

Technical Specification Group Services and System Aspects **TSGS#15(02)0083**
Meeting #15, Cheju Island, Korea, 11-14 March 2002

Source: TSG-SA WG4

Title: CR to TS 26.191 on " Error concealment of high band gain in 23.85 kbit/s mode " (Release 5)

Document for: Approval

Agenda Item: 7.4.3

The following CR, agreed at the TSG-SA WG4 meeting #20, is presented to TSG SA #15 for approval.

Spec	CR	Rev	Phase	Subject	Cat	Vers	WG	Meeting	S4 doc
26.191	001		REL-5	Error concealment of high band gain in 23.85 kbit/s mode	F	5.0.0	S4	TSG-SA WG4#20	S4-020173

CHANGE REQUEST

⌘ **TS 26.191 CR 001** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

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:	⌘ Error concealment of high-band gain in 23.85 kbit/s mode		
Source:	⌘ TSG SA WG4		
Work item code:	⌘ AMRWB	Date:	⌘ 2002-03-11
Category:	⌘ F	Release:	⌘ REL-5
	<i>Use <u>one</u> of the following categories:</i> F (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 .		<i>Use <u>one</u> of the following releases:</i> 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:	⌘ There is no substitution procedure for high-band energy parameter (mode 23.85 kbit/s).
Summary of change:	⌘ Substitution and muting procedure is added for high-band energy parameter.
Consequences if not approved:	⌘ No bad frame substitution is performed for the high-band gain parameter. That parameter is extracted from the erroneous/lost frame and used as such.

Clauses affected:	⌘ Addition of chapter 6.2.5.	
Other specs affected:	⌘ <input checked="" type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘ TS 26.173
Other comments:	⌘	

6.2.4 Innovation sequence

When `RX_FRAMETYPE = SPEECH_BAD`, the received fixed codebook innovation pulses from the erroneous frame are used as they are received.

When `RX_FRAMETYPE = SPEECH_LOST`, the received fixed codebook innovation pulses from the erroneous frame are not used and the fixed codebook innovation vector is filled with random signal (values limited to range `[-1, +1]`).

6.2.5 High-band gain (for 23.85 kbit/s mode)

When `RX_FRAMETYPE = SPEECH_BAD` or `RX_FRAMETYPE = SPEECH_LOST` the received high-band energy parameter of the frame is not used and the estimation for the high-band gain is used instead. This means that in case of bad/lost speech frames, the high-band reconstruction operates in the same way for all the modes.