

**TSG-RAN Meeting #8**  
**Düsseldorf, Germany, 21 – 23 June 2000**

**RP-000208**

**Title:** Agreed CRs to TS 25.113

**Source:** TSG-RAN WG4

**Agenda item:** 5.4.3

<b>Doc-1st-</b>	<b>Spec</b>	<b>CR</b>	<b>Re</b>	<b>Phas</b>	<b>Subject</b>	<b>Cat</b>	<b>Version</b>	<b>Version</b>
RP-000019	25.113	004		R99	Correction according to IEC and CISPR Standards	F	3.1.0	3.2.0

**CHANGE REQUEST**

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

**25.113 CR 004**Current Version: **3.1.0**

GSM (AA.BB) or 3G (AA.BBB) specification number ↑

↑ CR number as allocated by MCC support team

For submission to: **RAN #8**  
list expected approval meeting # here ↑for approval   
for information strategic   
non-strategic  (for SMG use only)

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:**

(at least one should be marked with an X)

(U)SIM  ME  UTRAN / Radio  Core Network **Source:**

Ericsson

**Date:** 18.05.2000**Subject:**

Correction to IEC and CISPR Standards

**Work item:****Category:**

(only one category shall be marked with an X)

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"/>

<b>Release:</b>	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"/>

**Reason for change:**

To update requirements to the IEC and CISPR Standards

**Clauses affected:**

A.1.4.2, A.2.3.2 and A.2.6.2

**Other specs affected:**

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

**Other comments:**

## A.1.4 Conducted emission DC power input/output port

This test is applicable to equipment which may have DC cables longer than 3 m.

If the DC power cable of the radio equipment is intended to be less than 3 m in length, and intended only for direct connection to a dedicated AC to DC power supply, then the measurement shall be performed only on the AC power input of that power supply as specified in subclause A.1.5.

This test shall be performed on a representative configuration of the radio equipment, the associated ancillary equipment, or representative configuration of the combination of radio and ancillary equipment.

### A.1.4.1 Definition

This test assesses the ability of radio equipment and ancillary equipment to limit internal noise from the DC power input/output ports.

### A.1.4.2 Test method

The test method shall be in accordance with CISPR 22 [4] and the Line Impedance Stabilizing Networks (LISN) shall be connected to a DC power source.

In the case of DC output ports, the ports shall be connected via a LISN to a load drawing the rated current of the source.

A measuring receiver shall be connected to each LISN measurement port in turn and the conducted emission recorded. The LISN measurement ports not being used for measurement shall be terminated with a ~~50-Ω~~ 50 Ω/50 μH load.

The equipment shall be installed with a ground plane as defined in CISPR 22 [4]. The reference earth point of the LISNs shall be connected to the reference ground plane with a conductor as short as possible.

The measurement receiver shall be in accordance with the requirements of section one of CISPR 16-1 [5].

## A.2.3 RF electromagnetic field (80 MHz - 1000 MHz)

The test shall be performed on a representative configuration of the equipment, the associated ancillary equipment, or representative configuration of the combination of radio and ancillary equipment.

### A.2.3.1 Definition

This test assesses the ability of radio equipment and ancillary equipment to operate as intended in the presence of a radio frequency electromagnetic field disturbance at the enclosure.

### A.2.3.2 Test method and level

The test method shall be in accordance with IEC 61000-4-3 [9]:

- for transmitters, receivers and transceivers the following requirements shall apply:
- the test level shall be 3 V/m amplitude modulated to a depth of 80 % by a sinusoidal audio signal of 1 kHz;
- the stepped frequency increments shall be 1 % of the momentary frequency;
- ~~when using the max hold detector method at each test frequency step initially an unmodulated test signal shall be applied. Then the test modulation shall be applied;~~
- the test shall be performed over the frequency range 80 MHz - 1 000 MHz
- responses in stand alone receivers or receivers which are part of transceivers occurring at discrete frequencies which are narrow band responses, shall be disregarded, see subclause 4.3;
- the frequencies selected during the test shall be recorded in the test report.

## A.2.6 RF common mode (0,15 MHz - 80 MHz)

The test shall be performed on AC mains power input/output ports.

This test shall be performed on signal, control and DC power input/output ports, which may have cables longer than 1 m.

Where this test is not carried out on a port or any other ports because the manufacturer declares that it is not intended to be used with cables longer than stated above, a list of ports which were not tested shall be included in the test report.

This test shall be performed on a representative configuration of the equipment, the associated ancillary equipment, or representative configuration of the combination of radio and ancillary equipment.

NOTE: This test can also be performed using the intrusive method, where appropriate, see IEC 61000-4-6 [12].

### A.2.6.1 Definition

This test assesses the ability of radio equipment and ancillary equipment to operate as intended in the presence of a radio frequency electromagnetic disturbance.

### A.2.6.2 Test method and level

The test method shall be in accordance with IEC 61000-4-6 [12]:

- the test signal shall be amplitude modulated to a depth of 80 % by a sinusoidal audio signal of 1 kHz;
- The stepped frequency increments shall be 1% of the momentary frequency in the frequency range 0.15 MHz-80 MHz.  
~~the stepped frequency increments shall be 50 kHz and 1 % frequency increment of the momentary frequency in the frequency range 5 MHz – 80 MHz;~~
- the test level shall be severity level 2 as given in IEC 61000-4-6 [12] corresponding to 3 V rms, at a transfer impedance of 150  $\Omega$ ;
- the test shall be performed over the frequency range 150 kHz - 80 MHz;
- responses of stand alone receivers or receivers which are part of transceivers occurring at discrete frequencies which are narrow band responses, shall be disregarded, see subclause 4.3;
- the frequencies selected during the test and the test method used shall be recorded in the test report.