About This Standard

Current Status *Mandated*

Standard Identifier **ISO/IEC 13818-3:1998**

Title of Standard

Information technology - Generic coding of moving pictures and associated audio information, Part 3: Audio, 1998 (also known as MPEG-2 Audio)

Standards History

Introduced to Registry	Date Emerging	Date Mandated	Last Status Update	Last Status Review	Inactive/ Retired
2003-04-04	n/a	2003-04-04	2003-04-04	2009-03-26	n/a

Replaced ISO/IEC 13818-3

Standards Body ISO Broken Link?

URL to Access or Acquire http://www.ansi.org

Working Group

Primary Owner Geospatial Intelligence (GWG)

Secondary Interest No Secondary Interest

Service Areas Audio Data Interchange
GEOINT: Motion Imagery

KIPs No KIP Found

Standard Applicability

2009-03-27

Audio for MI systems specifies data formats for the exchange of the digital sound track associated with video in compressed and non-compressed formats. For audio systems associated with video imagery applications, the audio subsections of the Motion Imagery Standards Profile (MISP) apply. Application areas for MPEG-2 include: - Internet - DVD - Satellite video - airborne video - surveillance - reconnaissance - intelligence - targeting - Scientific and Industrial - Digital Cinema - Image archives and databases There are a number of standards competing with MPEG-2, but MPEG-2 is by far the most widely used. See http://www.gwg.nga.mil/misb/

2006-02-21

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2003-10-03

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Standard Abstract

2009-03-27

ISO/IEC 13818-3 defines the audio standards for the MPEG-2 system. It allows the compression of the audio stream to an amount manageable by many communications systems. ISO/IEC 13818-2 - Specifies extended decoding processes for converting compressed image data to reconstructed image data; - Specifies an extended code stream syntax containing information for interpreting the compressed image data; - Provides guidance on extended encoding processes for converting source image data to compressed image data; - Provides guidance on how to implement these processes in practice.

2006-02-21

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2003-04-04

Used for compressed digital audio systems. MPEG-2 is an open international standard currently in 9 parts. Part 1 addresses the combining of one or more elementary streams of video and audio as well as other data into single or multiple streams suitable for storage or transmission; each is optimized for a different set of applications. Part 2 builds on the video compression capabilities of the MPEG-1 standard to offer a wide range of coding tools, including pictures with a color resolution of 4:2:2 and a higher bitrate. Part 3 is a backward-compatible multichannel extension of the MPEG-1 Audio standard. Part 4 specifies how tests can be designed to verify whether bitstreams and decoders meet the requirements specified in parts 1, 2, and 3. Part 5, technically not a standard but a technical report, gives a full software implementation of the first three parts of the MPEG-1 standard. Part 6, Digital Storage Media Command and Control (DSM-CC) specifies a set of protocols which provides the control functions and operations specific to managing MPEG-1 and MPEG-2 bitstreams. Part 7 specifies a multichannel audio coding algorithm not constrained to be backward-compatible with MPEG-2 Audio. Part 8 was discontinued for lack of industry interest. Part 9 specifies the real-time interface (RTI) to transport stream decoders which may be used to adapt to all appropriate networks carrying transport streams. And, finally, Part 10 will address the conformance testing of DSM-CC.

Profiling Questions

Audio Data Interchange	• Does your system support Audio for Video Imagery Systems?
GEOINT: Motion Imagery	• Does your system use MPEG-2 Systems for standard and high-definition compression or does your system require support for compressed video?

Products Incorporating This Standard

Companies with commercially available implementations/products include: Adobe, Analog Devices, Avid, Aware, BAE, Intel, ITT Industries, HP, Kodak, Leitch, Matrox Imaging, Motorola, NEC, PAR Government Systems, Panasonic, Pinnacle, Quantel, Ricoh, Scientific Atlanta, Siemens, Sony, Snell & Wilcox, Telestream, Tales, Texas Instruments, Thomson, Yahoo, and many others. Non-native (plug-in) software is also available for Internet Explorer, Netscape and Windows Media 9 Series.
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Relevant Information

This citation authored by the GWG Motion Imagery Standards Board (MISB).

Implementation Guidance

None

Standard Selection Criteria

Interoperability/Supportability

MPEG-2 is still the most widely-used video compression today. DVDs, satellite delivered services such as DirecTV and DISH, cable delivered services and the new over-the-air digital broadcast services use MPEG-2. MPEG-2 decoders are provided with all computer systems that have DVD readers. The DoD has many systems that employ MPEG-2 and they will continue using MPEG-2 in the distant future. MPEG-2 video and audio compression have provided the reduction in data to allow motion imagery to be widely used in military and civilian applications.

Technical Maturity

The international standard MPEG-2, completed in 1995, is the most widely implemented video technology standard in the history of ISO/IEC. DVDs, satellite delivered services such as DirecTV and DISH, cable delivered services and the new over-the-air digital broadcast services use MPEG-2. MPEG-2 decoders are provided with all computer systems that have DVD readers. The MPEG-2 audio compression standard is so widely deployed that it will be many years before it will be significantly replaced.

Public Availability

Available for purchase from the ISO Store (online): http://www.iso.org/iso/en/prods-services/ISOstore/store.html

Implementability

MPEG-2 is used by almost all DOD and Intelligence organizations who have video requirements. DVDs, satellite delivered services such as DirecTV and DISH, cable delivered services and the new over-the-air digital broadcast services use MPEG-2. MPEG-2 audio decoders are provided with all computer systems that have DVD readers.

Authority

ISO/IEC JTC 1/SC 29, Coding of audio, picture, multimedia and hypermedia information, developed and maintains this standard. This standard has been adopted by the DoD/IC Motion Imagery Standards Board (MISB) since 1996 and the MISB is the DOD/IC focal point for the open process of maintaining and future development for this standard at ISO/IEC. http://www.gwg.nga.mil/misb/

Standard Type	Non-Military
Standard Classification	Unclassified
Keywords for Search	Audio, IR, ISO/IEC 13818-3, J2K, JPEG, JPEG2000, NITF, NITFS, compression, hyperspectral, interchange, motion imagery, multispectral, music, raster, sound