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

**Part 4:
Conformance testing**

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

Technologies de l'information — Codage des objets audiovisuels —

Partie 4: Essai de conformité

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

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Foreword

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The main task of the joint technical committee is to prepare International Standards. 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.

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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

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			

