Technical Specification Group Services and System Aspects ***TSGS#15(02)0076***
Meeting #15, Cheju Island, Korea, 11-14 March 2002

Source: **TSG-SA WG4**

Title: CR to TS 06.74 on Correction to DTX test vectors (R98)

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
06.74	A002	1	R98	Correction to DTX test vectors	F	7.1.1	S4	TSG-SA WG4#20	S4-020188

3GPP TSG-SA WG4 Meeting #20
Lulea, Sweden, 18-22 February 2002

Tdoc S4-020188

CR-Form-v5

CHANGE REQUEST

⌘ **06.74** **CR** **A002** ⌘ **rev** **1** ⌘ Current version: **7.1.1** ⌘

*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:	⌘	Correction to DTX test vectors
Source:	⌘	TSG SA WG4
Work item code:	⌘	AMR
Date:	⌘	11 March 2002
Category:	⌘	**F**
Release:	⌘	R98

Use one of the following categories:
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.

Use one of the following releases:

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:	⌘	With AMR FR in DTX mode, the DAI tests using channel coder / decoder may give output vectors different than the ones given with direct link between speech encoder and speech decoder. This has not been taken into account in the definition of DAI tests.
Summary of change:	⌘	Additional .OUT vectors are given for DTX tests with channel coder / decoder.
Consequences if not approved:	⌘	AMR FR testing with DTX is impossible for some mobile implementations.

Clauses affected:	⌘	7.2, Annex
Other specs affected:	⌘	☐ Other core specifications ⌘ ☐ 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/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.

7.2 Test Sequences

Each DTX test sequence consists of the following~~three~~ files:

- Files for input to the speech encoder: *.INP.
- Files for comparison with the encoder output and input to the speech decoder: *.COD.
- Files for comparison with the decoder output: *.OUT.
  For Full Rate codecs on a GSM radio interface when DTX is used, some mobile station implementation of channel decoder may mask the first NO_DATA frame when DTX period starts. In that case the alternative files *.OUT_D shall be used for the comparison with the decoder output.

The *.COD and *.OUT* file names has the format DTxA_<mode>.*, where “x” is the VAD option (X for option 1 and 2 for option 2), "A" is the test case number (1, 2, 3 or 4) and <mode> is the speech codec mode.

In a correct implementation, the speech encoder parameters generated by the *.INP file shall be identical to those specified in the *.COD file; and the speech decoder output generated by the *.COD file shall be identical to that specified in the *.OUT* file.

Sequence name	No. of frames	Size (bytes)		
		*.INP	*.COD	*.OUT*
DTX1	710	227 200	355 000	227 200
DTX2	898	287 360	449 000	287 360
DTX3	1620	518 400	810 000	518 400
DTX4	1188	380 160	594 000	380 160
DT21	938	300 160	469 000	300 160
DT22	616	197 280	308 000	197 120
DT23	938	300 320	469 000	300 160
DT24	1188	380 160	594 000	380 160