TSG-RAN Meeting #12 *RP-010362*
Stockholm, Sweden, 12 - 15 June 2001

Title: **Agreed CR (Release 4) to TS 25.113**

Source: **TSG-RAN WG4**

Agenda item: **8.4.4**

WG4 doc	Status WG4	Spec	CR	Phase	Title	Cat	V old	V new
R4-010556	agreed	25.113	10	Rel-4	Correction to the description of the radiated spurious emission test method (1.28 Mcps TDD optioon)	F	4.0.0	4.1.0

3GPP TSG RAN WG4 Meeting #17 **R4-010556**

Gothenburg, Sweden 21st - 25th May 2001

CR-Form-v3

CHANGE REQUEST

⌘ **25.113** **CR** **10** ⌘ rev **-** ⌘ Current version: **4.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☒ Core Network ☐

Title:	⌘	Correction to the description of radiated spurious emission test method (1.28 Mcps TDD option)
Source:	⌘	RAN WG4
Work item code:	⌘	LCRTTD-RF
Date:	⌘	18. Apr. 2001
Category:	⌘	**F**
Release:	⌘	REL-4

Use one of the following categories:
- ***F*** *(essential 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)*

Reason for change:	⌘	Differences in the description of the test method for radiated spurious emissions for 1.28 Mcps TDD option in comparison to FDD and 3.84 Mcps TDD option
Summary of change:	⌘	Correction to be in line with the 3.84 Mcps TDD specification
Consequences if not approved:	⌘	Inconsistency with 3.84 Mcps specification

Clauses affected:	⌘	A.1.3.1.2
Other specs affected:	⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications
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/3G_Specs/CRs.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://www.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

A.1.3 Radiated spurious emission from Base station, Repeater and ancillary equipment

A.1.3.1 Radiated spurious emission, Base stations and Repeater

This test is applicable to Base station and Repeater. This test shall be performed on a representative configuration of the Base station or Repeater.

A.1.3.1.1 Definition

This test assesses the ability of BS and Repeater to limit unwanted emission from the enclosure port.

A.1.3.1.2 Test method

A.1.3.1.2.1 FDD and 3,84 Mcps TDD option

a) A test site fulfilling the requirements of ITU-R SM. 329-8 [1] shall be used. The BS or Repeater shall be placed on a non-conducting support and shall be operated from a power source via a RF filter to avoid radiation from the power leads.

   Average power of any spurious components shall be detected by the test antenna and measuring receiver (e.g. a spectrum analyser). At each frequency at which a component is detected, the BS or Repeater shall be rotated and the height of the test antenna adjusted to obtain maximum response, and the effective radiated power (e.r.p.) of that component determined by a substitution measurement. The measurement shall be repeated with the test antenna in the orthogonal polarization plane.

NOTE: Effective radiated power (e.r.p.) refers to the radiation of a half wave tuned dipole instead of an isotropic antenna. There is a constant difference of 2,15 dB between e.i.r.p. and e.r.p.

e.r.p. (dBm) = e.i.r.p. (dBm) – 2,15 Ref: ITU-R SM.329-8 ANNEX 1 [1].

b) The BS shall transmit with maximum power declared by the manufacturer with all transmitters active. Set the base station to transmit a signal as stated for measurement of spurious emission for FDD in the TS25.141 [2] and for 3.84 Mcps TDD option in the TS25.142 [3].

   In case of a Repeater the gain and the output power shall be set to the maximum value as declared by the manufacturer.

c) The received power shall be measured over the frequency range 30 MHz to 12.75 GHz, excluding 12.5MHz below the first carrier frequency to 12.5 MHz above the last carrier frequency used. The measurement bandwidth shall be 100 kHz between 30 MHz and 1 GHz and 1 MHz above 1 GHz as given in ITU-R SM.329-8 [1]. The video bandwidth shall be approximately three times the resolution bandwidth. If this video bandwidth is not available on the measuring receiver, it shall be the maximum available and at least 1 MHz.

A.1.3.1.2.2 1,28 Mcps TDD option

a) A test site fulfilling the requirements of ITU-R SM. 329-8 [1] shall be used. The BS shall be placed on a non-conducting support and shall be operated from a power source via a RF filter to avoid radiation from the power leads.

   Radiated Power ~~Radiation~~ of any spurious components shall be detected by the test antenna and measuring receiver (e.g. a spectrum analyser). At each frequency at which a component is detected, the BS shall be rotated and the height of the test antenna adjusted to obtain maximum response, and the effective radiated power (e.r.p.) of that component determined by a substitution measurement. The measurement shall be repeated with the test antenna in the orthogonal polarisation plane.

NOTE: Effective radiated power (e.r.p.) refers to the radiation of a half wave tuned dipole instead of an isotropic antenna. There is a constant difference of 2,15 dB between e.i.r.p. and e.r.p.

e.r.p. (dBm) = e.i.r.p. (dBm) – 2,15 Ref: ITU-R SM.329-8 ANNEX 1 [1].

b) The BS shall transmit with maximum power declared by the manufacturer with all transmitters active. Set the base station to transmit a signal as stated for measurement of spurious emission for 1.28 Mcps TDD in the TS25.142 [3].~~in table 6.2.4.1.2 of TS25.142.~~

c) The received power shall be measured over the frequency range 30 MHz to 12.75 GHz, excluding 4MHz below the first carrier frequency to 4 MHz above the last carrier frequency used. The measurement bandwidth shall be 100 kHz between 30 MHz and 1 GHz and 1 MHz above 1 GHz as given in ITU-R SM.329-8 [1]. The video bandwidth shall be approximately three times the resolution bandwidth. If this video bandwidth is not available on the measuring receiver, it shall be the maximum available and at least 1 MHz. ~~At each frequency at which a component is detected, the maximum effective radiated power of that component shall be determined, as described in step a).~~