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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**  21st Meeting: Warsaw, PL, 19–26 June 2015 | Document: JCTVC-U0007 |

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| *Title:* | **JCT-VC AHG report: SCC extensions text editing (AHG7))** | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Report | | |
| *Author(s) or Contact(s):* | Rajan Joshi, Ji-Zheng Xu Yan Ye Shan Liu Gary Sullivan Robert Cohen Zhan Ma | Email: | [rajanj@qti.qualcomm.com](mailto:rajanj@qti.qualcomm.com) [jzxu@microsoft.com](mailto:jzxu@microsoft.com) [yan.ye@interdigital.com](mailto:yan.ye@interdigital.com) [shan.liu@mediatek.com](mailto:shan.liu@mediatek.com) [garysull@microsoft.com](mailto:garysull@microsoft.com) [cohen@merl.com](mailto:cohen@merl.com) |
| *Source:* | Ad Hoc Group | | |

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# Abstract

This document reports on the work of the JCT-VC ad hoc group on SCC extensions text editing (AHG7) between the 20th JCT-VC meeting in Geneva, Switzerland (February 2015).and the 21st JCT-VC meeting in Warsaw, Poland (June 2015).

# Introduction

At the 20th meeting of the ITU-T/ISO/IEC Joint Collaborative Team on Video Coding (JCT-VC), AHG7 on SCC extensions text editing was established with the following mandates:

* Produce and finalize JCTVC-T1005 HEVC screen content coding extensions draft 3 and JCTVC-T1014 test model 4 text.
* Gather and address comments for refinement of the test model.
* Coordinate with AHG8 to address issues relating to mismatches between software and text.

# Status

The third working draft for the High Efficiency Video Coding Screen Content Coding (HEVC SCC) extension was created as an output document following the decisions taken at the 20th JCT-VC meeting in Geneva, Switzerland (February 2015).

JCTVC-T1005 was published by the editing ad hoc group (AHG) following the 20th JCT-VC meeting in Geneva, Switzerland. One significant change was that JCTVC-T1005 is based on HEVC v2 (without the 3D-HEVC extension yet integrated).Two versions JCTVC-T1005 were produced. The two are identical except that the editorial notes have been removed from the second version of the document. The text of JCTVC-T1005 (version 2) was submitted to ISO/IEC JTC1/SC29 for a ISO/IEC PDAM ballot (23008-2/PDAM 5).

List of changes with respect to JCTVC-S1005:

* Converted the document to use the complete HEVC version 2 text as its basis (without the 3D-HEVC extension yet integrated).
* Integrated palette escape colour coding (JCTVC-T0112/T0118)
* Integrated IBC unified with inter (JCTVC-T0227)
* Integrated Palette extension to non-444 format (JCTVC-T0072/T0109/T0120)
* Integrated intra MPM fix for SCC (JCTVC-T0049)
* Integrated disabling 64x64 palette (JCTVC-T0058)
* Integrated context reduction for coding run\_type in palette (JCTVC-T0078)
* Integrated signalling delta maximum palette predictor size in SPS (JCTVC-T0134)
* Integrated HLS refinement for adaptive motion vector resolution (JCTVC-T0069)
* Integrated Inference for palette\_escape\_val\_present\_flag (JCTVC-T0183)
* Integrated palette predictor initialization entries in PPS (JCTVC-T0048)
* Integrated removal of palette sharing flag (JCTVC-T0064)
* Integrated EG0 for new palette entries (JCTVC-T0064)
* Integrated content light level information SEI message (JCTVC-T0101)
* Integrated clipping MV to 16-bit for AMVR (Notes of JCTVC-T0059)
* Integrated QP offset for different colour spaces (JCTVC-T0140)
* Integrated clipping before ACT (JCTVC-T0132)

The screen content coding test model4 (SCM 4) **(**document JCTVC-T1014) was released on 1st, June 2015. The main changes were the description of unified signalling for intra block copy and inter modes.

# Related Contributions

JCTVC-U0038 proposes editorial improvements to address the feedback and comments related to the SCC draft text 3. It also summarizes omissions and known open issues.

JCTVC-U0031, JCTVC-U0091 and JCTVC-U0099 point to mismatch between draft text 3 and SCM 4.0 software.

JCTVC-U0036, JCTVC-U0055, and JCTVC-U0089, although containing normative aspects, introduce constraints on syntax elements.

JCTVC-U0092, JCTVC-U0110 are proposals for general editorial improvements/cleanups of the draft text.

# Recommendations

The recommendations of the HEVC SCC extension draft text AHG are to:

* Approve the documents JCTVC-T1005 and JCTVC-T1014 as JCT-VC outputs
* Address the comments and feedback on SCC extensions text specification as appropriate
* Compare the HEVC SCC extensions document with the HEVC SCC extensions software and resolve any discrepancies that may exist, in collaboration with the SCC extension software development (AHG8)
* Review the related contributions