

**Joint Video Experts Team (JVET)
of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC
29/WG 11**

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20th Meeting, by teleconference, 7 - 16 October 2020

Title: AHG4: New HLG sequences for high bit-depth video coding

Status: Input document to JVET

Purpose: Proposal

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Source: Sony

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Abstract

This contribution proposes new HLG (Hybrid Log-Gamma) test sequences for high bit-depth video coding. This provides information on the test sequences, which are resolution, frame rate, chroma format, bit-depth, frame count and the coding results of VTM-10.0 compared to HM-16.22-RExt.

Introduction

We, Sony, proposed five HLG sequences, YUV4:2:0/10-bit, for HDR CTC in the VVC Ver.1 [1][2], and two of them were adopted at that time. The VVC Ver.1 was finalized in the last meeting, and a new AHG is established where high bit-depth, high bit rate, and high frame rate coding are studied. One of the requirements for the AHG is to define test sequences. So, we would like to propose the same content as previously proposed, but at 12-bit. These sequences are captured by the 4K camera below in Table 1.

Table 1: Specifications of 4K camera

Test sequence

Built from JVET-T0082-v3.docx

CARD

JVET-T0082

<http://vexpertise.stbit.ru/documents/JVET-T0082>

The screenshot displays the JVET Search interface. At the top, the text "JVET Search" is visible. Below it, a search bar contains the text "Kengo Kondo", "M. Ikeda", and "A. Brisse". The search results show a paper titled "AHG4: New HLG sequences for high bit-depth video coding" by "Authors:". Below the title, there is a section labeled "ABSTRACT" followed by a blue bar. Further down, there is a section labeled "MEETING NOTES" followed by several blue bars. In the bottom right corner, there is a QR code.

ARCHIVE

archive v3

https://jvet-experts.org/doc_end_user/documents/20_Teleconference/wg11/JVET-T0082-v3.zip

- XLS** JVET-T0082-v1-high-QP-LMCS0.xlsm
- XLS** JVET-T0082-v1-low-QP-LMCS0.xlsm
- DOC** JVET-T0082-v1.docx
- XLS** JVET-T0082-v2-high-QP-LMCS0.xlsm
- XLS** JVET-T0082-v2-low-QP-LMCS0.xlsm
- DOC** JVET-T0082-v2.docx
- PPT** JVET-T0082-v2.pptx
- XLS** JVET-T0082-v3-low-QP-LMCS0.xlsm

SOURCE

external source

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The screenshot displays the 'JVET Document Management System' interface. At the top, a dark blue header contains the system name and the role 'JVET Video Experts Team'. On the left, a vertical sidebar lists navigation options: 'User' (highlighted with a dark blue background), 'Login', 'Create new user', 'Claim your password', and 'Contact'. The main content area is titled 'Preview document JVET-T0082' in red. Below this, a section titled 'Document Information' (underlined in red) shows the document was 'Submitted by' 'Jens-Rainer Oden' (a blue link) and is an 'H.264: New HLG sequences for high bit-depth video coding'. It also lists 'Authors' as 'V. Sotgiu' (a blue link). To the right, under the heading 'Associated Resources', there is a table with one entry: 'Document' 'JVET-T0082' (a blue link) with the description 'updated document'. Below this, a 'Comments' section (underlined in red) contains a large, empty text input area. In the bottom right corner, there is a QR code.

MEETING NOTES

external meeting notes

https://www.itu.int/wftp3/av-arch/jvet-site/2020_10_T_Virtual/JVET-T_Notes_dH.docx

  	Joint Video Experts Team (JVET) of ITU-T SG21 WP3/21 and ISO/IEC JTC 1/SC 29 20th Meeting; by teleconference, October 2020 <i>Title:</i> Meeting Report of the 41st Meeting of the Joint Video Experts Team <i>Status:</i> Report document from the chair of JVET <i>Purpose:</i> Report	Document: JVET-T0082
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1 Summary



MEETING NOTES

[JVET-T0082](#) New HLG sequences for high bit-depth video coding [K. Kondo, M. Ikeda, A. Browne (Sony)]

This contribution was discussed briefly in session 20 at 2010 on Thursday 15 October.

This contribution proposes new HLG (Hybrid Log-Gamma) test sequences for high bit-depth video coding. This provides information on the test sequences, which are resolution, frame rate, chroma format, bit-depth, frame count and the coding results of VTM-10.0 compared to HM-16.22-RExt.

This contribution was discussed in the HBD BoG (see section 5.1.1, esp. JVET-T0124).

Conformance test development (1)

CITATION

K. Kondo, M. Ikeda, A. Browne, "AHG4: New HLG sequences for high bit-depth video coding", JVET-T0082, 20th Meeting: by teleconference, October 2020.

REFERENCES

1. [T. Tsukuba, M. Ikeda, T. Suzuki, "New Test Sequence of 4K Hybrid Log-Gamma", JVET-G0063, 7th Meeting: Torino, July 2017.](#)
2. [T. Tsukuba, M. Ikeda, T. Suzuki, "AHG7: Test Sequences of 4K Hybrid Log-Gamma", JVET-H0038, 8th Meeting: Macau, October 2017.](#)
3. [T. Ikai, A. Browne, X. Xiu, "AHG12: Preliminary common test conditions for high bitdepth video coding", JVET-T0047, 20th Meeting: by teleconference, October 2020.](#)