

Source: TSG-SA WG4

Title: CR to TS 26.132 - Loudness rating measurements at lower bit rates (Release 5)

Document for: Approval

Agenda Item: 7.4.3

The following CR, agreed at the TSG-SA WG4 meeting #28, is presented to TSG SA #21 for approval.

Spec	CR	Rev	Phase	Subject	Cat	Vers	WG	Meeting	S4 doc
26.132	026		Rel-5	Loudness rating measurements at lower bit rates	F	5.3.0	S4	TSG-SA WG4#28	S4-030619

CR-Form-v7

CHANGE REQUEST

⌘ **26.132 CR 026** ⌘ rev **-** ⌘ Current version: **5.3.0** ⌘

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

Title:	⌘ CR 26.132 026 on Loudness rating measurements at lower bit rates		
Source:	⌘ TSG SA WG4		
Work item code:	⌘ TEI5	Date:	⌘ 22/09/2003
Category:	⌘ F	Release:	⌘ Rel-5
	Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:
	F (correction)		2 (GSM Phase 2)
	A (corresponds to a correction in an earlier release)		R96 (Release 1996)
	B (addition of feature),		R97 (Release 1997)
	C (functional modification of feature)		R98 (Release 1998)
	D (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)

Reason for change:	⌘ At lower bit rates of AMR codec multisine signal is not recommended for loudness rating measurements.
Summary of change:	⌘ A note is added for information: If measurements of loudness ratings are performed at lower bit rates the use of multisine signal is not recommended, because the results depend on the selected bit rate.
Consequences if not approved:	⌘ Possible measurement errors.

Clauses affected:	⌘ 5.4										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table>	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Other core specifications	⌘
Y	N										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
<input type="checkbox"/>	<input checked="" type="checkbox"/>										
		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/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.

5.4 Test signals

Due to the coding of the speech signals, standard sinusoidal test signals are not applicable for 3G acoustic tests, appropriate test signals (general description) are defined in ITU-T Recommendation P.50 and P.501. Normative requirements for the use of test signals from P.501 are for further study. For the time being, if test signals from P.501 are used, a multisine signal is recommended. More information can be found in the test procedures described below.

Note: As stated in section 5.2 for narrow-band telephony the AMR speech codec shall be used at the highest source coding bit rate of 12.2kbit/s for all measurements. Tests at lower bit rates are not covered by 3GPP TS 26.132. If measurements of loudness ratings are still performed at lower bit rates the use of multisine signal is not recommended, because the results depend on the selected bit rate.

For testing the narrow-band telephony service provided by a terminal the test signal used shall be band limited between 100 Hz and 4 kHz with a bandpass filter providing a minimum of 24 dB/Oct. filter roll off, when feeding into the receiving direction.

For testing the wide-band telephony service provided by a terminal the test signal used shall be band limited between 100 Hz and 8 kHz with a bandpass filter providing a minimum of 24 dB/Oct. filter roll off, when feeding into the receiving direction.

The test signal levels are referred to the average level of the (band limited in receiving direction) test signal, averaged over the complete test sequence . unless specified otherwise.