INTERNATIONAL STANDARD ISO/IEC 13818-6:1998/Amd.1:2000
TECHNICAL CORRIGENDUM 1

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

Part 6:
Extensions for DSM-CC

AMENDMENT 1

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Technologies de l'information — Codage générique des images animées et des informations sonores associées —

Partie 6: Extensions pour DSM-CC

AMENDEMENT 1

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to International Standard ISO/IEC 13818-6:1998/Amd.1:2000 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information.*

In item 8), replace semantics definition of the LLCSNAP() structure by the following definition:

LLCSNAP() -- This structure shall contain the datagram according to the ISO/IEC 8802-2 Logical Link Control (LLC) and ISO/IEC 8802-1a SubNetwork Attachment Point (SNAP) specifications. In LLC Type 1 operation, unacknowledged connectionless mode, the LLC header is three bytes long and consists of a one byte Destination Service Access Point (DSAP) field, a one byte Source Service Access Point (SSAP) field, a one byte Control field. The values 0xAA in the LLC header's DSAP and SSAP fields indicate that an IEEE 802.2 SNAP header follows. The Control value of 0x03 specifies an Unnumbered Information Command PDU. The SNAP header is five bytes long and consists of a three byte Organizationally Unique Identifier (OUI) field and a two byte Protocol Identifier. The SNAP OUI value 0x00-00-00 specifies the Protocol Identifier as an EtherType or routed non-OSI protocol. The SNAP OUI of 0x00-80-C2 indicates a Bridged Protocol. When the OUI is set

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to 0x00-00-00 then the SNAP Protocol Identifier for IP is 0x08-00. For Internet Protocol datagrams, the complete LLC/SNAP header is 0xAA-AA-03-00-00-00-08-00.

In item 9), replace Table 9-4 by the following table:

Table 9-4 DSM-CC Addressable Section

Syntax	No. of bits	Mnemonic
DSMCC_addressable_section() {		
table_id	**8**	**uimsbf**
'0'	**1**	
error_detection_type	**1**	**bslbf**
reserved	**2**	**bslbf**
addressable_section_length	**12**	**uimsbf**
deviceId[7..0]	**8**	**uimsbf**
deviceId[15..8]	**8**	**uimsbf**
reserved	**2**	**bslbf**
payload_scrambling_control	**2**	**bslbf**
address_scrambling_control	**2**	**bslbf**
LLCSNAP_flag	**1**	**bslbf**
'1'	**1**	
section_number	**8**	**uimsbf**
last_section_number	**8**	**uimsbf**
deviceId[23..16]	**8**	**uimsbf**
deviceId[31..24]	**8**	**uimsbf**
deviceId[39..32]	**8**	**uimsbf**
deviceId[47..40]	**8**	**uimsbf**
if (LLCSNAP_flag == '1') {		
LLCSNAP()		
}		
else {		
for (j=0;j<N1;j++) {		
datagram_data_byte	**8**	**bslbf**
}		
}		
if (section_number == last_section_number) {		
for (j=0;j<N2;j++) {		
stuffing_byte	**8**	**bslbf**
}		
}		
if (error_detection_type == '1') {		
checksum	**32**	**uimsbf**
}		
else {		
CRC_32	**32**	**rpchof**
}		
}		
}		

In item 9), between the definition of the error_detection_type field and the definition of the deviceId field, add the following semantic definition of the addressable_section_length field:

addressable_section_length -- This 12 bit field specifies the number of remaining bytes in the DSMCC_addressable_section immediately following this field up to the end of the DSMCC_addressable_section. The value in this field shall not exceed 4093 (indicating a section maximum data length of 4084 bytes, following the last_section_number field and up to the CRC_32/checksum field).

In item 9), replace semantic definition of the datagram_data_byte field by the following definition:

datagram_data_byte -- This 8 bit field shall contain a byte of the datagram.

In item 9), replace semantic definition of the CRC_32 field by the following definition:

CRC_32 -- This 32-bit field shall be set as defined in ISO/IEC 13818-1:2000 Annex A. This field is only present when error_detection_type is set to '0'.

In item 9), replace semantic definition of the checksum field by the following definition:

checksum -- A 32 bit checksum calculated over the entire DSMCC_addressable_section. The checksum shall be calculated by treating the DSMCC_addressable_section as a sequence of 32-bit integers and performing one's complement addition over all the integers, most significant byte first, then taking the one's complement of the result. For the purpose of computing the checksum, the value of the checksum field shall be considered 0. If the message length is not a multiple of four bytes, the message shall be considered to be appended with zeroed bytes for the purpose of checksum calculation only. If the computed result is 0, then the result shall be set to 0xFFFFFFFF (the alternative value for a one's complement representation of 0). In cases where a checksum is not desired, the value of this field shall be set to '0' to indicate the checksum has not been calculated. This feature is useful for networks where error detection is provided at a protocol layer lower than the MPEG-2 Transport Stream. This field is only present when error_detection_type is set to '1'.

In item 10), replace Table 9-7 by the following table:

Table 9-7 DSM-CC Stream Types

stream_type	Description
0x00-0x09	ITU-T Rec. H.222.0 | ISO/IEC 13818-1 defined
0x0A	Multi-protocol Encapsulation
0x0B	DSM-CC U-N Messages
0x0C	DSM-CC Stream Descriptors
0x0D	DSM-CC Sections (any type, including private data) or DSM-CC Addressable Sections
0x0E - 0x7F	ITU-T Rec. H.222.0 | ISO/IEC 13818-1:2000 reserved
0x80 - 0xFF	User private