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| *Source:* | Scalable coding investigation AHG | | |

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# Abstract

This report summarizes the activities of the Scalable coding investigation Ad Hoc Group between the 5th JCT-VC meeting held in Geneva in March 2011 and the current meeting in Torino.

Mandates

* Investigate hooks that would be needed for support of bitstream scalability in HEVC syntax
* Study the applicability and effectiveness (e.g., relative to simulcast and single-layer coding) of scalability tools
* Study potential experimental conditions for evaluation of scalable video coding technologies

Reflector activity

There was no activity on the e-mail reflector related to scalable coding investigation, although there was considerable discussion about requirements on the mpeg-hevc-ext reflector.

# Related contributions

The following contributions related to scalable coding were submitted to the current JCT-VC meeting:

* JCTVC-F096,” Scalable structures and inter-layer predictions for HEVC scalable extension”, Hyomin Choi , Junghak Nam and Donggyu Sim [(Kwangwoon Univ.)](mailto:dgsim@kw.ac.kr)
* JCTVC-F290, “Scalability Support in HEVC”, Danny Hong, Wonkap Jang, Jill Boyce, Adeel Abbas (Vidyo)
* JCTVC-F292, “Recommendations for evaluation of scalable coding”, Jill Boyce, Adeel Abbas, Danny Hong, Wonkap Jang, (Vidyo)
* JCTVC-F491, “High level syntax for scalability support in HEVC”, Rickard Sjöberg, Jiong Sun, Per Wennersten, Andrey Norkin (Ericsson)
* JCTVC-F462, “On reference picture marking”, Y.-K. Wang (Huawei), Y. Chen (Qualcomm)
* JCTVC-F546, “Sliding Window Improvement for Temporal Scalability”, [Y. Chen](mailto:cheny@qualcomm.com), [P. Chen](mailto:peisongc@qualcomm.com), [M. Karczewicz](mailto:martak@qualcomm.com) (Qualcomm)
* JCTVC-F618, “Resampling Filters For Scalability And Screen Content Applications”, [W. Dai](mailto:daisy@fastvdo.com), [M. Krishnan](mailto:madhu@fastvdo.com), P. Topiwala (FastVDO)

The following contribution is related to requirements for scalable coding, and is listed for completeness, although not part of the mandate of this AHG.

* JCTVC-F488, “Requirements for Scalable extension of HEVC”, [Edouard Francois](mailto:edouard.francois@crf.canon.fr), [Sebastien Lasserre](mailto:sebastien.lasserre@canon.crf), [Fabrice Le Leannec (Canon)](mailto:fabrice.leleannec@crf.canon.fr)

# Conclusions

The Scalable coding investigation AHG recommends:

* To review all contributions related to scalability
* To coordinate with the High Level Syntax AHG on contributions related to both groups