

Fourth edition  
2006-01-15

**AMENDMENT 1**  
2007-11-15

Corrected version  
2008-05-01

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**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*

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



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Published in Switzerland

## Foreword

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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".

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# 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) { <b>extension_type</b> ; 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); case EXT_SBR_DATA_CRC: return sbr_extension_data(id_aac, 1); ... }	4	uimbsf
		Note 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

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)		
{		
<b>ancType</b> ;	<b>2</b>	<b>uimsbf</b>
<b>ancStart</b> ;	<b>1</b>	<b>uimsbf</b>
<b>ancStop</b> ;	<b>1</b>	<b>uimsbf</b>
for (i=0; i<cnt-1; i++) {		
<b>ancDataSegmentByte</b> [i];	<b>8</b>	<b>bslbf</b>
}		
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: MPEG Surround*