

IETF 108 SVC/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:

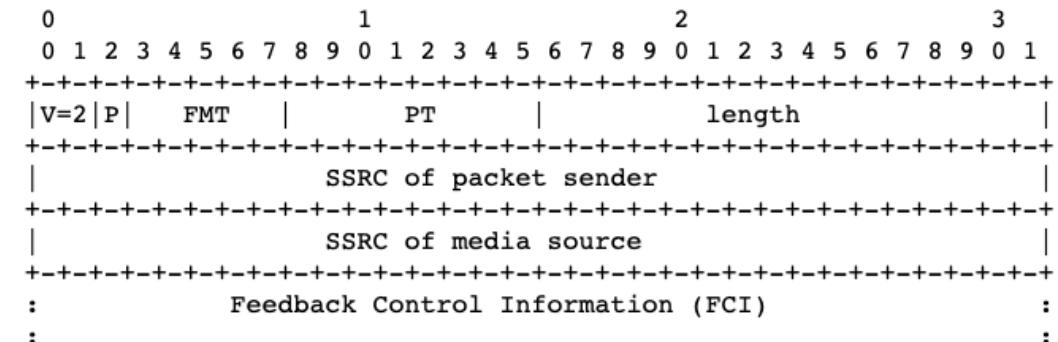
- **Picture Loss Indication (PLI)**
 - FMT = 1
 - **Slice Loss Indication(SLI):**
 - FMT = 2
 - **Reference Picture Selection Indication(RPSI):**
 - FMT = 3

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 use both of Short and Long FM extension

0	1								
0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5								
+-+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+									
ID L=0 S E I D 0 0 0 0									
+-+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+									

Short Frame Marking RTP Extension for [[VVC](#)]

0	1	2	3						
0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9	0 1						
+-+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+									
ID L=2 S E I D B TID 0 0 LayerID TL0PICIDX									
+-+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+---+-+									

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