

TSG RAN Meeting #17
 Biarritz, France, 3 - 6 September, 2002

RP-020492

Title CRs (Rel-5) to TS 25.104 and TS 25.141 "Correction of the CPICH measurement"
Source TSG RAN WG4
Agenda Item 7.4.5

RAN4 Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R4-021282	25.104	142		F	Rel-5	5.3.0	Correction to CPICH measurement period	TEI5
R4-021283	25.141	242		F	Rel-5	5.3.1	Correction to CPICH accuracy measurement	TEI5

Helsinki, Finland 12 - 16 August 2002

CR-Form-v7

CHANGE REQUEST⌘ **25.104 CR 142** ⌘ rev ⌘ Current version: **5.3.0** ⌘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:	⌘ Correction to CPICH measurement period		
Source:	⌘ RAN WG4		
Work item code:	⌘ TEI5	Date:	⌘ 21/08/2002
Category:	⌘ F	Release:	⌘ Rel-5
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:	⌘ The definition of CPICH power includes a measurement requirement for averaging over one frame. Apart from modulation accuracy requirements where it is essential, there are no other cases of measurement periods being defined in the core spec. The figure of one frame is also out of step with other similar measurements.
Summary of change:	⌘ The requirement for measuring over one frame is deleted.
Consequences if not approved:	⌘ The measurement method is unnecessarily constrained. <u>Isolated impact analysis:</u> Matters relating to measurement methods do not impact the core requirement or network operation.

Clauses affected:	⌘ 6.4.4							
Other specs affected:	⌘	<table border="1"><tr><td>Y</td><td>N</td></tr><tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td></tr></table>	Y	N	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Other core specifications	⌘ 25.141
	Y	N						
	<input checked="" type="checkbox"/>	<input type="checkbox"/>						
⌘	<table border="1"><tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td></tr></table>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Test specifications				
<input checked="" type="checkbox"/>	<input type="checkbox"/>							
⌘	<table border="1"><tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td></tr></table>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	O&M Specifications				
<input checked="" type="checkbox"/>	<input type="checkbox"/>							
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.

6.4.4 Primary CPICH power

| Primary CPICH power is the code domain power of the Common Pilot Channel ~~averaged over one frame~~.
Primary CPICH power is indicated on the BCH.

6.4.4.1 Requirement

Primary CPICH code domain power shall be within ± 2.1 dB of the Primary CPICH code domain power indicated on the BCHe.

Helsinki, Finland 12 - 16 August 2002

CR-Form-v7

CHANGE REQUEST

⌘ 25.141 CR 242 ⌘ rev ⌘ Current version: 5.3.1 ⌘

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:	⌘ Correction to CPICH accuracy measurement		
Source:	⌘ RAN WG4		
Work item code:	⌘ TEI5	Date:	⌘ 21/08/2002
Category:	⌘ F	Release:	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
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	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:	⌘ The measurement period is not specified in the test specification. The figure of one frame specified in 25.104 seems out of step with all other measurements and a figure of one slot seems more appropriate than one frame. Also, references to PCCPCH are removed since there are no requirements for PCCPCH code domain power accuracy and by including this non-continuous channel with the PCPICH, the measurement results will be incorrect.
Summary of change:	⌘ A measurement period of one slot is added. Reference to the PCCPCH is deleted.
Consequences if not approved:	⌘ The measurement as defined would include power from the PCCPCH and possible fail the PCPICH accuracy requirement. <u>Isolated impact analysis:</u> Matters relating to measurement methods do not impact the core requirement or network operation.

Clauses affected:	⌘ 6.2.2												
Other specs affected:	<table border="1"> <tr> <td>Y</td> <td>N</td> <td></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Other core specifications</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Test specifications</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>O&M Specifications</td> </tr> </table>	Y	N		<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Test specifications	<input type="checkbox"/>	<input checked="" type="checkbox"/>	O&M Specifications
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Other comments:	⌘												

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6.2.2 CPICH power accuracy

6.2.2.1 Definition and applicability

CPICH power accuracy is defined as the maximum deviation between the Primary CPICH code domain power indicated on the BCH and the Primary CPICH code domain power measured at the TX antenna interface. The requirement is applicable for all BS types.

6.2.2.2 Minimum Requirement

The measured Primary CPICH code domain power shall be within ± 2.1 dB of the Primary CPICH code domain power indicated on the BCH. The normative reference for this requirement is in TS 25.104 [1] subclause 6.4.4

6.2.2.3 Test purpose

The purpose of the test is to verify, that the BS under test delivers Primary CPICH code domain power within margins, thereby allowing reliable cell planning and operation.

6.2.2.4 Method of test

6.2.2.4.1 Initial conditions

Test environment: normal; see subclause 4.4.1.

RF channels to be tested: B, M and T; see subclause 4.8

- 1) Connect BS to code domain analyser as shown in annex B.
- 2) Disable inner loop power control.
- 3) Set-up BS transmission at maximum total power as specified by the supplier. Channel set-up shall be according to [Test Model 2](#) subclause 6.1.1.2.

6.2.2.4.2 Procedure

- Measure the code domain power ~~in the PCCPCH and of the~~ PCPICH in one timeslot according to annex E.

6.2.2.5 Test Requirement

The measured CPICH power shall be within ± 2.9 dB of the ordered absolute value.

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 subclause 4.2 and the explanation of how the Minimum Requirement has been relaxed by the Test Tolerance is given in Annex F.