
3GPP TSG SA WG4 Codec

S4-(02)0225

Meeting no 20
Lulea, Sweden
18 – 22 February 2002

Title: LIAISON FOR INFORMATION:
Reduction of the number of AMR-WB modes for speech telephony service.
(Reply to GP-(02)0505 = S4-(02)0035)

Source: TSG SA WG4

To: TSG GERAN, TSG SA

Cc: TSG SA WG1, TSG RAN WG1, TSG RAN WG2

Attachment: none

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TSG SA4 (especially the TFO sub-group) would like to thank GERAN for the fast and efficient communication.

In your “LS on Speech Codecs references in GERAN specifications” you requested SA4 “To investigate the feasibility of defining a sub-set of WB AMR modes to support for WB speech telephony service.”

In a joint TFO – SQ session (TFO = Tandem Free Operation, SQ = Speech Quality) the following result for requirements on support of AMR-WB modes from a speech telephony perspective was reached. This result was later approved by the SA4 plenary:

It was agreed that a reduction of the number of AMR-WB modes for telephony service is desirable.

The AMR-WB modes for speech telephony service are reduced to the following set, consisting of 5 modes: 23,85, 15,85, 12,65, 8,85, 6,60 kbit/s.

Two 4-mode-subsets out of these 5 modes were preferred compared to this “9 to 5 model”, but none of both was agreeable. Therefore these 5 modes were taken as a compromise solution.

The following requirements were agreed:

Requirements for a terminal regarding these 5 modes:

1. The three lowest modes (12,65, 8,85, 6,60) shall be supported in all RATs (GERAN-GMSK, GERAN-8PSK TCH/F and TCH/H, UTRAN).
2. Additionally the two highest mode (15,85, 23,85) shall be supported in GERAN-8PSK TCH/F and UTRAN channels.

Requirements for a network:

1. A network shall support at least the modes 6,60, 8,85 and 12,65 in all its RATs.

These reduced sets of AMR-WB modes reduces the number of channel coding schemes from 28 (for all 9 AMR-WB modes) to 14.

Another reduction of effort could be achieved by defining within these sets of AMR-WB modes those scenarios which need interworking tests. SA4 will discuss this in the future and would be happy about any input in this regard.

Next meetings

TFO Ad-Hoc#4 22nd-23th April 2002 email exploder: SMG11_TFO@LIST.ETSI.FR

TSG SA4#21 13th-17th May 2002 email exploder: 3GPP_TSG_SA_WG4@LIST.ETSI.FR