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Title: CE2: Tests on long deblocking (CE2.2.1.4)

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Purpose: Proposal

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Source: D.Rusanovskyy, J. Dong, M. Karczewicz

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Abstract

This contribution report results of CE2.2.1.4 test on changes to deblocking filtering method as it was proposed in the JVET-J0021. A long deblocking filter is applied to boundary samples of the blocks, with size (orthogonal to boundary) equal or large than 16. Boundary samples of the blocks with size (orthogonal to the boundary) smaller than 16 are filtered with HEVC deblocking. Total number of 4 samples are filtered from each side of the boundary.

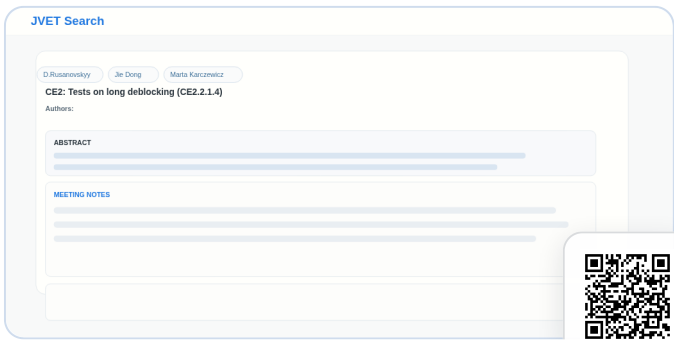
In Random Access (RA) configuration of VTM1.0, the proposed deblocking reportedly provides of 0.09% and 0.42% of bitrate reduction on average over all classes against the VTM1.0 anchor. Notably, for UHD ClassA1 average bitrate reduction of 0.34% for luma and 1.13% for chroma is reported. Against the BMS1.0 RA anchor, 0.02% and 0.43% of average bitrate reduction is reported for luma and chroma components respectively. For UHD Class A1, average 0.14% bitrate reduction for luma and 0.94% for chroma is reported. In All Intra(AI) configuration, 0.02% bitrate increase on average is reported against the VTM1.0 anchor and 0.04% average bitrate increase against the BMS1.0 anchor. In LDB configuration, average 0.01% bitrate increase is reported against the VTM1.0 anchor and 0.07% average bitrate reduction against the BMS1.0 anchor.

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CARD

JVET-K0334

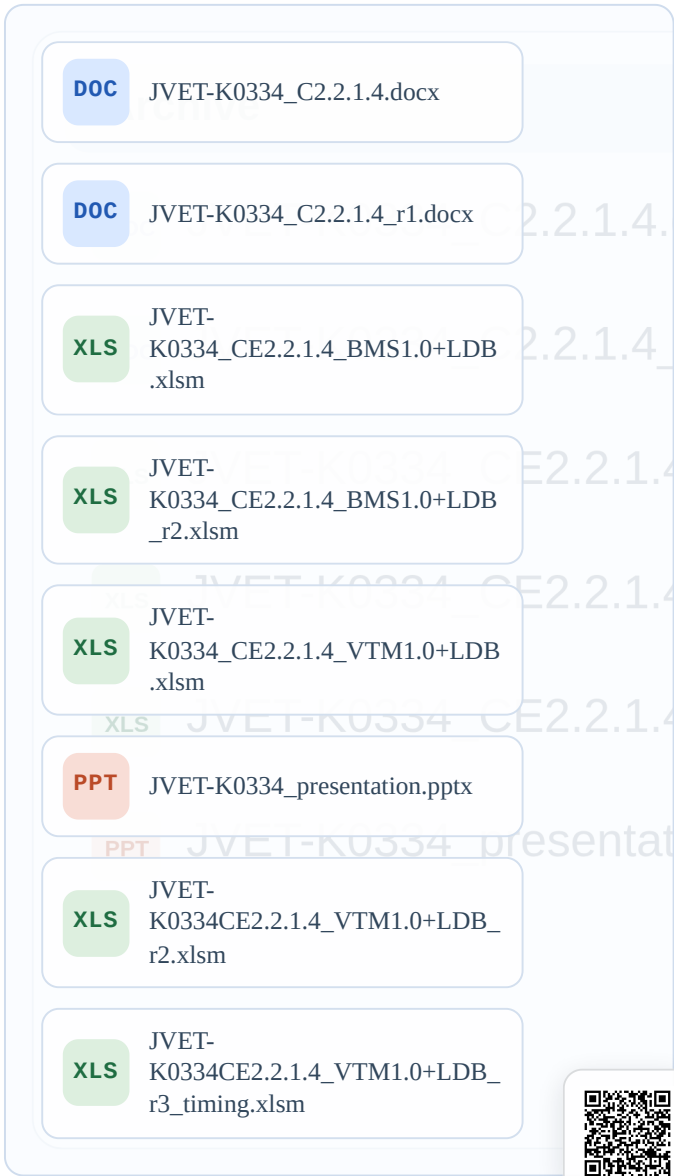
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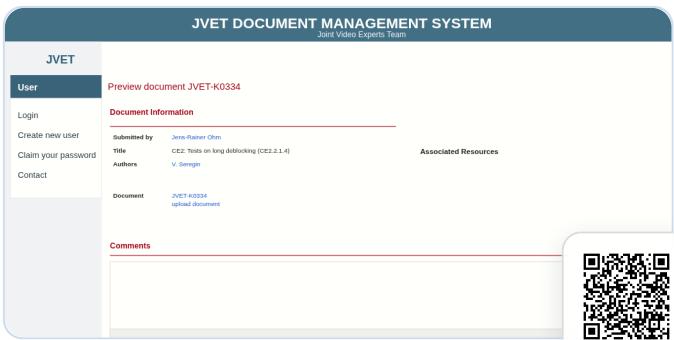
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SOURCE

external source

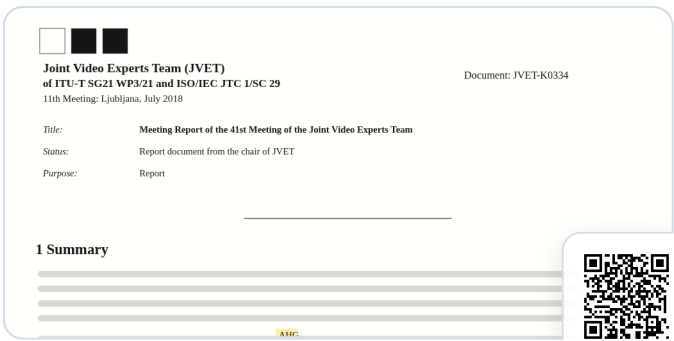
https://jvet-experts.org/doc_end_user/current_document.php?id=3849



MEETING NOTES

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MEETING NOTES

[JVET-K0334](#) CE2: Tests on long deblocking (CE2.2.1.4) [D. Rusanovskyy, J. Dong, M. Karczewicz (Qualcomm)]

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REFERENCES

1. [Y.-W. Chen, W.-J. Chien, H.-C. Chuang, M. Coban, J. Dong, H. E. Egilmez, N. Hu, M. Karczewicz, A. Ramasubramonian, D. Rusanovskyy, A. Said, V. Seregin, G. Van Der Auwera, K. Zhang, L. Zhang, P. Bordes, Y. Chen, C. Chevance, E. François, F. Galpin, M. Kerdranvat, F. Hiron, P. de Lagrange, F. Le Léannec, K. Naser, T. Poirier, F. Racapé, G. Rath, A. Robert, F. Urban, T. Viellard, "Description of SDR, HDR and 360° video coding technology proposal by Qualcomm and Technicolor – low and high complexity versions", JVET-J0021, 10th Meeting: San Diego, April 2018.](#)
2. [J. Dong, Y.-H. Chao, W.-J. Chien, L. Zhang, M. Karczewicz, "Multi-Dimensional Filter Selection for Deblocking", JVET-J0056, 10th Meeting: San Diego, April 2018.](#)