

Title: JCT-VC AHG report: Chroma format support (AHG 14)

Status: Input Document to JCT-VC

Purpose: Ad-hoc group report

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Source: AHG 14

Abstract

This report summarizes the activities of Ad Hoc Group 14 on Chroma Formats between the 8th and 9th JCT-VC meetings.

Mandates

The ad hoc group was mandated to:

- Study aspects of the technical design and software that need modification to support non-4:2:0 chroma formats.
- Assist and advise in the work of removing implicit assumptions of 4:2:0 formatting from the WD and software (where feasible, without introducing technical design changes).

Contributions

A number of documents have been contributed, covering a number of areas:

- National Body comments on schedule of work [1, 2]
- Traditional coding [3]
- Hybrid coding [4, 5]
- Future directions [6]

Recommendations

It is recommended to:

- Present the above documents
- Continue the AHG to investigate incompatibilities with the current working draft and the use of chroma formats other than 4:2:0.

References

- [1] J. N. Body, "JNB comments on HEVC scalable extensions to support non-4:2:0, n-bit video." JCTVC-IO496, Apr. 2012.
- [2] U. S. N. Body, "USNB Comments on HEVC." ISO/IEC JTC1/SC29/WG11 m24263, Apr. 2012.
- [3] K. Sugimoto, A. Minezawa, and S. ichi Sekiguchi, "AHG14: Color format extension for HEVC." JCTVC-IO521, Apr. 2012.
- [4] T. Lin, S. Wang, and K. Zhou, "Subjective quality comparison between Mixed Chroma Sampling-Rate coding and Chroma-subsampled 420 coding using YUV444 screen content test sequences." JCTVC-IO336, Apr. 2012.

- [5] T. Lin, P. Zhang, S. Wang, and K. Zhou, “4:4:4 Screen content coding using mixed chroma sampling-rate techniques.” JCTVC-IO272, Apr. 2012.
- [6] P. Andrivon and P. Bordes, “High Bit Depth Considerations in HEVC.” JCTVC-IO108, Apr. 2012.