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**Information technology — Coding of audio-visual objects — Part 15: Carriage of network abstraction layer (NAL) unit structured video in the ISO base media file format — Amendment 2: Improvement of carriage of L-HEVC**

CD stage

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Information technology — Coding of audio-visual objects — Part 15: Carriage of network abstraction layer (NAL) unit structured video in the ISO base media file format — Amendment 2: Improvement of carriage of L-HEVC

*Change the text in section 9.6.2.1:*

*from*:

For all tracks of an L-HEVC bitstream, there shall be exactly one track among this set that carries an 'oinf' sample group. Except the tracks that carry the 'oinf' sample group, all other tracks of that L-HEVC bitstream shall have a track reference of type 'oref' to the track that carries the 'oinf' sample group they relate to.

*to*:

When an L-HEVC stream is represented by more than one video track, there shall be exactly one track among this set that carries an 'oinf' sample group. Except the tracks that carry the 'oinf' sample group, all other tracks of that L-HEVC bitstream shall have a track reference of type 'oref' to the track that carries the 'oinf' sample group they relate to. Otherwise, when an L-HEVC stream is represented by a single track, the 'oinf' sample group is not mandatory; it's presence can be mandated by a derived specification if required. If L-HEVC stream is represented by a single track and there is no 'oinf' sample group signalled, the VPS shall be in the present in the sample entry.

*Rename the existing NOTE in section 9.6.2.1 to NOTE1 and add the following note:*

NOTE2: In some earlier versions of this document, the presence of the 'oinf' sample group was mandatory for an L-HEVC bitstream stored in a single track. It is suggested to include the 'oinf' sample group for an L-HEVC bitstream stored in a single track in files and for readers that comply with such earlier versions of this document.

*Change the text in section 9.6.3*

*from:*

Every L-HEVC track, including the base track (when coded with HEVC), shall carry a 'linf' sample group.

*to:*

When an L-HEVC stream is represented by more than one video track, every L-HEVC track, including the base track (when coded with HEVC), shall carry a 'linf' sample group.

*Add this note at the end of section 9.6.3:*

NOTE: In some earlier versions of this document, the presence of the 'linf' sample group was mandatory for an L-HEVC bitstream stored in a single track. It is suggested to include the 'linf' sample group for an L-HEVC bitstream stored in a single track in files and for readers that comply with such earlier versions of this document.

*Remove this redundant text in Annex E.4 (the same text appears 2 times):*

where each *ListItem* has the following structure:

*Add a new brand definition to Annex D:*

**D.4.7 L-HEVC single track backwards compatibility brand**

The brand 'hvcs' may be present among the compatible\_brands of the FileTypeBox.

It is intended for use cases where the layered HEVC bitstream is packaged into a single track in a backwards compatible manner so that a player that can only decode the base layer (with layer\_id = 0) can still decode the video samples.

Files conformant to this brand shall obey the following constraints:

* Only a single track carrying layered HEVC bitstream is present in the file with the sample entry 'hvc1'.
* The sample entry of the 'hvc1' track shall carry the VPS.

*Replace the clause 4.19.2 with:*

aligned(8) class NnpfcSeiSampleGroupEntry() extends SampleGroupDescriptionEntry('nfcs')

{

unsigned int(32) meta\_box\_handler\_type;

unsigned int(32) num\_items;

for (i = 0; i < num\_items; i++) {

unsigned int(32) item\_id[[I]];

}

unsigned int(8) nnpfc\_sei\_data\_byte[];

}