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AMENDMENT 1
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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
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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*.

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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**	**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

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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*

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