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| **Joint Collaborative Team on Video Coding (JCT-VC)**  **of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11**  17th Meeting: Valencia, ES, 27 March – 4 April 2014 | Document: JCTVC-Q0011 |

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| *Title:* | **JCT-VC AHG report: SHVC text editing (AHG11)** | | |
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| *Source:* | AHG | | |

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# Abstract

This document reports the work of the JCT-VC ad hoc group on SHVC text editing (AHG11) between the 16th JCT-VC meeting in San Jose, US, (9 – 17 Jan. 2014) and 17th JCT-VC meeting in Valencia, Spain, (27 March – 4 April 2014).

# Mandate

At the 16th meeting of the ITU-T/ISO/IEC Joint Collaborative Team on Video Coding (JCT-VC), AHG11 on SHVC text editing was established with the following mandates:

* Produce and finalize JCTVC-P1007 SHVC Test Model 5 (SHM 5) text.
* Produce and finalize JCTVC-P1008 SHVC text specification Draft 5.
* Gather and address comments for corrections and editorial improvements of these documents.
* Coordinate with AHG12 on SHVC software development to address issues relating to mismatches between software and text

# Summary of Activities

The whole editorial team worked on two documents: JCTVC-P1007 (SHVC Test Model 5 text) [1] and JCTVC-P1008 (SHVC draft 5) [2]. Editing JCTVC-P1008 was assigned a higher priority than editing JCTVC-P1007.

One version of JCTVC-P1007 and four versions of JCTVC-P1008 were published by the editing AHG following the 16th JCT-VC meeting in San Jose. The SHVC DAM document was generated based on the final version of JCTVC-P1008.

The main changes in JCTVC-P1008, relative to the previous JCTVC-O1008 (SHVC Draft 4), are:

* + Incorporation of all common SHVC and MV-HEVC HLS normative adoptions at the 16th JCTVC meeting
  + Integration of all SHVC-specific normative adoptions at the 16th JCTVC meeting, including:
    - (JCTVC-P0312): vertical phase adjustment in resampling process for interlaced-to-progressive scalability
    - (Scalable Main 10 profile): Profile for up to 10 bits in each layer
    - (RL and EL bit depth restriction): EL bit depth shall not be smaller than RL bit depth
  + Editorial improvements and fixes
  + Fixes of bug tracker tickets.

JCTVC-P1007 Test Model 5 document mainly contains the general descriptions of SHVC framework, texture data resampling process and motion field mapping process. The main change to the previous JCTVC-O1007 (SHM4) is the inclusion of interlaced-to-progressive scalability.

# Recommendations

The AHG recommends to:

* Use SHVC bug-tracker (<https://hevc.hhi.fraunhofer.de/trac/shvc>) to report issues related to SHVC Draft and Test Model text.
* Compare the SHVC documents with the SHVC software and resolve any discrepancies that may exist, in collaboration with the SHVC Software AHG.
* Continue to improve the overall editorial quality of the SHVC Draft and Test Model documents.
* Request that proponents provide mature text for integration into the SHVC draft.

# Reference

1. J. Chen, J. Boyce, Y. Ye and M. M. Hannuksela, “Scalable HEVC (SHVC) Test Model 5 (SHM 5)”, JCTVC-P1007, 16th JCTVC Meeting, San Jose, US, Jan. 2014
2. J. Chen, J. Boyce, Y. Ye, M. M. Hannuksela, G. J. Sullivan and Y.-K. Wang, “Scalable High Efficiency Video Coding Draft 5”, JCTVC-P1008, 16th JCTVC Meeting, San Jose, US, Jan. 2014