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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

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



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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 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)		
{		
extension_type;	4	uimbsf
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

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: MPEG Surround*