IETF 108 VVC/H.266 RTP Payload Format Update

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VVC/H.266 Spec update

- FDIS on 07/06/2020
- It is “consented” by ITU, so it is approved
- Current WG draft version draft-ietf-avtcore-rtp-vvc-02
WG draft update since IETF 106

- Coding tool intro updated to align with VVC/H.266 specification
- Cleaner and agreed design path:
  - Only support SRST due to limited or nonexistent implementation for MRST/MRMT mode
  - Removed Payload content information (PACI) packets
  - Removed interleaving/DOND-based signaling
- Added SDP signalling section (still need to be filled with details)
- Added frame marking support
  - For FM supporters, please provide reviews on this section
RTCP FB message

Inherited Payload-specific FB (PT=PSFB) message from HEVC:

- **Picture Loss Indication (PLI):**
  - FMT = 1

- **Slice Loss Indication (SLI):**
  - FMT = 2

- **Reference Picture Selection Indication (RPSI):**
  - FMT = 3

Inherited from H.261

- **Full Intra Request (FIR):**
  - PT=RTCP_FIR

- do we need to support all the FB messages for VVC/H.266?
- Our preference: remove SLI and RPSI, due to limited/nonexistent implementation, please advise if that is not true.
Use of Frame Marking

- Current design uses both Short and Long FM extension

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Short Frame Marking RTP Extension for [VVC]

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Long Frame Marking RTP Extension for [VVC]
Fragmentation Unit Header

• Currently we keep as 1 byte
• What do we do with the “Reserved” ‘R’ bit? Options:
  • Ex: use it for assisting picture boundary detection
  • Others...!
To Be completed

• Finalize coding tool section, introduce relative new features such as:
  • New non-VLC NAL header 12, OPI_NUT
• FrameMarking usage
  • Short
  • Long
• payload format parameters for SDP
  • Optional parameter details, SDP offer/answer consideration and limitation
• IANA consideration
  • payload formation parameter and MIME type registry
• Targeted Milestone: ~End of 2020
Change history

- draft-zhao-payload-rtp-vvc-00 .......... initial version
- draft-zhao-payload-rtp-vvc-01 .......... editorial clarifications and corrections
- draft-ietf-payload-rtp-vvc-00 .......... initial WG draft
- draft-ietf-payload-rtp-vvc-01 .......... VVC specification update