

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

**RP-020785**

**Title** CRs (Rel-4 and Rel-5 Category A) to TS 25.106  
**Source** TSG RAN WG4  
**Agenda Item** 7.4.4

RAN4 Tdoc	Spec	CR	R	Cat	Rel	Curr Ver	Title	Work Item
R4-021529	25.106	015		F	Rel-4	4.3.0	Aligning of the requirement for "Output power" in extreme conditions with TS25.143	RInImp-REP
R4-021530	25.106	016		A	Rel-5	5.2.0	Aligning of the requirement for "Output power" in extreme conditions with TS25.143	RInImp-REP

## CHANGE REQUEST

⌘ **25.106 CR 015** ⌘ rev  ⌘ Current version: **4.3.0** ⌘

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

<b>Title:</b>	⌘	Aligning of the requirement for "Output power" in extreme conditions with TS25.143		
<b>Source:</b>	⌘	RAN WG4		
<b>Work item code:</b>	⌘	RInImp-REP	<b>Date:</b>	⌘ 26/11/2002
<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)	2	(GSM Phase 2)
		<b>A</b> (corresponds to a correction in an earlier release)	R96	(Release 1996)
		<b>B</b> (addition of feature),	R97	(Release 1997)
		<b>C</b> (functional modification of feature)	R98	(Release 1998)
		<b>D</b> (editorial modification)	R99	(Release 1999)
		Detailed explanations of the above categories can be found in 3GPP TR 21.900.		Rel-4 (Release 4)
			Rel-5	(Release 5)
			Rel-6	(Release 6)

<b>Reason for change:</b>	⌘	The requirement for "Output power" in extreme conditions for Repeater with an output power >= 31dBm differs from TS25.143 UTRA Repeater Conformance testing. The correct figures appear to be stated in TS25.143, whereas the figures in TS25.106 appear to be subject to a typing error. The decision on the figures to be used in the requirement where made on 3GPP TSG RAN WG4 # 15 in Boston, January 2001. The approved figures can be found in document R4-010066, and are the ones to which the limits are corrected to in this CR.		
<b>Summary of change:</b>	⌘	The requirement for "Output power" in extreme conditions for Repeater with an output power >= 31dBm was changed to +/- 2,5 dB to match the TS25.143 UTRA Repeater Conformance testing.		
<b>Consequences if not approved:</b>	⌘	There will be a misunderstanding with requirement is the right on to test against, that from the core specification TS25.106 or that from the conformance testing TS25.143.		

<b>Clauses affected:</b>	⌘	6.1.1			
<b>Other specs affected:</b>	⌘	Y	N	Other core specifications ⌘	
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Test specifications
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		O&M Specifications
<b>Other comments:</b>	⌘	Equivalent CRs in other Releases: CR016 cat. A to 25.106 v5.2.0			

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.

## 6 Output power

Output power,  $P_{out}$ , of the repeater is the mean power of one carrier at maximum repeater gain delivered to a load with resistance equal to the nominal load impedance of the transmitter.

Rated output power, PRAT, of the repeater is the mean power level per carrier at maximum repeater gain that the manufacturer has declared to be available at the antenna connector.

### 6.1 Maximum output power

Maximum output power,  $P_{max}$ , of the repeater is the mean power level per carrier measured at the antenna connector in specified reference condition.

#### 6.1.1 Minimum Requirements

The requirements shall apply at maximum gain, with WCDMA signals in the operating band of the repeater, at levels that produce the maximum rated output power per channel.

When the power of all signals is increased by 10 dB, compared to the power level that produce the maximum rated output power, the requirements shall still be met.

In normal conditions, the Repeater maximum output power shall remain within limits specified in Table 6.1 relative to the manufacturer's rated output power.

**Table 6.1: Repeater output power; normal conditions**

Rated output power	Limit
$P \geq 43$ dBm	+2 dB and -2 dB
$39 \leq P < 43$ dBm	+2 dB and -2 dB
$31 \leq P < 39$ dBm	+2 dB and -2 dB
$P < 31$ dBm	+3 dB and -3 dB

In extreme conditions, the Repeater maximum output power shall remain within the limits specified in Table 6.2 relative to the manufacturer's rated output power.

**Table 6.2: Repeater output power; extreme conditions**

Rated output power	Limit
$P \geq 43$ dBm	+2,5 dB and -2,5 dB
$39 \leq P < 43$ dBm	+2,5 dB and -2,5 dB
$31 \leq P < 39$ dBm	+2,5 dB and -2,5 dB
$P < 31$ dBm	+4 dB and -4 dB

In certain regions, the minimum requirement for normal conditions may apply also for some conditions outside the ranges of conditions defined as normal.

## CHANGE REQUEST

⌘ **25.106 CR 016** ⌘ 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

<b>Title:</b>	⌘ Aligning of the requirement for "Output power" in extreme conditions with TS25.143		
<b>Source:</b>	⌘ RAN WG4		
<b>Work item code:</b>	⌘ RInImp-REP	<b>Date:</b>	⌘ 26/11/2002
<b>Category:</b>	⌘ <b>A</b>	<b>Release:</b>	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
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<b>Consequences if not approved:</b>	⌘ There will be a misunderstanding with requirement is the right one to test against, that from the core specification TS25.106 or that from the conformance testing TS25.143.

<b>Clauses affected:</b>	⌘ 6.1.1						
<b>Other specs affected:</b>	<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;"><input type="checkbox"/></td> <td style="width: 20px;"><input checked="" type="checkbox"/></td> </tr> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications	⌘
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