#27 decision on Feature Clean-up		
Summary of change:	⌘ Requirements and test case of Observed time difference to GSM cell measurement is removed.		
	<p style="text-align: center;">Isolated Impact Analysis</p> <p>Functionality removed: Observed time difference to GSM cell Isolated impact statement: Since functionality is removed, UE implementations are not affected. Would affect UTRAN implementations supporting the removed functionality.</p>		
Consequences if not approved:	⌘ Introduction of new features and evolution of the existing feature remain slow also in the future.		

Clauses affected:	⌘ 9.1.10 and A.9.1.7										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td>Y</td> <td>N</td> </tr> <tr> <td>X</td> <td> </td> </tr> <tr> <td>X</td> <td> </td> </tr> <tr> <td> </td> <td>X</td> </tr> </table>	Y	N	X		X			X	Other core specifications Test specifications O&M Specifications	⌘ 25.215, 25.331, 25.302 34.121
Y	N										
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.

9.1.9.2.2 UE Rx-Tx time difference type 2 measurement report mapping

The reporting range is for *UE Rx-Tx time difference type2* is from 768 ... 1280 chip.

In table 9.28 the mapping of measured quantity is defined. The range in the signalling may be larger than the guaranteed accuracy range.

Table 9.28

Reported value	Measured quantity value	Unit
RX-TX_TIME_0000	UE Rx-Tx Time difference type 2 < 768.000	chip
RX-TX_TIME_0001	$768.000 \leq$ UE Rx-Tx Time difference type 2 < 768.0625	chip
RX-TX_TIME_0002	$768.0625 \leq$ UE Rx-Tx Time difference type 2 < 768.1250	chip
RX-TX_TIME_0003	$768.1250 \leq$ UE Rx-Tx Time difference type 2 < 768.1875	chip
...
RX-TX_TIME_8189	$1279.7500 \leq$ UE Rx-Tx Time difference type 2 < 1279.8125	chip
RX-TX_TIME_8190	$1279.8125 \leq$ UE Rx-Tx Time difference type 2 < 1279.8750	chip
RX-TX_TIME_8191	$1279.8750 \leq$ UE Rx-Tx Time difference type 2	chip

9.1.10 ~~Observed time difference to GSM cell~~[Void](#)

~~NOTE:—This measurement is used to determine the system time difference between UTRAN and GSM cells.~~

~~The requirements in this section are valid for terminals supporting UTRA and GSM.~~

9.1.10.1 ~~Measurement requirement~~

~~The measurement period for CELL_DCH state is equal to the maximum time between two successive BSIC re-confirmations for one particular GSM cell according to sub clause 8.1.2.5.2.~~

~~The accuracy requirement in table 9.29 is valid in the conditions defined in sub clause 8.1.2.5.2.~~

Table 9.29

Parameter	Unit	Accuracy [chip]	Conditions
Observed time difference to GSM cell	chip	± 20	

9.1.10.2 ~~Observed time difference to GSM cell measurement report mapping~~

~~The reporting range is for *Observed time difference to GSM cell* is from 0 ... 3060/13 ms.~~

~~In table 9.30 the mapping of measured quantity is defined. The range in the signalling may be larger than the guaranteed accuracy range.~~

Table 9.30

Reported value	Measured quantity value	Unit
GSM_TIME_0000	$0 \leq$ Observed time difference to GSM cell < $1 \times 3060 / (4096 \times 13)$	ms
GSM_TIME_0004	$1 \times 3060 / (4096 \times 13) \leq$ Observed time difference to GSM cell < $2 \times 3060 / (4096 \times 13)$	ms
GSM_TIME_0002	$2 \times 3060 / (4096 \times 13) \leq$ Observed time difference to GSM cell < $3 \times 3060 / (4096 \times 13)$	ms
GSM_TIME_0003	$3 \times 3060 / (4096 \times 13) \leq$ Observed time difference to GSM cell < $4 \times 3060 / (4096 \times 13)$	ms
...
GSM_TIME_4093	$4093 \times 3060 / (4096 \times 13) \leq$ Observed time difference to GSM cell < $4094 \times 3060 / (4096 \times 13)$	ms
GSM_TIME_4094	$4094 \times 3060 / (4096 \times 13) \leq$ Observed time difference to GSM cell < $4095 \times 3060 / (4096 \times 13)$	ms
GSM_TIME_4095	$4095 \times 3060 / (4096 \times 13) \leq$ Observed time difference to GSM cell < 3060/13	ms

9.1.11 P-CCPCH RSCP

NOTE: This measurement is used for handover between UTRA FDD and UTRA TDD.

The requirements in this section are valid for terminals supporting this capability.

The measurement period for CELL_DCH state can be found in sub clause 8.1.2.4. The measurement period for CELL_FACH state can be found in sub clause 8.4.2.4.

*****NEXT MODIFIED SECTIONS*****

A.9.1.6.2 UE Rx-Tx time difference type 2

A.9.1.6.2.1 Test Purpose and Environment

The purpose of this test is to verify that the UE Rx-Tx time difference type 2 measurement accuracy is within the specified limits. This test will verify the requirements in section 9.1.9.2.

The connection is started using cell 1, then cell 2 is added to the active set so that cell 1 is the timing reference. During the test the downlink DPCH time difference between Cell 1 and 2 can be set to any value from -148 to 148 chips.

Table A.9.12 defines the limits of signal strengths and code powers, where the requirements are applicable.

Table A.9.12: UE Rx-Tx time difference type 2 intra frequency test parameters

Parameter	Unit	Cell 1	Cell 2
UTRA RF Channel number		Channel 1	Channel 1
Downlink DPCH timing	Chips	Timing reference	From reference timing – 148 to reference timing+148
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	-15	-15
OCNS	dB	-1.11	-1.11
Ior/Ioc	dB	10.5	10.5
Ioc	dBm/ 3.84 MHz	Io –10.9 dB = Ioc, Note 1	Io-13.7 dB = Ioc, Note 1
Io	dBm/ 3.84 MHz	-94...-50 (Band I, IV, VI) -92...-50 (Band II, V) -91...-50 (Band III)	-94...-50 (Band I, IV, VI) -92...-50 (Band II, V) -91...-50 (Band III)
Propagation condition	-	AWGN	
NOTE 1: Ioc level shall be adjusted according the total signal power spectral density Io at receiver input and the geometry factor Ior/Ioc.			

A.9.1.6.2.2 Test Requirements

The UE Rx-Tx time difference type 2 measurement accuracy measured for cell 2 shall meet the requirements in section 9.1.9.2.

A.9.1.7 ~~Observed time difference to GSM cell~~Void

~~A.9.1.7.1 Test Purpose and Environment~~

~~The purpose of this test is to verify that the Observed time difference to GSM cell measurement accuracy is within the specified limits. This test will verify the requirements in section 9.1.10.~~

~~Note: The requirement scenario is FFS.~~

~~A.9.1.7.2 — Test Requirements~~

~~Note: Requirements will be added when the requirement scenario is defined.~~

A.9.1.8 P-CCPCH RSCP

A.9.1.8.1 Test Purpose and Environment

The purpose of this test is to verify that the P-CCPCH RSCP measurement accuracy is within the specified limits. This test will verify the requirements in section 9.1.11 and applies to UE supporting this capability.