

Australian Standard™

**Information technology—Multimedia
framework (MPEG-21)**

Part 9: File Format

STANDARDS
Australia



This Australian Standard was prepared by Committee IT-029, Coded Representation of Picture, Audio and Multimedia/Hypermedia Information. It was approved on behalf of the Council of Standards Australia on 2 August 2005.
This Standard was published on 29 August 2005.

The following are represented on Committee IT-029:

Australian Broadcasting Authority
Australian Broadcasting Corporation
Australian Consumers' Association
Australian Subscription Television and Radio Association
CSIRO Information and Communication Technologies Centre
Department of Defence (Australia)
Free TV Australia
Special Broadcasting Service
The University of New South Wales
University of Wollongong
Victoria University of Technology

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 05192.

Australian Standard™

**Information technology—Multimedia
framework (MPEG-21)**

Part 9: File Format

First published as AS ISO/IEC 21000.9—2005.

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 6833 4

PREFACE

This Standard was prepared by the Standards Australia Committee IT-029, Coded Representation of Picture, Audio and Multimedia/Hypermedia Information.

This Standard is identical with, and has been reproduced from ISO/IEC 21000-9:2005, *Information technology—Multimedia framework (MPEG-21) Part 9: File Format*.

The objective of this Standard is to provide the Australian multimedia design industry with an MPEG-21 file format to enable packaging of MPEG-21 documents in a form that allows for interchange, edit, and ‘playback’ of digital items.

This Standard is Part 9 of AS ISO/IEC 21000, *Information technology—Multimedia framework (MPEG-21)*, which is published in parts as follows:

- Part 2: Digital Item Declaration
- Part 3: Digital Item Identification
- Part 5: Rights Expression Language
- Part 6: Rights Data Dictionary
- Part 7: Digital Item Adaption
- Part 9: File Format (this Standard)

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

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

- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text ‘this International Standard’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

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

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO/IEC		AS ISO/IEC	
14496	Information technology—Coding of audio-visual objects	14496	Information technology—Coding of audio-visual objects
14496-12	Part 12: ISO base media file format	14496.12	Part 12: ISO base media file format
21000	Information technology—Multimedia framework (MPEG-21)	21000	Information technology—Multimedia framework (MPEG-21)
21000-2	Part 2: Digital Item Declaration	21000.2	Part 2: Digital Item Declaration

INTRODUCTION

The MPEG-21 File Format is designed to contain a base MPEG-21 XML document with some or all of its ancillary resources, potentially in a single package.

It forms part of a family of specifications which are box-structured, and is built using tools from the ISO Base Media File Format, specifically those that provide the unified structural approach to both static meta-data (untimed meta-data) and MPEG-21 integrated document handling.

Currently in preview, click buy full version

AUSTRALIAN STANDARD

1 Scope

This International Standard specifies the MPEG-21 file format, in which an MPEG-21 XML document (e.g. Digital Item Declaration (DID)) and some or all of its referenced content can be placed in a single 'content package' file. This enables the interchange, editing, and 'playback' of MPEG-21 documents.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 14496-12, *Information technology — Coding of audio-visual objects — Part 12: ISO base media file format*

ISO/IEC 21000-2, *Information technology — Multimedia framework (MPEG-21) — Part 2: Digital Item Declaration*

3 File Format

3.1 Basic Structure

An MPEG-21 file is an object-structured file as defined in the ISO Base Media File Format, sub-clause 4. The file-type ('ftyp') box specified there is mandatory.

It uses the following other boxes from that format. Section numbers refer to subclauses of The ISO Base Media File Format, Specification (as amended by amendment 1). Mandatory boxes are marked with an asterisk (*).

ftyp				*	4.3	<i>file type and compatibility</i>
meta					8.2	<i>media data container</i>
free					8.24	<i>free space</i>
skip					8.24	<i>free space</i>
meta				*	8.44.1	<i>metadata</i>
hdlr				*	8.9	<i>handler, declares the metadata (handler) type</i>
dinf					8.12	<i>data information box, container</i>
		dref			8.13	<i>data reference box, declares source(s) of metadata items</i>
ipmc					8.45.4	<i>IPMP Control Box</i>
iloc					8.44.3	<i>item location</i>
ipro					8.44.5	<i>item protection</i>
		sinf			8.45.1	<i>protection scheme information box</i>
			frma		8.45.2	<i>original format box</i>