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AMENDMENT 1
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Information technology — High efficiency coding and media delivery in heterogeneous environments —

Part 2: High efficiency video coding

AMENDMENT 1: Additional colour representation code point

Technologies de l'information — Codage à haute efficacité et livraison des medias dans des environnements hétérogènes —

Partie 2: Codage vidéo à haute efficacité

AMENDEMENT 1: Point de codage de représentation de couleur supplémentaire

Reference number
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Foreword

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This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information* in collaboration with ITU-T. A technically aligned twin text is published as ITU-T H.265.

A list of all parts in the ISO/IEC 23008 series can be found on the ISO website.

Information technology — High efficiency coding and media delivery in heterogeneous environments —

Part 2:
High efficiency video coding

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Page 19, Clause 4: Abbreviated terms

Add the following additional items (interspersed with the existing items in alphabetical order):

FCC Federal Communications Commission (of the United States)

NTSC National Television System Committee (of the United States)

SMPTE Society of Motion Picture and Television Engineers

Page 446, Annex E

In E.3.1, replace the semantics of video_full_range_flag, colour_description_present_flag, colour_primaries, transfer_characteristics, and matrix_coeffs, including Tables E.3, E.4, and E.5, with the following.

video_full_range_flag indicates the black level and range of the luma and chroma signals as derived from E'_Y, E'_{PB}, and E'_{PR} or E'_R, E'_G, and E'_B real-valued component signals.

When the video_full_range_flag syntax element is not present, the value of video_full_range_flag is inferred to be equal to 0.

colour_description_present_flag equal to 1 specifies that colour_primaries, transfer_characteristics, and matrix_coeffs are present. colour_description_present_flag equal to 0 specifies that colour_primaries, transfer_characteristics, and matrix_coeffs are not present.

colour_primaries indicates the chromaticity coordinates of the source primaries as specified in Table E.3 in terms of the CIE 1931 definition of x and y as specified in ISO 11664-1.

When the colour_primaries syntax element is not present, the value of colour_primaries is inferred to be equal to 2 (the chromaticity is unspecified or is determined by the application). Values of colour_primaries that are identified as reserved in Table E.3 are reserved for future use by ITU-T | ISO/IEC and shall not be present in bitstreams conforming to this version of this document. Decoders shall interpret reserved values of colour_primaries as equivalent to the value 2.

Table E.3 — Colour primaries interpretation using the colour_primaries syntax element

Value	Primaries			Informative remark
0	Reserved			For future use by ITU-T | ISO/IEC
1	primary	x	y	Rec. ITU-R BT.709–6
	green	0.300	0.600	Rec. ITU-R BT.1361–0 conventional colour gamut system and extended colour gamut system (historical)
	blue	0.150	0.060	
	red	0.640	0.330	IEC 61966-2-1 sRGB or sYCC
	white D65	0.312 7	0.329 0	IEC 61966-2-4
				SMPTE RP 177 (1993) Annex B
2	Unspecified			Image characteristics are unknown or are determined by the application.
3	Reserved			For future use by ITU-T | ISO/IEC
4	primary	x	y	Rec. ITU-R BT.470–6 System M (historical)
	green	0.21	0.71	NTSC Recommendation for transmission standards for colour television (1953)
	blue	0.14	0.08	
	red	0.67	0.33	FCC Title 47 Code of Federal Regulations (2003) 73.682 (a) (20)
	white C	0.310	0.316	
5	primary	x	y	Rec. ITU-R BT.470–6 System B, G (historical)
	green	0.29	0.60	Rec. ITU-R BT.601–7 625
	blue	0.15	0.06	Rec. ITU-R BT.1358–0 625 (historical)
	red	0.64	0.33	Rec. ITU-R BT.1700–0 625 PAL and 625 SECAM
	white D65	0.312 7	0.329 0	
6	primary	x	y	Rec. ITU-R BT.601–7 525
	green	0.310	0.595	Rec. ITU-R BT.1358–1 525 or 625 (historical)
	blue	0.155	0.070	Rec. ITU-R BT.1700–0 NTSC
	red	0.630	0.340	SMPTE ST 170 (2004)
	white D65	0.312 7	0.329 0	(functionally the same as the value 7)
7	primary	x	y	SMPTE ST 240 (1999, historical)
	green	0.310	0.595	(functionally the same as the value 6)
	blue	0.155	0.070	
	red	0.630	0.340	
	white D65	0.312 7	0.329 0	
8	primary	x	y	Generic film (colour filters using Illuminant C)
	green	0.243	0.692 (Wratten 58)	
	blue	0.145	0.049 (Wratten 47)	
	red	0.681	0.319 (Wratten 25)	
	white C	0.310	0.316	
9	primary	x	y	Rec. ITU-R BT.2020–2
	green	0.170	0.797	Rec. ITU-R BT.2100–1
	blue	0.131	0.046	
	red	0.708	0.292	
	white D65	0.312 7	0.329 0	