
**Information technology — Coding
of audio-visual objects —**

**Part 4:
Conformance testing**

**AMENDMENT 10: Conformance extensions
for simple profile levels 4a and 5**

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Technologies de l'information — Codage des objets audiovisuels —

Partie 4: Essai de conformité

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*AMENDEMENT 10: Extensions de conformité pour niveaux 4a et 5 de
profil simple*

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Amendment 10 to ISO/IEC 14496-4:2004 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

This amendment specifies conformance tests for Levels 4a and 5 of the ISO/IEC 14496-2 Simple Profile. The bitstreams to be used for conformance testing of these levels accompany this document.

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Add 5.5.3.1.37 after subclause 5.5.3.1.36 and change the following subclauses accordingly:

5.5.3.1.37 Conformance for Simple Profile Levels 4a and 5

5.5.3.1.37.1 Test Bitstream #A6-GE19

Specification: A series of VGA (640x480) resolution P-VOPs with some periodic I-VOPs, coded at frame rate 30 FPS with data partitioning and bit rate 4000Kbps. The number of MB/s, packet size and bit rate are the maximum allowed for the profile-and-level combination. To achieve the maximum bitrate, several MBs are INTRA coded for each frame. The vbv_occupancy in the VOL header must be used to begin decode at the proper time. The VBV approaches the maximum, then approaches the minimum after removal of a large frame that is near the vbv_buffer_size.

Functional stage: VBV [ISO/IEC 14496-4:2004/Amd 10:2005](https://standards.iteh.ai/catalog/standards/sist/002c6e98-9127-452c-b203-sf723631166f/iso-iec-14496-4:2004/and-10:2005)
<https://standards.iteh.ai/catalog/standards/sist/002c6e98-9127-452c-b203-sf723631166f/iso-iec-14496-4:2004/and-10:2005>

Purpose: Check that the decoder has sufficient buffering and I/O bandwidth for Simple Profile Level 4a.

5.5.3.1.37.2 Test Bitstream #A6-GE20

Specification: A series of Euro-SDTV (720x576) resolution P-VOPs with some periodic I-VOPs, coded at frame rate 30 FPS with data partitioning and bit rate 8000Kbps. The number of MB/s, packet size and bit rate are the maximum allowed for the profile-and-level combination. To achieve the maximum bitrate, several MBs are INTRA coded for each frame. The vbv_occupancy in the VOL header must be used to begin decode at the proper time. The VBV approaches the maximum, then approaches the minimum after removal of a large frame that is near the vbv_buffer_size.

Functional stage: VBV

Purpose: Check that the decoder has sufficient buffering and I/O bandwidth for Simple Profile Level 5.

In subclause 5.5.7, add the following table after Table 10:

Table AMD10-1 – Normative Test Suites for Simple Profile Levels 4a and 5

NOTE: Each row represents a single bitstream.

Legend:

S – Bitstream is intended for functional test

D – Bitstream is intended for dynamic test

X – Bitstream is for functional and dynamic test

Categories	Bitstream	Donated by	Bitstreams Name	Simple						Error Resilient Simple Scalable			
				L0b	L1	L2	L3	L4a	L5	L0	L1	L2	
	A6-GE19	Texas Instruments	ti_vga.cmp					X					
	A6-GE20	Texas Instruments	ti_sdtv.cmp						X				

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