
**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*

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO/IEC 2005

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

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

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.

Information technology — Coding of audio-visual objects —

Part 4: Conformance testing

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

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			

STANDARDSISO.COM : Click to view the full PDF of ISO/IEC 14496-4:2004/Amd 10:2005