

**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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19th Meeting, by teleconference, 22 June - 1 July 2020

Title: **AHG9: Signalling of Virtual Boundary Positions**

Status: Input document to JVET

Purpose: Proposal

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Abstract

At the 18th JVET meeting, it was decided (in JVET-R0266 item 6) to code virtual boundary positions using ue(v) for the sps_virtual_boundary_pos_x, sps_virtual_boundary_pos_y, ph_virtual_boundary_pos_x and ph_virtual_boundary_pos_y syntax elements instead of fixed length coding using u(13). It is observed that the value of 0 is not allowed for these four syntax elements so this contribution proposes to align the semantics of these four syntax elements with other syntax elements in the specification and use the minus1 mechanism. The following changes to the syntax and semantics are proposed:

Add “_minus1” to each of the four syntax elements sps_virtual_boundary_pos_x, sps_virtual_boundary_pos_y, ph_virtual_boundary_pos_x and ph_virtual_boundary_pos_y.

Update the corresponding ranges and derivations in the semantics of the four syntax elements accordingly.

Introduction

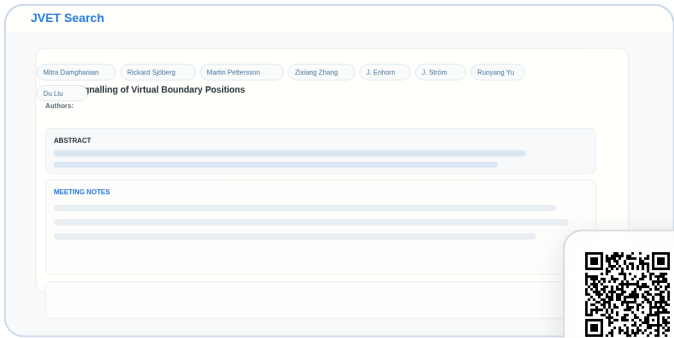
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LINKS

CARD

JVET-S0047

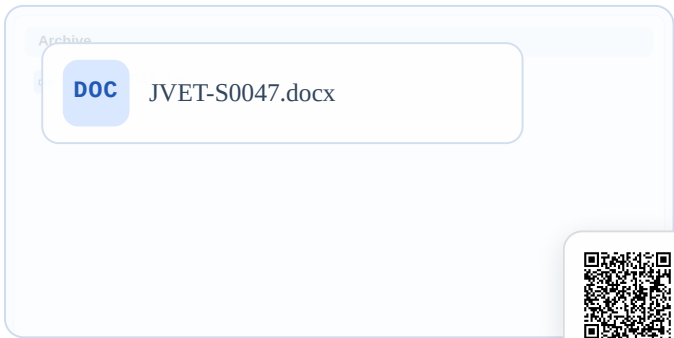
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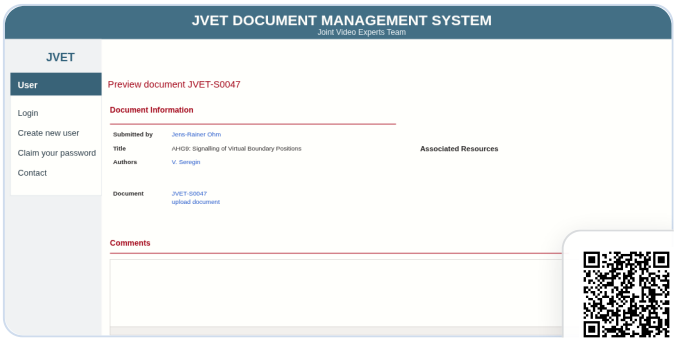
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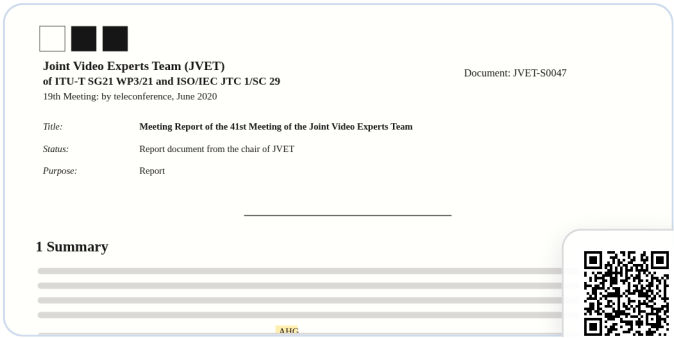
https://jvet-experts.org/doc_end_user/current_document.php?id=10169



MEETING NOTES

external meeting notes

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MEETING NOTES

[JVET-S0047](#) AHG9: Signalling of Virtual Boundary Positions [M. Damghanian, R. Sjöberg, M. Pettersson, Z. Zhang, J. Enhorn, J. Ström, R. Yu, D. Liu (Ericsson)]

This contribution was discussed in the HLS AHG meeting at 0837 UTC on Thursday 28 May and in the main JVET meeting at 1340 on 25 June (chaired by GJS).

At the 18th JVET meeting, it was decided (in JVET-R0266 item 6) to code virtual boundary positions using ue(v) for the sps_virtual_boundary_pos_x, sps_virtual_boundary_pos_y, ph_virtual_boundary_pos_x and ph_virtual_boundary_pos_y syntax elements instead of fixed length coding using u(13). It is observed that the value of 0 is not allowed for these four syntax elements so this contribution proposes to align the semantics of these four syntax elements with other syntax elements in the specification and use the minus1 mechanism. The following changes to the syntax and semantics are proposed:

- Add “_minus1” to each of the four syntax elements sps_virtual_boundary_pos_x, sps_virtual_boundary_pos_y, ph_virtual_boundary_pos_x and ph_virtual_boundary_pos_y.
- Update the corresponding ranges and derivations in the semantics of the four syntax elements accordingly.

AHG Recommendation (cleanup): Adopt.

CITATION

M. Damghanian, R. Sjöberg, M. Pettersson, Z. Zhang, J. Enhorn, J. Ström, R. Yu, D. Liu, "AHG9: Signalling of Virtual Boundary Positions", JVET-S0047, 19th Meeting: by teleconference, June 2020.

REFERENCES

1. [Y. He, Y.-J. Chang, V. Seregin, M. Coban, M. Karczewicz, "AHG9: Miscellaneous HLS topics", JVET-R0266, 18th Meeting: Teleconference, April 2020.](#)
2. [B. Bross, J. Chen, S. Liu, Y.-K. Wang, "Versatile Video Coding \(Draft 9\)", JVET-R2001, 18th Meeting: Teleconference, April 2020.](#)