SP-040451

PSS and MMS speech/audio/video codecs in Rel-5

- **MMS: for terminals supporting a particular media type, the requirements for codec support (defined in TS 26.140):**

  - **Speech media type**
    - The AMR codec shall be supported for narrow-band speech.
    - The AMR wideband speech codec shall be supported when wideband speech working at 16 kHz sampling frequency is supported.

  - **Audio media type**
    - MPEG-4 AAC Low Complexity (AAC-LC) object type should be supported. (In addition, the MPEG-4 AAC Long Term Prediction (AAC-LTP) object type may be supported.)

  - **Video media type**
    - ITU-T H.263 (profile 0 level 10) shall be supported. (In addition, MMS should support: H.263 Profile 3 Level 10; MPEG-4 Visual Simple Profile Level 0.)

- **For PSS, codec support requirements are the same except that only support for decoder is specified (defined in TS 26.234).**

New speech/audio/video codecs under consideration for PSS and MMS for Rel-6

- **Audio media type**
  - Enhanced aacPlus and Extended AMR-WB codecs under consideration
    - **For PSS**, SA4 intends to define two recommended codecs ("should be supported"): found agreeable at SA4#30 and SA4#31, and at SA#23.
      - Draft audio codec TSs presented for information at SA#24.
    - **For MMS**, most companies in SA4 want only one codec with mandatory support ("shall be supported"). (Note: Some companies gave support for other options, e.g., for two recommended codecs, for one default encoder and two default decoders.)
      - No agreement of the codec. (To recommend two codecs objected by 3 companies in SA4.)
      - Both candidate codecs met PSS/MMS design constraints and requirements for performance (audio quality).
      - Choosing between them is difficult and a matter of preferences between bit-rates and content types (use cases).
      - Guidance from SA and relevant WGs (T2, SA1 on use cases) likely needed.

- **Video media type**
  - With disagreement from one company, SA4 working assumption is H.264 (AVC) to be added as a recommended codec i.e. "should be supported". (Some companies in SA4 also requested further testing.)