INTERNATIONAL STANDARD

ISO/IEC 13818-7

Fourth edition
2006-01-15

AMENDMENT 1
2007-11-15

Corrected version
2008-05-01

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

Part 7: Advanced Audio Coding (AAC)

AMENDMENT 1: Transport of MPEG Surround in AAC

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

Partie 7: Codage du son avancé (AAC)

AMENDEMENT 1: Transport de périphérique MPEG dans AAC

IECNORM.COM : Click to view the full PDF of ISO/IEC 13818-7:2006/Amd 1:2007

Reference number
ISO/IEC 13818-7:2006/Amd.1:2007(E)

© ISO/IEC 2007

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.

IECNORM.COM : Click to view the full PDF of ISO/IEC 13818-7:2006/Amd 1:2007

COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2007

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

 © ISO/IEC 2007 – All rights reserved

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 1 to ISO/IEC 13818-7:2006 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

This corrected version incorporates a correction to the edition number on the cover page, replacing “First edition” with “Fourth edition”.

IECNORM.COM : Click to view the full PDF of ISO/IEC 13818-7:2006/Amd 1:2007

© ISO/IEC 2007 – All rights reserved

IECNORM.COM : Click to view the full PDF of ISO/IEC 13818-7:2006/Amd 1:2007

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

Part 7:
Advanced Audio Coding (AAC)

AMENDMENT 1: Transport of MPEG Surround in AAC

In the following, changes in existing text and tables are highlighted by grey background.

In subclause 6.3 extend Table 28 "Syntax of extension_payload()" as follows:

Table 28 – Syntax of extension_payload()

Syntax	No. of bits	Mnemonic
extension_payload(cnt)		
{		
extension_type;	**4**	**uimsbf**
switch(extension_type) {		
case EXT_DYNAMIC_RANGE:		
n = dynamic_range_info();		
return n;		
case EXT_SAC_DATA:		
return sac_extension_data(cnt);		
case EXT_SBR_DATA:		
return sbr_extension_data(id_aac, 0);		Note 1
case EXT_SBR_DATA_CRC:		
return sbr_extension_data(id_aac, 1);		Note 1
…		
}		

In subclause 8.8.1.2 extend Table 40 "Values of the extension_type data element" as follows:

Table 40 – Values of the extension_type data element

Symbol	Value of extension_type	Purpose
EXT_FILL	'0000'	bitstream payload filler
EXT_FILL_DATA	'0001'	bitstream payload data as filler
EXT_DYNAMIC_RANGE	'1011'	dynamic range control
EXT_SAC_DATA	'1100'	MPEG Surround
EXT_SBR_DATA	'1101'	SBR enhancement
EXT_SBR_DATA_CRC	'1110'	SBR enhancement with CRC
-	all other values	reserved

IECNORM.COM : Click to view the full PDF of ISO/IEC 13818-7:2006/Amd 1:2007

© ISO/IEC 2007 – All rights reserved

In subclause 6.3 after Table 30 add a new Table "Syntax of sac_extension_data()" as given below:

Table 30A – Syntax of sac_extension_data()

Syntax	No. of bits	Mnemonic
sac_extension_data(cnt)		
{		
ancType;	**2**	**uimsbf**
ancStart;	**1**	**uimsbf**
ancStop;	**1**	**uimsbf**
for (i=0; i<cnt-1; i++) {		
ancDataSegmentByte[i];	**8**	**bslbf**
}		
return (cnt);		
}		

After subclause 8.8.4 add a new subclause 8.8.5 as given below:

8.8.5 MPEG Surround (Spatial Audio Coding)

The syntax element sac_extension_data() is used to embed spatial audio coding side information for MPEG Surround decoding as defined in ISO/IEC 23003-1. The semantics of the syntax elements ancType, ancStart, ancStop, and ancDataSegmentByte is defined in ISO/IEC 23003-1:2007, 7.2.4.

In subclause 9.3 (Decoding process), replace:

"…from the previously decoded coefficients…"

In the first paragraph on p. 75

with:

"…from the previously determined coefficients…"

Add the following reference to the bibliography:

[4] ISO/IEC 23003-1, *Information technology — MPEG audio technologies — Part 1: MEPG Surround*

IECNORM.COM : Click to view the full PDF of ISO/IEC 13818-7:2006/Amd 1:2007

© ISO/IEC 2007 – All rights reserved