

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

Document: JVET-AJ0170
MPEG: m69718

36th Meeting, Kemer, TR, 1-8 November 2024

Title: **AHG9: On Lens Optical Correction SEI message**
Status: Input document to JVET
Purpose: Proposal
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Source: Sharp

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Abstract

This input contribution relates to the Lens Optical Correction (LOC) SEI message which is included in the technologies under consideration document for future versions of VSEI. The proposals in this document are intended to broaden the applicability of the LOC SEI message and are asserted to provide clarifications of the usage of the LOC SEI message. Specifically, the following items are proposed:

- Add support for signalling vignetting parameters
- Add poly4 as a model for radial distortion
- Move the persistence flag to be the first syntax element after the cancel flag
- Add support for signalling a text string identifying the lens model

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MEETING NOTES

[JVET-AJ0170](#) AHG9: On Lens Optical Correction SEI message [J. Samuelsson-Allendes, S. Deshpande (Sharp)]

This input contribution relates to the Lens Optical Correction (LOC) SEI message which is included in the technologies under consideration document for future versions of VSEI. The proposals in this document are intended to broaden the applicability of the LOC SEI message and are asserted to provide clarifications of the usage of the LOC SEI message. Specifically, the following items are proposed:

1. Add support for signalling vignetting parameters

Some support for adding this functionality.

A question was raised about why so many bits of precision?

Agreed.

1. Add poly4 as a model for radial distortion

Agreed.

1. Move the persistence flag to be the first syntax element after the cancel flag

Agreed.

1. Add support for signalling a text string identifying the lens model

A maximum length of the string should be specified.

The semantics should be updated to be consistent with other syntax elements of type st(v).

It was suggested that the Note not mention that the string is an alternative or the remove the note entirely.

It was noted that many other st(v) syntax elements do not have a maximum length, although SEI messages themselves have a maximum length.

Agreed with removing the note.

1. Add clarification on the order in which corrections are expected to be performed

A question was raised about if it is always appropriate that the proposed order would always be followed.

Agreed.

1. Add description of when in the processing chain (to what color format) the corrections are applied

It is suggested that a note be used, and that wording be checked as to how to refer to linear RGB.

Agreed. Decision: Adopt as noted above.

CITATION

J. Samuelsson-Allendes, S. Deshpande, "AHG9: On Lens Optical Correction SEI message", JVET-AJ0170, 36th Meeting: Kemer, TR, November 2024.