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29/WG 11**

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Title: AhG 9: On ALF, LMCS and Scaling List Parameters Signalling

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Abstract

In the VVC draft 8 specification, ALF, LMCS and Scaling List parameters are signaled using the adaptation parameters set. This is to have the maximum flexibility where the encoder can signal any of these tools' parameters at any moment. However, for certain profiles, APS is not signaled. For these profiles, ALF, LMCS and Scaling List shall not be employed. This contribution proposes additional coding mechanism for these parameters such that the tools can still be used with restricted decoders.

Introduction

In VVC draft 8, there exist many constraint flags that are used to define profiles with limited coding tools. Among these flags, there is a flag to disable coding any NAL unit with APS. Specifically, in VVC draft 8, the general constraint information flags are coded in this way:

The highlighted flag (no_aps_constraint_flag) is meant for disabling the coding of any APS information:

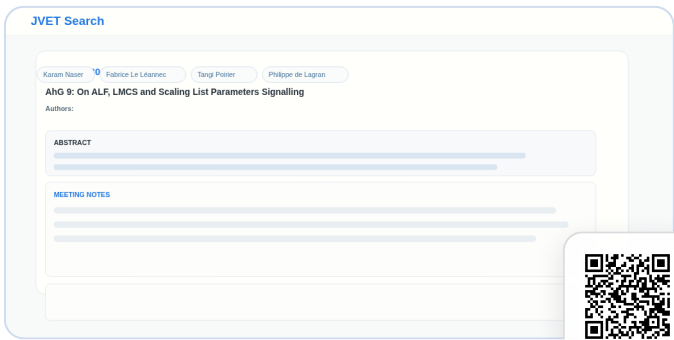
no_aps_constraint_flag equal to 1 specifies that there shall be no NAL unit with nuh_unit_type equal to PREFIX_APS_NUT or SUFFIX_APS_NUT present in OlsInScope. no_aps_constraint_flag equal to 0 does not impose such a constraint.

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CARD

JVET-R0180

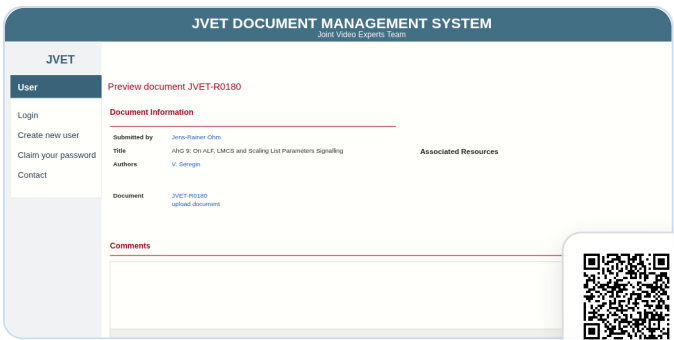
<http://vexpertise.stbit.ru/documents/JVET-R0180>



SOURCE

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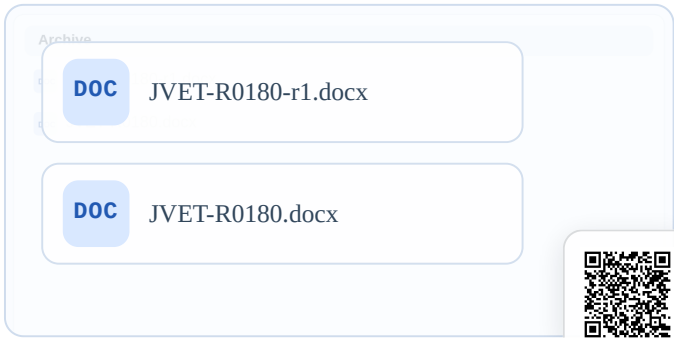
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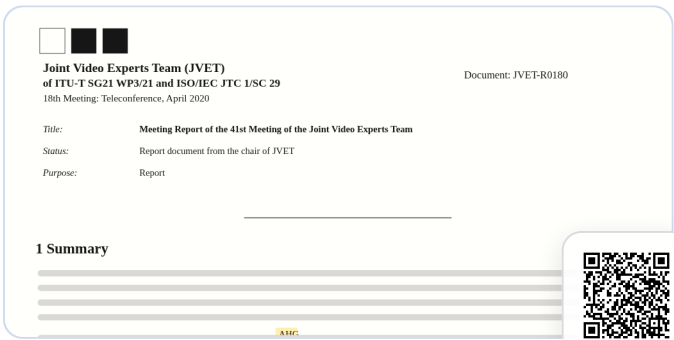
https://jvet-experts.org/doc_end_user/documents/18_Alpbach/wg11/JVET-R0180-v2.zip



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-R0180 AHG9: On ALF, LMCS and Scaling List Parameters Signalling [K. Naser, F. Le Léannec, T. Poirier, P. de Lagrange (InterDigital)]

JVET-R0273 AHG9: APS signalled in picture header [V. Seregin, M. Coban, Y. He, M. Karczewicz (Qualcomm)]

CITATION

K. Naser, F. Le Léannec, T. Poirier, P. de Lagrange, "AhG 9: On ALF, LMCS and Scaling List Parameters Signalling", JVET-R0180, 18th Meeting: Teleconference, April 2020.

REFERENCES

1. [M. Pettersson, R. Sjöberg, M. Damghanian, "AHG17: Signaling absence of NAL unit types in DPS", JVET-P0366, 16th Meeting: Geneva, October 2019.](#)