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| **Joint Collaborative Team on Video Coding (JCT-VC)**  **of ITU-T SG16 WP3 and ISO/IEC JTC1/SC29/WG11**  7th Meeting: Geneva, 21-30 November, 2011 | Document: JCTVC-G017 |

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| *Title:* | **JCT-VCAHG 17: Scalable coding investigation** | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Report | | |
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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 6th JCT-VC meeting held in Torino in July 2011 and the current meeting in Geneva.

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-G078, “Information for HEVC scalability extension”, J. Boyce, D. Hong, W. Jang, A. Abbas (Vidyo)
* JCTVC-G149, “Options for High-Level Syntax for Multistandard Scalability”, Stephan Wenger (Vidyo)
* JCTVC-G248, “Low Complexity Scalable Extension of HEVC intra pictures”,S.Lasserre, F. Le Léannec, E. Nassor (Canon)
* JCTVC-G336, “AHG17: Unified NAL unit header design for HEVC and its extensions”, [Y. Chen,](mailto:cheny@qualcomm.com) [Y. -K. Wang](mailto:yekuiw@qualcomm.com) , [M. Karczewicz (Qualcomm)](mailto:martak@qualcomm.com)
* JCTVC-G582, “Multiview HEVC – experimental results”, M. Domański, T. Grajek, D. Karwowski, K. Klimaszewski, J. Konieczny, M. Kurc, A. Łuczak, R. Ratajczak, J. Siast, O. Stankiewicz, J. Stankowski, K. Wegner (Poznan University of Technology)
* JCTVC-G584, “Temporal layer access pictures and CRA”, J. Samuelsson, R. Sjöberg (Ericsson)
* JCTVC-G607, “High-Level Syntax for Bitstream Extraction”, R. Sjöberg, T. Russert (Ericsson)

Although not directly under the mandate of the group, the following scalability requirements related documents are listed for completeness:

* [JCTVC-G948](http://phenix.it-sudparis.eu/jct/doc_end_user/current_document.php?id=4226), “Draft Requirements and Discussion on the scalable enhancement of HEVC”, A. Luthra
* [JCTVC-G949](http://phenix.it-sudparis.eu/jct/doc_end_user/current_document.php?id=4227), “Draft requirements for the scalable enhancement of HEVC”, A. Luthra
* [JCTVC-G950](http://phenix.it-sudparis.eu/jct/doc_end_user/current_document.php?id=4228), “Draft use cases for the scalable enhancement of HEVC”, A. Luthra
* [JCTVC-G951](http://phenix.it-sudparis.eu/jct/doc_end_user/current_document.php?id=4229), “Draft Call for Proposals on the Scalable Video Coding Extensions of HEVC, [A. Luthra

# 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