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~~ISO/IEC JTC 1/SC 29/WG 04 MPEG VIDEO CODING~~

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC-29, *Coding of audio, picture, multimedia and hypermedia information*.

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Information technology — General video coding — Part 2: Low complexity enhancement video coding — Amendment 1: Additional levels

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Normative references

Replace "ITU-T H.273 | ISO/IEC 23091-2:2019" with "ITU-T H.273 | ISO/IEC 23091-2".

-
6.2

Replace:

The variables ShiftWidthC and ShiftHeightC are specified in Table-2, depending on the chroma format sampling structure, which is specified through chroma_format_idc and separate_colour_plane_flag. Other values of chroma_format_idc, ShiftWidthC and ShiftHeightC may be specified in the future by ISO/IEC.

with:

The variables ShiftWidthC and ShiftHeightC are specified in Table-2, depending on the chroma format sampling structure, which is specified through chroma_sampling_type.

-
7.3.9

Replace Table-13 with the following table:

Table 13 — Process payload - surface

Syntax	Descriptor
process_surface(surface) {	
if (surface.entropy_enabled_flag) {	
if (compression_type_size_per_tile == 0) {	
surface.size	mb
}	
if (surface.rle_only_flag) {	
surface.data_rle	surface.size
} else {	
surface.data_prefix_coding	surface.size
}	
}	
}	

-
7.3.12

Replace Table-16 with the following table:

Table 16 — Byte alignment syntax

Syntax	Descriptor
byte_alignment() {	
while(!byte_aligned())	
alignment_bit_equal_to_zero /* equal to 0 */	f(1)
}	

7.4.2.2

In Table-19, replace:

~~per picture (if no_enhancement_bit_flag == 0)~~

~~]~~ with:

per picture (if no_enhancement_bit_flag == 0 or temporal_signalling_present == 1)

Add the following sentence below Table-19:

If a NAL unit as specified in Sec. 7.3.2 contains more than one payload of the same payload_type (where payload_type is equal to 0, 1, or 2), the values given by the last payload of such payload_type within the NAL unit shall be used.

7.4.3.3

Replace

In order to prevent incomplete TUs, as defined in 6.3.2, custom_tile_width shall be an integer multiple of the TU size (nTbS = 2 if transform_type is equal to 0 and nTbS = 4 if transform_type is equal to 1) for each sub-layer and for each plane within a sub-layer.

with

In order to prevent incomplete entropy encoded quantized transform coefficient tiles, as defined in 9.1.1, custom_tile_width shall be an integer multiple of 64 for each sub-layer and for each plane within a sub-layer.

Replace

In order to prevent incomplete Tus, as defined in 6.3.2, custom_tile_height shall be an integer multiple of the TU size (nTbS = 2 if transform_type is equal to 0 and nTbS = 4 if transform_type is equal to 1) for each sub-layer and for each plane within a sub-layer.

with

In order to prevent incomplete entropy encoded quantized transform coefficient tiles, as defined in 9.1.1, custom_tile_height shall be an integer multiple of 64 for each sub-layer and for each plane.

Replace

planes_type specifies the planes to be processed by the decoder according to Table-25.

with

planes_type specifies the planes to be processed by the decoder according to Table_25. If chroma_sampling_type is equal to 0, planes_type shall be equal to 0.

-

7.4.3.4-

Replace:

temporal_signalling_present_flag specifies whether the temporal signalling coefficient group is present in the bitstream.

with:

temporal_signalling_present_flag specifies whether the temporal signalling coefficient group is present in the bitstream. If temporal_enabled_flag is equal to 0 or temporal_refresh_bit_flag is equal to 1, temporal_signalling_present_flag shall be equal to 0.-

-

8.3.2

Delete the following:

— variable nPlanes is derived as follows:

if (processed_planes_type_flag == 0)

 nPlanes = 1

else

 nPlanes = 3

-

Delete "data = read_byte(bitstream)" ~~in~~from the condition branch below

```
if (surfaces[planeIdx][levelIdx][layerIdx].rle_only_flag) {
    multibyte = read_multibyte(bitstream)
    surfaces[planeIdx][levelIdx][layerIdx].size = multibyte
    surfaces[planeIdx][levelIdx][layerIdx].data_rle =
        bytestream_current(bitstream)
} else {
    data = read_byte(bitstream)

    multibyte = read_multibyte(bitstream)
    surfaces[planeIdx][levelIdx][layerIdx].size = multibyte
    surfaces[planeIdx][levelIdx][layerIdx].data_prefix_coding =
        bytestream_current(bitstream)
    bytestream_seek(bitstream, surfaces[planeIdx][levelIdx][layerIdx].size)
}
```

-

Delete "data = read_byte(bitstream)" ~~in~~from the condition branch below

3

```
if (temporal_signalling_present_flag == 1) {
  if (temporal_surfaces[planeIdx].entropy_enabled_flag) {
    if (temporal_surfaces[planeIdx].rle_only_flag) {
      multibyte = read_multibyte(bitstream)
      temporal_surfaces[planeIdx].size = multibyte
      temporal_surfaces[planeIdx].data_rle = bytestream_current(bitstream)
    } else {
      data = read_byte(bitstream)
      multibyte = read_multibyte(bitstream)
      temporal_surfaces[planeIdx].size = multibyte
      temporal_surfaces[planeIdx].data_prefix_coding =
        bytestream_current(bitstream)
      bytestream_seek(bitstream, temporal_surfaces[planeIdx].size)
    }
  }
}
```

~~Remove~~

~~— variable nPlanes is derived as follows:~~

~~if (processed_planes_type_flag == 0)~~

~~— nPlanes = 1~~

~~else~~

~~— nPlanes = 3~~

~~-~~

~~8.3.3~~

~~↳ Delete the following:~~

~~— variable nPlanes is derived as follows:~~

~~f (processed_planes_type_flag == 0)~~

~~— nPlanes = 1~~

~~else~~

~~— nPlanes = 3~~

~~-~~

~~Delete the instruction "data = read_byte(bitstream)" from the condition branch below:~~