3GPP TSG-S4 meeting #10
Helsinki, Finland, 28 Feb – 3 Mar 2000

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3G CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

26.101 **CR** **002**   Current Version: **3.0.0**

3G specification number ↑   ↑ *CR number as allocated by 3G support team*

For submission to TSG **SA#7**   for approval **X**   *(only one box should*
list TSG meeting no. here ↑   for information   *be marked with an X)*

Form: 3G CR cover sheet, version 1.0   *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/3GCRF-xx.rtf*

Proposed change affects: USIM   ME **X**   UTRAN   Core Network
(at least one should be marked with an X)

Source:	Nokia	**Date:**	29-Feb-2000

Subject: Addition of comfort noise bit ordering

3G Work item: AMR

Category: F Correction   **X**
                 A Corresponds to a correction in a 2G specification
(only one category   B Addition of feature
shall be marked   C Functional modification of feature
with an X)   D Editorial modification

Reason for change: The present version of TS 26.101 does not unambiguously define the bit ordering of comfort noise frames. This change excplicitly defines that ordering for Frame Type 8.

Clauses affected: 4.2.3

Other specs affected:
Other 3G core specifications		→ List of CRs:
Other 2G core specifications		→ List of CRs:
MS test specifications		→ List of CRs:
BSS test specifications		→ List of CRs:
O&M specifications		→ List of CRs:

Other comments: The change consists of added text and one corrected typing error above the new text. The added text may have an effect on the page numbering for table of contents.

help.doc

<--------- double-click here for help and instructions on how to create a CR.

4.2.3   AMR Core Frame with comfort noise bits

The AMR Core Frame content for the additional frame types with Type Indices 8-15 in Table 1a are described in this section. These mainly consist of the frames related to Source Controlled Rate Operation specified in [2].

The data content (comfort nboise bits) of the additional frame types is carried in AMR Core Frame. The comfort noise bits are all mapped to Class A of AMR Core Frame and Classes B and C are not used. This is a notation convention only and the class division has no meaning for comfort noise bits.

The number of bits in each class (Class A, Class B, and Class C) for the AMR comfort noise bits (Frame Type Index 8) is shown in Table 3. The contents of SID_UPDATE and SID_FIRST are divided into three parts (SID Type Indicator, Mode Indication, and Comfort Noise Parameters) as defined in [2].

The comfort noise parameter bits produced by the AMR speech encoder are denoted as $\{s(1),s(2),...,s(35)\}$. The notation $s(i)$ follows that of [3]. These bits are numbered in the order they are produced by the AMR encoder without any reordering. These bits are followed by the SID Type Indicator bit ($t1$) and Mode Indication bits ($\{smi(0),smi(1),smi(2)\}$. Thus, the AMR comfort noise bits $\{d(0),d(1),…,d(38)\}$are formed as defined by the pseudo code below.

for $j = 0$ to 34

$d(j) := s(j+1);$

$d(35) := t1;$

for $j = 36$ to 38

$d(j) := smi(j-36);$