

Australian/New Zealand Standard™

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

Part 5: Software simulation

AS/NZS 13818.5:1999

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee IT-001, Information Systems—Interconnections. It was approved on behalf of the Council of Standards Australia on 16 February 1999 and on behalf of the Council of Standards New Zealand on 31 January 1999. It was published on 5 May 1999.

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Australian/New Zealand Standard™

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

Part 5: Software simulation

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee IT-001, Information Systems—Interconnection. It is identical with, and has been reproduced from, ISO/IEC 13818-5:1997, *Information technology—Generic coding of moving pictures and associated audio information*, Part 5: *Software simulation*.

Amendment No.1 (December 2002) is identical to ISO/IEC 13818-5:1997/Amendment No.1:1999, Advanced Audio Coding (AAC) and has been bound at the end of this Standard. The amendment relates to Clauses 1 and 5 and Annex A.

The objective of this Standard is to supply designers of video and audio compression with a C language software simulation of an encoder and decoder for AS/NZS 13818.1:1997, AS/NZS 13818.2:1997 and AS/NZS 13818.3:1997.

The following three disks are included with this Standard:

- (a) Disk 1—Systems and video files.
- (b) Disks 2 and 3—Audio files.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard, whereas an ‘informative’ annex is only for information and guidance.

As this Standard is reproduced from an International Standard, the following applies:

- (i) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (ii) In the source text ‘this part of ISO/IEC TR 13818’ should read ‘this Australian/New Zealand Standard’.
- (iii) A full point should be substituted for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to equivalent Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian/New Zealand Australian or Australian/New Zealand Standard</i>	
IEC		AS	
461	Time and control code for video tape recordings	—	
908	Compact disk digital audio system	3738	Compact disc digital audio system
ISO			
639	Code for the representation of names of languages	2632	Codes for the representation of names of countries
8859	Information processing—8-bit single-byte coded graphic character sets	—	
8859-1	Part 1: Latin alphabet No.1	—	
ISO/IEC		AS/NZS	
10918	Information technology—Digital compression and coding of continuous-tone still images	4473	Information technology—Digital compression and coding of continuous-tone still images
10918-1	Part 1: Requirements and guidelines	4473.1	Part 1: Requirements and guidelines

ISO/IEC		AS/NZS	
11172	Information technology—Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s	4230	Information technology—Coding of moving pictures and associated audio for digital storage media at up to about 1.5 Mbit/s
11172-1	Part 1: Systems	4230.1	Part 1: Systems
11172-2	Part 2: Video	4230.2	Part 2: Video
11172-3	Part 3: Audio	4230.3	Part 3: Audio
11172-4	Part 4: Conformance testing	4230.4	Part 4: Conformance testing
13818	Information technology—Generic coding of moving pictures and associated audio information	13818	Information technology—Generic coding of moving pictures and associated audio information
13818-1	Part 1: Systems	13818.1	Part 1: Systems
13818-2	Part 2: Video	13818.2	Part 2: Video
13818-3	Part 3: Audio	13818.3	Part 3: Audio
CCIR			
Volume X and XI Part 3 Recommendation 648: Recording of audio signals		—	
Volume X and XI Part 3 Report 955-2: Sound broadcasting by satellite for portable and mobile receivers, including Annex IV Summary description of advanced digital system II		—	
IEEE			
Standard Specifications for the Implementations of 8 by 8 Inverse Discrete Cosine Transform, IEEE Std 1180-1990, December 6, 1990		—	
ITU-T			
Recommendation H.261 (Formerly CCITT Recommendation H.261) 'Codec for audiovisual services at $p \times 64$ kbit/s' Geneva, 1990		—	

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AUSTRALIAN/NEW ZEALAND STANDARD

Information technology — Generic coding of moving pictures and associated audio information — Part 5: Software simulation

1 General

1.1 Scope

This part of ISO/IEC 13818 provides a C language software simulation of an encoder and decoder for Part 1 (Systems), Part 2 (Video), and Part 3 (Audio) of ISO/IEC 13818.

1.2 References

ISO 639:1988, *Code for the representation of names of languages*.

ISO 8859-1:1987, *Information processing - 8-bit single-byte coded graphic character sets - Part 1: Latin alphabet No. 1*.

ISO/IEC 10918-1:1994, *Information technology - Digital compression and coding of continuous-tone still images: Requirements and guidelines*. (See also ITU-T Rec. T.81.)

ISO/IEC 11172-1:1993, *Information technology - Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s - Part 1: Systems*.

ISO/IEC 11172-2:1993, *Information technology - Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s - Part 2: Video*.

ISO/IEC 11172-3:1993, *Information technology - Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s - Part 3: Audio*.

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ISO/IEC 11172-5:—¹⁾, *Information technology - Coding of moving pictures and associated audio for digital storage media at up to about 1,5 Mbit/s - Part 5: Software simulation*.

ISO/IEC 13818-1:1996, *Information technology - Generic coding of moving pictures and associated audio information : Systems*. (see also ITU-T Rec. H.222.0)

ISO/IEC 13818-2:1996, *Information technology - Generic coding of moving pictures and associated audio information : Video*. (see also ITU-T Rec. H.262)

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