**Joint Video Experts Team (JVET)
of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11**
18th Meeting: Teleconference, April 2020

Document: JVET-R0139-v2
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Title: **AHG9: High-level control flag for lossless coding**

Status: Input document to JVET

Purpose: Proposal

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Source: Sharp

HEADER EXCERPT FROM SOURCE DOCUMENT

Picture parameter set RBSP syntax

Picture header structure syntax

[Ed. (YK): Move this subclause to be somewhere after the subclause of the RBSP trailing bits syntax.]

Slice header syntax

General slice header syntax

Transform unit syntax

Picture parameter set RBSP semantics

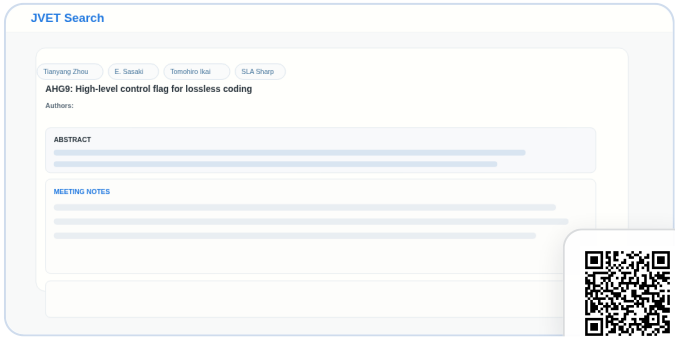
Built from JVET-R0139_WD_test2_pps_lossless_flag.docx

LINKS

CARD

JVET-R0139

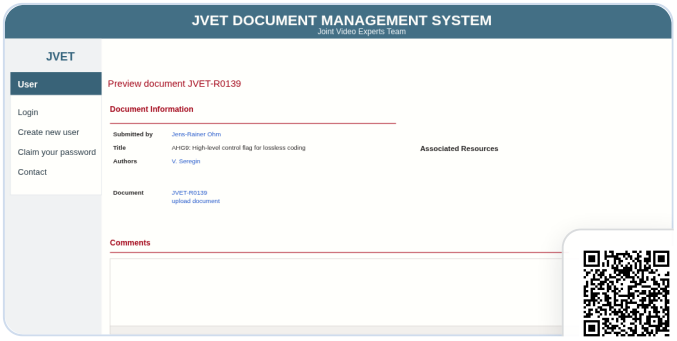
http://vexpertise.stbit.ru/documents/JVET-R0139



SOURCE

external source

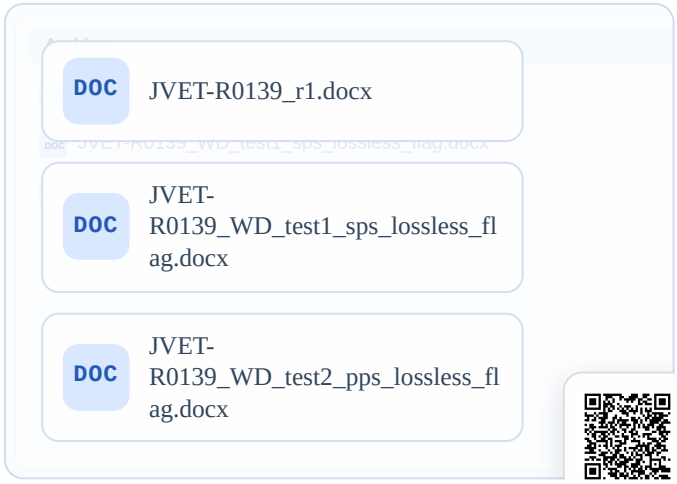
https://jvet-experts.org/doc_end_user/current_document.php?id=9783



ARCHIVE

archive v2

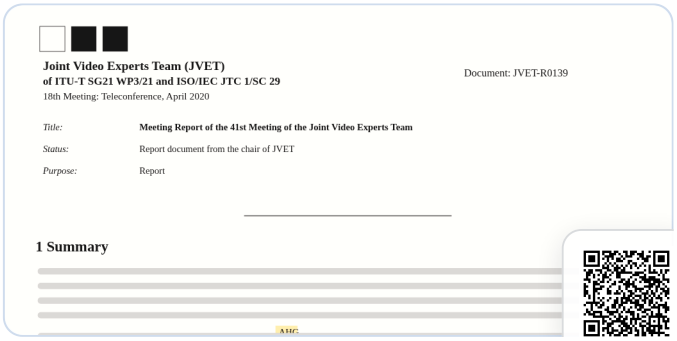
https://jvet-experts.org/doc_end_user/documents/18_Alpbach/wg11/JVET-R0139-v2.zip



MEETING NOTES

external meeting notes

https://www.itu.int/wftp3/av-arch/jvet-site/2020_04_R_Alpbach/JVET-R_Notes_dH.docx



MEETING NOTES

JVET-R0139 AHG9: High-level control flag for lossless coding [T. Zhou, E. Sasaki, T. Ikai (Sharp)]

This contribution proposes a high-level control flag for lossless coding in VVC. It includes two options:

Option 1: A sequence parameter set (SPS) level flag for lossless mode

Option 2: A picture parameter set (PPS) level flag for lossless mode

In both cases, some applicable flags that are always constant in lossless mode are not signalled when the proposed lossless flag is equal to 1. It is asserted that the proposed syntax can be beneficial for sequence or picture level lossless case and it avoids useless flag signalling in lossless coding case.

The intent is for entire-picture lossless coding.

The motivation is inferring the disabling of tools that disallow lossless coding at SPS and PPS, such that various other flags can be saved

Further, there is a low-level change which saves the TS flag at CU level.

The saving of HLS information is not relevant, and even more for lossless coding

Entire-picture lossless coding is not a relevant application for VVC (due to high complexity, and level constraints).

> No action was taken on this.

CITATION

T. Zhou, E. Sasaki, T. Ikai, "AHG9: High-level control flag for lossless coding", JVET-R0139, 18th Meeting: Teleconference, April 2020.

REFERENCES

1. B. Bross, J. Chen, S. Liu, Y.-K. Wang, "Versatile Video Coding (Draft 8)", JVET-Q2001, 17th Meeting: Brussels, January 2020.
2. T.-C. Ma, A. Nalci, T. Nguyen, "JVET common test conditions and software reference configurations for lossless, near lossless, and mixed lossy/lossless coding", JVET-Q2014, 17th Meeting: Brussels, January 2020.