

**TSG RAN Meeting #13**  
**Beijing, China, 18-21 September 2001**

**RP-010629**

**Title: CRs (Rel-4) to TS 25.113**

**Source TSG RAN WG4**

**Agenda item: 8.4.4**

<b>RAN4 Tdoc</b>	<b>Spec</b>	<b>CR</b>	<b>Title</b>	<b>Cat</b>	<b>Phase</b>	<b>Curr Ver</b>	<b>New Ver</b>
R4-010902	25.113	13	Add Arrangements for testing Repeater	F	Rel-4	4.1.0	4.2.0

**CHANGE REQUEST**

⌘ **25.113 CR 13** ⌘ ev **-** ⌘ Current version: **4.1.0** ⌘

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

<b>Title:</b>	⌘ Add Arrangements for testing Repeater		
<b>Source:</b>	⌘ RAN WG4		
<b>Work item code:</b>	⌘ RInImp-REP	<b>Date:</b>	⌘ 05.07.2001
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ Rel-4
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	<b>F</b> (correction)		<b>2</b> (GSM Phase 2)
	<b>A</b> (corresponds to a correction in an earlier release)		<b>R96</b> (Release 1996)
	<b>B</b> (addition of feature),		<b>R97</b> (Release 1997)
	<b>C</b> (functional modification of feature)		<b>R98</b> (Release 1998)
	<b>D</b> (editorial modification)		<b>R99</b> (Release 1999)
	Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		<b>REL-4</b> (Release 4)
			<b>REL-5</b> (Release 5)

<b>Reason for change:</b>	⌘ To precise the test signals for repeater, missing references
<b>Summary of change:</b>	⌘ Added arrangements for test signal for repeater, added references.
<b>Consequences if not approved:</b>	⌘ The document is inconsequent and not complete.

<b>Clauses affected:</b>	⌘ 4.4 Test conditions for Repeater, Appendix A.2.7.3 Performance criteria	
<b>Other specs affected:</b>	⌘ <input type="checkbox"/> Other core specifications	⌘
	<input type="checkbox"/> Test specifications	
	<input type="checkbox"/> O&M Specifications	
<b>Other comments:</b>	⌘	

**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](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://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.

## 4.4 Test condition for Repeater

The wanted RF input signal nominal frequency shall be selected by setting the Absolute Radio Frequency Channel Number (ARFCN) to an appropriate number within the operating band of the Repeater.

The Repeater path shall be tested with a suitable test system capable of measuring RF performance criteria (hereafter called "the test system"). The test system shall be located outside of the test environment.

When the EUT is required to be in the operational mode, the following conditions shall be met:

- the EUT shall be commanded to operate at maximum rated gain;
- Adequate measures shall be taken to avoid the effect of the unwanted signal on the measuring equipment;

For immunity tests conditions subclause 4.3 shall apply.

### 4.4.1 Arrangements for test signals for repeaters

For immunity tests of repeaters, the wanted RF input signal shall be coupled to one antenna port at a level which will result, when measured, in the maximum rated RF output power per channel, as declared by the manufacturer. The test shall either be repeated with a wanted signal coupled to the other antenna port, or a single test shall be performed with the specified input signals being simultaneously coupled to both antenna ports.

### A.2.7.3 Performance criteria

For a voltage dip corresponding to a reduction of the supply voltage of 30 % for 10 ms the performance criteria of subclause 6.2 shall apply for base station and performance criteria of subclause 6.5 for ancillary equipment and performance criteria of subclause 6.8 for repeater;

For a voltage dip corresponding to a reduction of the supply voltage of 60 % for 100 ms and/or a voltage interruption corresponding to a reduction of the supply voltage of > 95 % for 5 000 ms the performance criteria of subclause 6.3 shall apply for base station, ~~and~~ performance criteria of subclause 6.6 for ancillary equipment and performance criteria of subclause 6.9 for repeater with following exception:

- in the case where the equipment is powered solely from the AC mains supply (without the use of a parallel battery back-up the communications link need not be maintained and may have to be re-established and volatile user data may have been lost.

In the event of loss of the communications link or in the event of loss of user data, this fact shall be recorded in the test report, the product description and the user documentation.