

TSG RAN Meeting #18
New Orleans, US, 3 - 6 December, 2002

RP-020797

Title CR (Rel-5) to TS 25.123
Source TSG RAN WG4
Agenda Item 7.4.5

RAN4 Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R4-021573	25.123	285		F	Rel-5	5.2.0	P-CCPCH RSCP and CPICH RSCP signalling range extension	LCRTDD-RF

CHANGE REQUEST

⌘ **25.123** CR **285** ⌘ rev ⌘ Current version: **5.2.0** ⌘

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:	⌘ P-CCPCH RSCP and CPICH RSCP signalling range extension		
Source:	⌘ RAN WG4		
Work item code:	⌘ LCRTDD-RF	Date:	⌘ 26/11/2002
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 signalling range of PCCPCH RSCP and CPICH RSCP was extended in WG2 specification based on a WG4 proposal to allow optimized cell design.
Summary of change:	⌘ The lowest value for PCCPCH RSCP and CPICH RSCP is changed from –115dBm to –120dBm.
Consequences if not approved:	⌘ Operators may not be able to optimize the cell design. Inconsistency with RAN2.

Clauses affected:	⌘ 9.1.1.1.3, 9.1.1.2.1.2										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px;">Y</td> <td style="width: 20px;">N</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> <tr> <td style="width: 20px;"> </td> <td style="width: 20px;">X</td> </tr> </table> Other core specifications ⌘ Test specifications O&M Specifications	Y	N		X		X		X		
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.

9.1.1.1.3 Range/mapping

The reporting range for *P-CCPCH RSCP* is from -120~~15~~ ...-25 dBm.

In table 9.4 mapping of the measured quantity is defined. Signalling range may be larger than the guaranteed accuracy range.

Table 9.4

<u>Reported value</u>	<u>Measured quantity value</u>	<u>Unit</u>
<u>P-CCPCH RSCP_LEV_-05</u>	<u>P-CCPCH RSCP <-120</u>	<u>dBm</u>
<u>P-CCPCH RSCP_LEV_-04</u>	<u>-120 ≤ P-CCPCH RSCP < -119</u>	<u>dBm</u>
<u>P-CCPCH RSCP_LEV_-03</u>	<u>-119 ≤ P-CCPCH RSCP < -118</u>	<u>dBm</u>
...
<u>P-CCPCH RSCP_LEV_89</u>	<u>-27 ≤ P-CCPCH RSCP < -26</u>	<u>dBm</u>
<u>P-CCPCH RSCP_LEV_90</u>	<u>-26 ≤ P-CCPCH RSCP < -25</u>	<u>dBm</u>
<u>P-CCPCH RSCP_LEV_91</u>	<u>-25 ≤ P-CCPCH RSCP</u>	<u>dBm</u>

<u>Reported value</u>	<u>Measured quantity value</u>	<u>Unit</u>
<u>P-CCPCH RSCP_LEV_00</u>	<u>P-CCPCH RSCP <-115</u>	<u>dBm</u>
<u>P-CCPCH RSCP_LEV_01</u>	<u>-115 ≤ P-CCPCH RSCP < -114</u>	<u>dBm</u>
<u>P-CCPCH RSCP_LEV_02</u>	<u>-114 ≤ P-CCPCH RSCP < -113</u>	<u>dBm</u>
...
<u>P-CCPCH RSCP_LEV_89</u>	<u>-27 ≤ P-CCPCH RSCP < -26</u>	<u>dBm</u>
<u>P-CCPCH RSCP_LEV_90</u>	<u>-26 ≤ P-CCPCH RSCP < -25</u>	<u>dBm</u>
<u>P-CCPCH RSCP_LEV_91</u>	<u>-25 ≤ P-CCPCH RSCP</u>	<u>dBm</u>

9.1.1.2 CPICH measurements (FDD)

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

These measurements consider *CPICH RSCP* and *CPICH Ec/Io* measurements. The requirements in this section are valid for terminals supporting this capability. The measurement period for CELL_DCH state and CELL_FACH state can be found in section 8.

9.1.1.2.1 CPICH RSCP

9.1.1.2.1.1 Inter frequency measurement absolute accuracy requirement

The accuracy requirements in table 9.5 are valid under the following conditions:

$$CPICH_RSCP1_{dBm} \geq -114 \text{ dBm.}$$

$$\left(\frac{I_o}{\hat{I}_{or}} \right)_{in \text{ dB}} - \left(\frac{CPICH_Ec}{I_{or}} \right)_{in \text{ dB}} \leq 20dB$$

Table 9.5: CPICH_RSCP Inter frequency absolute accuracy

Parameter	Unit	Accuracy [dB]		Conditions Io [dBm/ 3.84 MHz]
		Normal condition	Extreme condition	
CPICH_RSCP	dBm	± 6	± 9	-94...-70
	dBm	± 8	± 11	-70...-50

9.1.1.2.1.2 Range/mapping

The reporting range for *CPICH RSCP* is from -120~~15~~ ...-25 dBm.

In table 9.6 mapping of the measured quantity is defined. Signalling range may be larger than the guaranteed accuracy range.

Table 9.6

<u>Reported value</u>	<u>Measured quantity value</u>	<u>Unit</u>
<u>CPICH_RSCP_LEV_-05</u>	<u>CPICH_RSCP < -120</u>	<u>dBm</u>
<u>CPICH_RSCP_LEV_-04</u>	<u>-120 ≤ CPICH_RSCP < -119</u>	<u>dBm</u>
<u>CPICH_RSCP_LEV_-03</u>	<u>-119 ≤ CPICH_RSCP < -118</u>	<u>dBm</u>
<u>...</u>	<u>...</u>	<u>...</u>
<u>CPICH_RSCP_LEV_89</u>	<u>-27 ≤ CPICH_RSCP < -26</u>	<u>dBm</u>
<u>CPICH_RSCP_LEV_90</u>	<u>-26 ≤ CPICH_RSCP < -25</u>	<u>dBm</u>
<u>CPICH_RSCP_LEV_91</u>	<u>-25 ≤ CPICH_RSCP</u>	<u>dBm</u>

Reported value	Measured quantity value	Unit
CPICH_RSCP_LEV_00	CPICH_RSCP < -115	dBm
CPICH_RSCP_LEV_01	-115 ≤ CPICH_RSCP < -114	dBm
CPICH_RSCP_LEV_02	-114 ≤ CPICH_RSCP < -113	dBm
...
CPICH_RSCP_LEV_89	-27 ≤ CPICH_RSCP < -26	dBm
CPICH_RSCP_LEV_90	-26 ≤ CPICH_RSCP < -25	dBm
CPICH_RSCP_LEV_91	-25 ≤ CPICH_RSCP	dBm