INTERNATIONAL STANDARD ISO/IEC 14496-4:2000
TECHNICAL CORRIGENDUM 1

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Information technology — Coding of audio-visual objects —

Part 4:
Conformance testing

TECHNICAL CORRIGENDUM 1

Technologies de l'information — Codage des objets audiovisuels —

Partie 4: Essai de conformité

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to International Standard ISO/IEC 14496-4:2000 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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Published in Switzerland

Replace Table 3-2 in 3.4.1.2 as follows:

Replace

“

Table 3-2 — Interpretation of syntax elements in a log file

Syntax element	Meaning	starting position	field width	Alignment
<TOS>	Indicates the type of the stream from which the bits are read acc. to Table 3-3	1	9	left
(	Separator for easier human legibility	10	1	-
<bits>	number of bits used to encode the semantic	11	3	right
,	Separator for easier manual legibility	14	1	-
<Tbits>	number of bits read altogether so far (since start of decoding process)	15	10	right
)	Separator for easier manual legibility	25	4	left
<semantic>	the textual description of the bits read, according to the syntax used in ISO/IEC 14496, see also subclause 3.4.1.2.1	29	40	left
<bits read>	the bits read, interpreted as a hexadecimal number	69	9	right
<blank>	blank characters for better legibility	78	2	-
<decoded value>	see subclause 3.4.1.2.2.	80	N/A	left

”

with

“

Table 3-2 — Interpretation of syntax elements in a log file

Syntax element	Meaning	starting position	field width	Alignment
<TOS>	Indicates the type of the stream from which the bits are read acc. to Table 3-3	1	9	left
(	Separator for easier human legibility	10	1	-
<bits>	number of bits used to encode the semantic	11	3	right
,	Separator for easier manual legibility	14	1	-
<Tbits>	number of bits read altogether so far (since start of decoding process)	15	10	right
)	Separator for easier manual legibility	25	4	left
<semantic>	the textual description of the bits read, according to the syntax used in ISO/IEC 14496, see also subclause 3.4.1.2.1	29	32	left
<bits read>	the bits read, interpreted as a hexadecimal number	61	17	right
<blank>	blank characters for better legibility	78	2	-
<decoded value>	see subclause 3.4.1.2.2	80	N/A	left

”

Replace text in 3.4.1.2.1 as follows:

Replace

“

As stated in Table 3-2, the <semantic> field shall provide for the textual description of the bits read, according to the syntax used in ISO/IEC 14496. I.e., every sophisticated ISO/IEC 14496 syntax element that is being constructed from other syntax element has to be broken down recursively to primitive syntax elements that cannot be broken down any further.

E.g., there would be no(!) <semantic> value *Transform2D*. Instead, every node would have to be broken down by its fields. The fields in turn would have to be broken down further (one exception is formed by fields of type SFBool, which cannot be broken down further). I.e., a field of type SFFloat would have to be broken down recursively until the *mantissa* and *exponent* level is reached.

”

with

“

As stated in Table 3-2, the <semantic> field shall provide for the textual description of the bits read, according to the syntax used in ISO/IEC 14496. I.e., every sophisticated ISO/IEC 14496 syntax element that is being constructed from other syntax element has to be broken down recursively to primitive syntax elements that cannot be broken down any further.

E.g., there would be no(!) <semantic> value *Transform2D*. Instead, every node would have to be broken down by its fields. The fields in turn would have to be broken down further until the level of definition where bit(), int(), float() or double() appear is reached.

”

Change subclause numbers after 7.3.1.2.4.8 as follows:

There are three subclauses for Test #9,Test#10 and Test#11 that need to have respective subclause numbers changed to 7.3.1.2.4.9, 7.3.1.2.4.10, 7.3.1.2.4.11 .

Fix reference in 7.2.2.1.2 as follows:

Line 4 of Table 7-1 has a reference that should be to Test#11, (which by above changed to) 7.3.1.2.4.11

Replace Table 3-4 in 3.4.3.1 with the following table to include new bitstreams:

“

Table 3-4 — BIFS Test Suite Information

N°	Feature	Reference of Test sequence and associated method
1.	BIFS-Anim: position 3D animation	anim-rect, anim1, anim-box1, anim-box2
2.	BIFS-Anim: position 2D animation	anim-simple, anim-rect, anim-circle, anim2
3.	BIFS-Anim: color animation	anim-box2, anim-box1, anim-box, anim1
4.	BIFS-Anim: angle animation	anim-circle, anim-rect
5.	BIFS-Anim: float animation	anim1, anim2
6.	BIFS-Anim: bound float animation	anim1, anim2
7.	BIFS-Anim: normal animation	anim1, anim-box1
8.	BIFS-Anim: size 3D animation	anim-box, anim1, anim-box2
9.	BIFS-Anim: size 2D animation	anim-simple, anim2

N°	Feature	Reference of Test sequence and associated method
10.	BIFS-Anim: integer animation	anim2 (There are no native nodes that have integer animatable fields. This example uses a PROTO. It's the only way to do integer animation and so only one example is provided for this feature).
11.	BIFS-Anim: several fields in the same node	anim-rect, anim-box
12.	BIFS-Anim: several nodes	anim-simple, anim-box
13.	BIFS-Anim: skip frame	No test provided. skipFrame is available for compatibility with FBA, but it is not used in BIFS-anim
14.	BIFS-Anim: switch of a node (isActive mask)	anim1, anim2
15.	BIFS-Anim: random access true	anim-box1, anim-box2 (any animation other than ANIM 5/anim1 or ANIM 6/anim2)
16.	BIFS-Anim: random access false	Anim1, anim2
17.	Quantization: 3D position	QuantPos3D-4bit, QuantPos3D
18.	Quantization: 2D position	QuantHead2D, QuantPos2D
19.	Quantization: drawing order	QuantDefUse, QuantDefUse1, QuantDrawOrder, QuantQPtest
20.	Quantization: color	QuantColor, QuantQPtest
21.	Quantization: texture coordinate	QuantHead2D, QuantTextureCoord
22.	Quantization: angle	QuantAngle-8bit, QuantAngle, QuantTextureCoord
23.	Quantization: scale	QuantHead2D, QuantQPtest
24.	Quantization: interpolator keys	QuantHead2D, QuantKey
25.	Quantization: normals	Normal-4bit, QuantAngle, QuantQPtest
26.	Quantization: rotations	QuantRotation, QuantQPtest, QuantNormal-4bit
27.	Quantization: object size 3D	QuantObject3D, QuantQPtest
28.	Quantization: object size 2D	QuantObject2D, QuantQPtest
29.	Quantization: linear scalar quantization	QuantQPtest, QuantObject2D
30.	Quantization: efficient float	QuantQPtest, QuantRotation
31.	Quantization: node default values	*Any streams from 17 to 33*
32.	Quantization: isLocal mode	QuantPos2D, QuantPos3D
33.	Quantization: DEF/USE	QuantDefUse, QuantDefUse1
34.	BIFS Command: insert node index	allupdates
35.	BIFS Command: insert node begin	allupdates
36.	BIFS Command: insert node end	Updatetest, Friday, allupdates
37.	BIFS Command: insert Idx value index	allupdates
38.	BIFS Command: insert Idx value begin	allupdates
39.	BIFS Command: insert Idx value end	allupdates
40.	BIFS Command: insert ROUTE	allupdates, slides2
41.	BIFS Command: delete node	Bifs-deletenode
42.	BIFS Command: delete Idx value index	Friday, allupdates
43.	BIFS Command: delete Idx value begin	allupdates
44.	BIFS Command: delete Idx value end	allupdates
45.	BIFS Command: replace node	
46.	BIFS Command: replace field	Bifs-2dfieldreplace1, Friday, allupdates
47.	BIFS Command: replace Idx value index	Pae_raise, allupdates
48.	BIFS Command: replace Idx value begin	allupdates
49.	BIFS Command: replace Idx value end	allupdates
50.	BIFS Command: replace ROUTE	

N°	Feature	Reference of Test sequence and associated method
51.	BIFS Command: replace scene	Ecran2, Updatetest
52.	BIFS Command: several commands in same AU	updatetest
53.	BIFS Scene: mask node	QuantAngle, anim-box1
54.	BIFS Scene: list node	Jerusalem, Layout, Testlayout
55.	BIFS Scene: mask MFField	QuantHead2D, QuantDrawOrder
56.	BIFS Scene: list MFField	QuantHead2D, QuantDrawOrder
57.	BIFS Scene: ROUTE	Scaling3D, Jerusalem, Ecran2
58.	SFBool	Ecran2, Updatetest
59.	SFColor	Ecran2, Updatetest
60.	SFFloat	Ecran2, Updatetest
61.	SFInt32	Ecran2, Updatetest
62.	SFRotation	Normal-4bit, QuantObject3D, jColor3D
63.	SFString	Ecran2, Updatetest
64.	SFTime	Jerusalem, OrientInterp3D
65.	SFUrl	Anchor, Audiotest
66.	SFVec2f	Ecran2, Updatetest
67.	SFVec3f	Bifs-deletenode
68.	SFImage	sfimage-1, sfimage-2
69.	SFCommandBuffer	Ecran2
70.	SFScript	Scaling3D, SFColor01, Value_changed3d, Qtvr
71.	BIFSConfig: BIFS Anim	Anim-rect, Anim-circle, Anim-simple
72.	BIFSConfig: BIFS Command	Ecran2, Jerusalem
73.	Anchor	Anchor, Frame1
74.	AnimationStream	Anim-rect, Anim-circle, Anim-simple
75.	Appearance	Bifs-deletenode, Bifs-2dfieldreplace1
76.	AudioBuffer	
77.	AudioClip	
78.	AudioDelay	
79.	AudioFX	
80.	AudioMix	
81.	AudioSource	Audiotest, Ifs
82.	AudioSwitch	
83.	Background	nist-enst/Bindable_Nodes/Background/*
84.	Background2D	
85.	Billboard	nist-enst/Grouping_Nodes/Billboard/*
86.	Bitmap	Ecran2, Updatetest, Transition
87.	Box	Bifs-deletenode, nist-enst/Geometry/Box/*
88.	Circle	Bifs-2dfieldreplace1, Ecran2, Simple
89.	Collision	nist-enst/Grouping_Nodes/Collision/*
90.	Color	nist-enst/Geometric_Properties/Color/*
91.	ColorInterpolator	Timestest, Anibut3
92.	CompositeTexture2D	Layout, CompositeTexture2D
93.	CompositeTexture3D	
94.	Conditional	Ecran2, Layout, Friday
95.	Cone	Bifs-deletenode, nist-enst/Geometry/Cone/*
96.	Coordinate	nist-enst/Geometric_Properties/Coordinate/*
97.	Coordinate2D	Layout, Updatetest
98.	CoordinateInterpolator	