INTERNATIONAL STANDARD

ISO/IEC 13818-2

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1996-05-15

AMENDMENT 5
2000-04-15

Information technology — Generic coding of moving pictures and associated audio information: Video

AMENDMENT 5

Technologies de l'information — Codage générique des images animées et du son associé: Données vidéo

AMENDEMENT 5

Reference number
ISO/IEC 13818-2:1996/Amd.5:2000(E)

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ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 734 10 79
E-mail copyright@iso.ch
Web www.iso.ch

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Foreword

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In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this Amendment may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Amendment 5 to ISO/IEC 13818-2:1996 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*, in collaboration with ITU-T. The identical text is published as ITU-T Rec. H.262/Amd.5.

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ITU-T RECOMMENDATION

INFORMATION TECHNOLOGY – GENERIC CODING OF MOVING PICTURES AND ASSOCIATED AUDIO INFORMATION: VIDEO

AMENDMENT 5

1) Clause 8

a) Replace Table 8-4 with:

Table 8-4 – Escape profile_and_level_indication identification

profile_and_level_indication	Name
10001111 to 11111111	(Reserved)
10001110	Multi-view profile @ Low level
10001101	Multi-view profile @ Main level
10001100	(Reserved)
10001011	Multi-view profile @ High1440 level
10001010	Multi-view profile @ High level
10000110 to 10001001	(Reserved)
10000101	4:2:2 profile @ Main level
10000011 to 10000100	(Reserved)
10000010	4:2:2 profile @ High level
10000000 to 10000001	(Reserved)

b) *Replace Table 8-11 with:*

Table 8-11 – Upper bounds for sampling density

Level	Spatial resolution layer		Profile						
			Simple	Main	SNR	Spatial	High	4:2:2	Multi
High	Enhancement	Samples/line Lines/frame Frames/s		1920 1152 60			1920 1152 60	1920 1152 60	1920 1152 60
	Lower	Samples/line Lines/frame Frames/s		–			960 576 30	–	1920 1152 60
High-1440	Enhancement	Samples/line Lines/frame Frames/s		1440 1152 60		1440 1152 60	1440 1152 60	–	1440 1152 60
	Lower	Samples/line Lines/frame Frames/s		–		720 576 30	720 576 30	–	1440 1152 60
Main	Enhancement	Samples/line Lines/frame Frames/s	720 576 30	720 576 30	720 576 30		720 576 30	720 608[a)] 30	720 576 30
	Lower	Samples/line Lines/frame Frames/s	–	–	–		352 288 30	–	720 576 30
Low	Enhancement	Samples/line Lines/frame Frames/s		352 288 30	352 288 30			–	352 288 30
	Lower	Samples/line Lines/frame Frames/s		–	–			–	352 288 30

In the case of single layer or SNR scaled coding, the limits specified by "Enhancement layer" apply.

a) 512 lines/frame for 525/60, 608 lines/frame for 625/50.

c) *Replace Table 8-12 with:*

Table 8-12 – Upper bounds for luminance sample rate (samples/s)

Level	Spatial resolution layer	Profile						
		Simple	Main	SNR	Spatial	High	4:2:2	Multi-view
High	Enhancement		62 668 800			62 668 800 (4:2:2) 83 558 400 (4:2:0)	62 668 800	62 668 800
	Lower		–			14 745 600 (4:2:2) 19 660 800 (4:2:0)	–	62 668 800
High-1440	Enhancement		47 001 600		47 001 600	47 001 600 (4:2:2) 62 668 800 (4:2:0)	–	47 001 600
	Lower		–		10 368 000	11 059 200 (4:2:2) 14 745 600 (4:2:0)	–	47 001 600
Main	Enhancement	10 368 000	10 368 000	10 368 000		11 059 200 (4:2:2) 14 745 600 (4:2:0)	11 059 200	10 368 000
	Lower	–	–	–		– 3 041 280 (4:2:0)	–	10 368 000
Low	Enhancement		3 041 280	3 041 280			–	3 041 280
	Lower		–	–			–	3 041 280
In the case of single layer or SNR scaled coding, the limits specified by "Enhancement layer" apply.								

d) *Replace Table 8-13 with:*

Table 8-13 – Upper bounds for bit rates (Mbit/s)

Level	Profile						
	Simple	Main	SNR	Spatial	High	4:2:2	Multi-view
High		80			100 all layers 80 middle + base layer 25 base layer	300	– 130 both layers 80 base layer
High-1440		60		60 all layers 40 middle + base layers 15 base layer	80 all layers 60 middle + base layers 20 base layer	–	– 100 both layers 60 base layer
Main	15	15	– 15 both layers 10 base layer		20 all layers 15 middle + base layer 4 base layer	50	– 25 both layers 15 base layer
Low		4	– 4 both layers 3 base layer			–	– 8 both layers 4 base layer

e) *Replace Table 8-14 with:*

Table 8-14 – VBV buffer size requirements (bits)

Level	Layer	Profile						
		Simple	Main	SNR	Spatial	High	4:2:2	Multi-view
High	Enhancement 2 Enhancement 1 Base		 9 781 248			12 222 464 9 781 248 3 047 424	 47 185 920	– 15 898 480 9 787 248
High-1440	Enhancement 2 Enhancement 1 Base		 7 340 032		7 340 032 4 882 432 1 835 008	9 781 248 7 340 032 2 441 216	 –	– 12 222 464 7 340 032
Main	Enhancement 2 Enhancement 1 Base	 1 835 008	 1 835 008	– 1 835 008 1 212 416		2 441 216 1 835 008 475 136	 9 437 184	– 3 047 424 1 835 008
Low	Enhancement 2 Enhancement 1 Base		 475 136	– 475 136 360 448			–	– 950 272 475 136