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29/WG 11**

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Title: **AhG 9: APS Cleanup**

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Abstract

In the last JVET meeting, a partial cleanup for APS was adopted in JVET-Q0505, where chroma related scaling matrices are not signaled in APS in monochrome mode. It was motivated by the principle “not signaling something which would never be used” according to the meeting notes. It is asserted, however, that this cleaning is not complete for APS. This is because the other APS parameters (ALF and LMCS) still signal redundant chroma information in the case of monochrome mode. This contribution proposes removing this redundant signaling by conditioning it on the chroma type.

Introduction

APS contains the parameters of ALF (also CC-ALF), LMCS and scaling matrices. When APS is signaled, the syntax `aps_params_type` is coded to identify the type of parameters (ALF, LMCS or scaling matrices). The parameters of ALF are coded using `alf_data()` function:

Clearly, the three flags highlighted in gray in the above syntax table are coded even for monochrome, although they are never used in such a case.

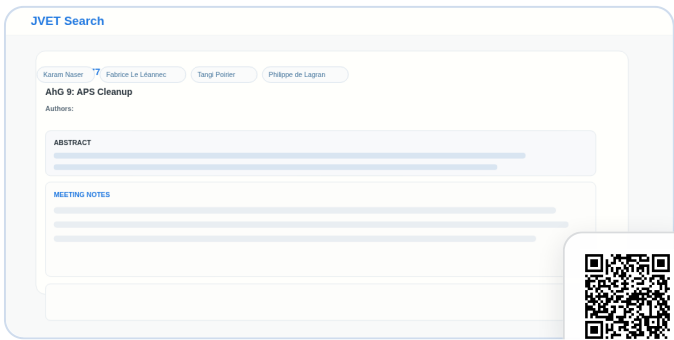
The LMCS parameters are coded in the following way:

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CARD

JVET-R0177

<http://vexpertise.stbit.ru/documents/JVET-R0177>



ARCHIVE

archive v1

https://jvet-experts.org/doc_end_user/documents/18_Alpbach/wg11/JVET-R0177-v1.zip



SOURCE

external source

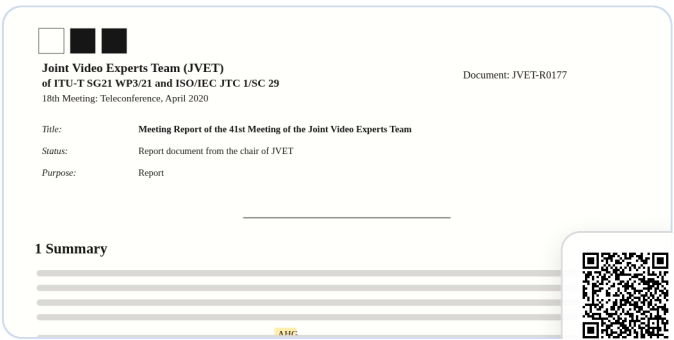
https://jvet-experts.org/doc_end_user/current_document.php?id=9821



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-R0177 AHG9: APS Cleanup [K. Naser, F. Le Léannec, T. Poirier, P. de Lagrange (InterDigital)]

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REFERENCES

1. [H. Zhang, X. Li, G. Li, L. Li, S. Liu, "AHG15: Improvement for Quantization Matrix Signaling", JVET-Q0505, 17th Meeting: Brussels, January 2020.](#)