

**TSG-RAN Meeting #6
Nice, France, 13 – 15 December 1999**

TSGRP#6(99)690

Title: Conditionally Agreed CR of category "F" (Corrections) to TS 25.215

Source: TSG-RAN WG1

Agenda item: 5.1.3

Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Doc
25.215	017	1	R99	CPICH SIR measurement	F	3.0.0	3.1.0	R1-99I50

NOTE: The source of this document is TSG-RAN WG1. The source shown on each CR cover sheet is the originating organisation.

Agenda item:

Title: CR 25.215-017r1: CPICH SIR measurements.

Source: Telia AB

Document for: Decision

Background

According to the latest versions of the RAN-2 specifications TS 25.302 and TS 25.331, it shall be possible to measure the SIR on the CPICH. In this CR, it is proposed to update TS 25.215 accordingly.

Revision history

The CR has been updated according to the decisions taken for SIR measurements on the dedicated channels (R1-99-L10, CR 25.215-009r2).

CHANGE REQUEST			<i>Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.</i>
25.215	CR 017r1	Current Version: 3.0.0	
<i>GSM (AA.BB) or 3G (AA.BBB) specification number ↑</i>	<i>↑ CR number as allocated by MCC support team</i>		
For submission to: TSG-RAN #6 <i>list expected approval meeting # here ↑</i>	for approval <input checked="" type="checkbox"/> for information <input type="checkbox"/>	strategic <input type="checkbox"/> non-strategic <input type="checkbox"/>	<i>(for SMG use only)</i>

Form: CR cover sheet, version 2 for 3GPP and SMG The latest version of this form is available from: <ftp://ftp.3gpp.org/Information/CR-Form-v2.doc>

Proposed change affects: (U)SIM ME UTRAN / Radio Core Network
(at least one should be marked with an X)

Source: **Telia AB** **Date:** **1999-11-30**

Subject: **CPICH SIR measurement**

Work item:

Category:	F Correction <input checked="" type="checkbox"/> A Corresponds to a correction in an earlier release <input type="checkbox"/> B Addition of feature <input type="checkbox"/> C Functional modification of feature <input type="checkbox"/> D Editorial modification <input type="checkbox"/>	Release:	Phase 2 <input type="checkbox"/> Release 96 <input type="checkbox"/> Release 97 <input type="checkbox"/> Release 98 <input type="checkbox"/> Release 99 <input checked="" type="checkbox"/> Release 00 <input type="checkbox"/>
<i>(only one category shall be marked with an X)</i>			

Reason for change: **The possibility to measure SIR on the CPICH is included in the RAN WG2 specifications TS 25.302 and TS 25.331. Hence, it is proposed to update TS 25.215 accordingly.**

Clauses affected: **5.1, 5.1.4**

Other specs affected:	Other 3G core specifications <input type="checkbox"/> Other GSM core specifications <input type="checkbox"/> MS test specifications <input type="checkbox"/> BSS test specifications <input type="checkbox"/> O&M specifications <input type="checkbox"/>	→ List of CRs: → List of CRs: → List of CRs: → List of CRs: → List of CRs:	
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Other comments:

5.1 UE measurement abilities

The structure of the table defining a UE measurement quantity is shown below:

Column field	Comment
Definition	Contains the definition of the measurement.
Applicable for	States if a measurement shall be possible to perform in Idle mode and/or Connected mode. For connected mode also information of the possibility to perform the measurement on intra-frequency and/or inter-frequency are given. The following terms are used in the tables: Idle = Shall be possible to perform in idle mode Connected Intra = Shall be possible to perform in connected mode on an intra-frequency Connected Inter = Shall be possible to perform in connected mode on an inter-frequency
Range/mapping	Gives the range and mapping to bits for the measurements quantity.

5.1.1 CPICH RSCP

Definition	Received Signal Code Power, the received power on one code after de-spreading measured on the pilot bits of the CPICH. The reference point for the RSCP is the antenna connector at the UE.
Applicable for	Idle, Connected Intra, Connected Inter
Range/mapping	

5.1.2 RSCP

Definition	Received Signal Code Power, the received power on one code after de-spreading measured on the pilot bits of the DPCH after RL combination. The reference point for the RSCP is the antenna connector at the UE.
Applicable for	Connected Intra
Range/mapping	

5.1.3 ISCP

Note that it is not a requirement that the ISCP shall be possible to report to higher layers. The ISCP is defined in this section because it is included in the definition of SIR.

Definition	Interference Signal Code Power, the interference on the received signal after de-spreading. Only the non-orthogonal part of the interference is included in the measurement. The reference point for the ISCP is the antenna connector at the UE.
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5.1.4 CPICH SIR

Definition	<p>Signal to Interference Ratio, defined as: $(RSCP/ISCP) \times (SF/2)$. The SIR shall be measured on CPICH pilot bits. The reference point for the SIR is the antenna connector of the UE.</p> <p>where:</p> <p>RSCP = Received Signal Code Power, the received power on one code measured on the pilot bits.</p> <p>ISCP = Interference Signal Code Power, the interference on the received signal measured on the pilot bits. Only the non-orthogonal part of the interference is included in the measurement.</p> <p>SF=The spreading factor used on the CPICH.</p>
Applicable for	Idle, Connected Intra, Connected Inter
Range/mapping	<p>CPICH SIR is given with a resolution of 0.5 dB with the range [-11, ..., 20] dB. CPICH SIR shall be reported in the unit UE_CPICH_SIR where:</p> <p>UE_CPICH_SIR_00: CPICH SIR < -11.0 dB</p> <p>UE_CPICH_SIR_01: -11.0 dB ≤ CPICH SIR < -10.5 dB</p> <p>UE_CPICH_SIR_02: -10.5 dB ≤ CPICH SIR < -10.0 dB</p> <p>...</p> <p>UE_CPICH_SIR_61: 19.0 dB ≤ CPICH SIR < 19.5 dB</p> <p>UE_CPICH_SIR_62: 19.5 dB ≤ CPICH SIR < 20.0 dB</p> <p>UE_CPICH_SIR_63: 20.0 dB ≤ CPICH SIR</p>

5.1.45 SIR

Definition	Signal to Interference Ratio, defined as the RSCP divided by ISCP. The SIR shall be measured on DPCH after RL combination. The reference point for the SIR is the antenna connector of the UE.
Applicable for	Connected Intra
Range/mapping	