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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**  23rd Meeting: San Diego, USA, 19–26 Feb. 2016 | Document: JCTVC-W0009 |

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| *Title:* | **JCT-VC AHG report: Complexity of SCC extensions (AHG9)** | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Report | | |
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| *Source:* | Ad Hoc Group | | |

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# Abstract

This report summarizes the activities of the JCT-VC ad hoc group on Complexity of SCC extensions (AHG9)) between the JCT-VC 22nd meeting in Geneva, Switzerland, and the 23rd meeting in San Diego, USA.

# Mandates

* Analyze complexity characteristics of SCC coding methods with regards to throughput, amount of memory, memory bandwidth, parsing dependencies, parallelism, pixel processing, chroma position interpolation, and other aspects of complexity as appropriate.
* Quantify and compare the average and worse case throughput (context-coded as well as bypass bins) for SCC coding methods.
* Study latency and parallelism implications of SCC coding techniques, considering multicore and single-core architectures.
* Identify criteria to determine the hardware implementability of the key hardware modules.

Identify bottlenecks in the current design with regard to implementation complexity.

# Email reflector activity

No coordinated AhG activity took place on the JCT-VC reflector between the 22nd JCT-VC meeting in Geneva, Switzerland (October 2015). and the 23rd JCT-VC meeting in San Diego, USA (February 2016).

# Related contributions

JCTVC-W0042: SCC encoder improvement.

JCTVC-W0075: Palette encoder improvements for the 4:2:0 chroma format and lossless.

JCTVC-W0077: Bug fix for DPB operations when current picture is a reference picture.

JCTVC-W0129: SCC Level Limits Based on Chroma Format.

# Recommendations

The AhG recommends to review the contributions related to mandates.