

# Study on new HEVC profiles and operating points (FS\_HEVC\_Profiles)

Status, Rel-18/19 outlook

# FS\_HEVC\_Profiles overview

- FS\_HEVC\_Profiles is investigating
  1. MV-HEVC for stereoscopic HEVC streaming as well as conversational or other low delay applications
    - Also using depth and alpha channels for specific scenarios is being investigated
    - As a reference, simulcast or frame-packed HEVC is considered
  2. Scalable HEVC (S-HEVC) for enhancement of adaptive streaming in terms of storage usage
    - HEVC with no scalability is considered as reference
  3. HEVC 4:4:4 for enhanced still images
- Each of the tools is
  - Described as to address the targeted scenarios
  - Evaluation methodology is outlined for the target scenario
  - Results are gathered for evaluation
- The main output of the study is TR 26.966

# FS\_HEVC\_Profiles current status

- Work is 65% completed post SA4#126
- TR 26.966 v1.0.0 is available
- Work is needed for
  - the completion of evaluation of solutions, and
  - to draw conclusions for the scenarios.
- It is expected that the major part of study is completed by SA4#127

# FS\_HEVC\_Profiles followup

- By SA4#127 the exact conclusions of the work will be made available
- These conclusions will outline exactly what normative work is to be done
- Still, in the current status following high-level outcome may be expected

	Rel-19 normative work	Future releases
MV-HEVC streaming (stereo)	✓	
MV-HEVC low delay (stereo)	✓	
MV-HEVC depth/alpha (stereo)	✓	
Scalable HEVC	?	?
4:4:4 still image	-	✓

- This signifies normative work for MV-HEVC due to its good motivating use cases and reasonable current technical feasibility
- For HEVC 4:4:4 still images, progress work in MPEG is needed which is not ascertained for Rel-19
- It has also been noted that specification of video profiles is being fragmented in SA4
  - Any following normative work should assist to improve this situation instead of worsening this by adding the profiles in a haphazard/fragmented manner
- Further planning is needed

# Conclusions

- Based on the preceding discussion it is recommended that
  - Completion of FS\_HEVC\_Profiles is expedited for Rel-18
  - Planning for normative Rel-19 work is done