IEEE P1722.1
MPEG Transport Stream Media Formats

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MPEG Transport Streams

• This presentation addresses the TBD of Section 7.3.2.1.2 in Draft 18

• A Transport Stream (TS) is composed of Packetized Elementary Streams (PES) and various tables.

• The tables describe the grouping of PES into Program Streams (PS)
MPEG Transport Streams (Cont.)

- Example TS with two PS, each containing a video and audio PES
Transport Stream Media Format

- 16bits - count, N, of PES descriptors
- pes_descriptor 0..N-1 (16bits each)
- pes_descriptor
  - 8 bits: program_stream - 0..255
  - 8 bits: stream_format
    - 0x00 - MPEG-2 video
    - 0x01 - H.264 video
    - 0x80 - MPEG-1 audio (MPEG Layer 2, MP3 etc)
    - 0x81 - MPEG-2 audio
    - 0x82 - Dolby Digital (AC3) audio
    - 0x83 - AAC audio
    - 0x84 - AAC HE v2 audio
Potential Issues

- No attempt is made to describe the format of the PES beyond the codec format used. For example, if its H.264, then the decoder has to know how to decode the bitstream to know if it can use the profile, resolution etc.

- Number of PS is limited to 16

- Number of PES is limited to size of Media Format Descriptor.

- We do not describe if the PES is encrypted or not.