

TSG-SA WG 4 (Codec) meeting #17  
Naantali, Finland, 4-8 June 2001

TSG S4 (01) 0386

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**Title: Response LS on Voice Bearer Interworking**

**Source: TSG-SA WG4**

**To: TSG-SA WG1, TSG-SA WG2**

**Cc: TSG-T, GSMA SerG**

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SA4 would like to thank SA1 on their liaison statement on “Response to LS Voice Bearer Interworking”.

- A question of this LS is directed to SA4 :
  1. *For Release 5, SA4 should identify a minimum mandatory set of codecs (e.g. AMR) for the voice bearer services that will be controlled by the IM subsystem.*

In SA4 view the minimum mandatory codec types should be the Narrow Band AMR codec family, i.e. the UMTS\_AMR2 codec type for UTRAN and FR\_AMR and HR\_AMR for GERAN.

In addition SA4 has identified the GSM EFR if GSM legacy transceivers are intended to be used in conjunction with the IM subsystem.

SA4 would like to bring SA1 and SA2 attentions on the fact that using the AMR has a certain number of implications, such as the definition and possibly negotiation of an ACS (Active Codec Set) since it is likely that not all the modes of the AMR are used for a given call. AMR implies also the use of a Codec Mode Indication and a Codec Mode Request in order to be able to switch from one rate to another. These different aspects must be taken into account when adopting the AMR. Finally there are different VAD/DTX schemes for AMR and possibly EFR to be taken into account.

- We understand that the other points are not in the field of SA4 expertise, however regarding the PSTN codecs the only one known by SA4 experts is G.711 (either A or  $\mu$  Law) also known as the 64 kbit/s PCM. There exist other ITU-T codecs such as the G.729 and G.723.1 but they're not used as PSTN codecs but rather in VoIP.