

**Joint Video Experts Team (JVET)
of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC
29/WG 11**

Document: JVET-Q0134-v2

MPEG: m51723

17th Meeting: Brussels, January 2020

Title: AHG8: Disabling reference wraparound for reference picture resampling

Status: Input document to JVET

Purpose: Proposal

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Abstract

In the VVC Draft 7, there is no restriction on enabling RPR and reference picture wraparound at the same time. This contribution contends that reference wraparound should be disabled when RPR is enabled, in that the reference picture wraparound does not work when a current picture and its reference have different resolutions.

Introduction

RPR was adopted to VVC in the 15th meeting at Gothenburg on July 2019 [1]. It supports adaptive resolution change within a coded video sequence. Specifically, the current picture's resolution can be different from those of its reference pictures.

Reference picture wraparound is primarily to support certain 360° video applications, where the left and right edges of the video or a part of the video belongs to one continuous scene.

In the current VVC Specification [2], it is not prohibited to have both RPR and reference picture wraparound enabled at the same time, even though these two coding tools do not work jointly in VTM 7.0 reference software.

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<http://vexpertise.stbit.ru/documents/JVET-Q0134>

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1 Summary

MEETING NOTES

[JVET-Q0134](#) AHG8: Disabling reference wraparound for reference picture resampling [B. Heng, P. Chen, T. Hellman, W. Wan, M. Zhou (Broadcom)]

CITATION

B. Heng, P. Chen, T. Hellman, W. Wan, M. Zhou, "AHG8: Disabling reference wraparound for reference picture resampling", JVET-Q0134, 17th Meeting: Brussels, January 2020.

REFERENCES

- [B. Bross, J. Chen, S. Liu, "Versatile Video Coding \(Draft 6\)", JVET-O2001, 15th Meeting: Gothenburg, SE, July 2019.](#)
- [B. Bross, J. Chen, S. Liu, Y.-K. Wang, "Versatile Video Coding \(Draft 7\)", JVET-P2001, 16th Meeting: Geneva, October 2019.](#)