This is a preview - click here to buy the full publication

INTERNATIONAL STANDARD

ISO/IEC 14496-30

First edition 2014-03-15

Information technology — Coding of audio-visual objects —

Part 30:

Timed text and other visual overlays in ISO base media file format

Technologies de l'information — Codage des objets audiovisuels — Partie 30: Texte temporisé et autres recouvrements visuels dans le format ISQ de base pour les fichiers médias







COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Foreword		Page
2	Normative references	1
3	Terms and definitions	1
4	Abbreviated terms	2
5	General Definitions 5.1 Layout 5.2 Timing 5.3 Language 5.4 Resources shared by multiple samples	
6	Timed Text Markup Language (TTML) 6.1 Introduction 6.2 Layout 6.3 Timing 6.4 Track format 6.5 Sample entry format 6.6 Sample format 6.7 Additional Considerations	
7	7.2 Layout 7.3 Timing	9
Bibl	liography	

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

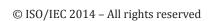
Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 14496-30 was prepared by Joint Technical Committee ISO/IEC JTC 1, Information technology, Subcommittee SC 29, Coding of audio, picture, multimedia and hypermedia information.

ISO/IEC 14496 consists of the following parts, under the general title *Information technology — Coding of audio-visual objects*:

- Part 1: Systems
- Part 2: Visual
- Part 3: Audio
- Part 4: Conformance testing
- Part 5: Reference software
- Part 6: Delivery Multimedia Integration Framework (DMIF)
- Part 7: Optimized reference software for coding of audio-visual objects [Technical Report]
- Part 8: Carriage of ISOXIEC 14496 contents over IP networks
- Part 9: Reference hardware description [Technical Report]
- Part 10: Advanced Video Coding
- Part 11: Scene description and application engine
- Part 12: ISO base media file format
- Part 13: Intellectual Property Management and Protection (IPMP) extensions
- Part 14: MP4 file format
- Part 15: Advanced Video Coding (AVC) file format
- Part 16: Animation Framework eXtension (AFX)
- Part 17: Streaming text format
- Part 18: Font compression and streaming

- Part 19: Synthesized texture stream
- Part 20: Lightweight Application Scene Representation (LASeR) and Simple Aggregation Format (SAF)
- Part 21: MPEG-J Graphics Framework eXtensions (GFX)
- Part 22: Open Font Format
- Part 23: Symbolic Music Representation
- Part 24: Audio and systems interaction [Technical Report]
- Part 25: 3D Graphics Compression Model
- Part 26: Audio conformance
- Part 27: 3D Graphics conformance
- Part 28: Composite font representation
- Part 29: Web video coding
- Part 30: Timed text and other visual overlays in ISO base media file format.



Introduction

This part of ISO/IEC 14496 defines a storage format based on, and compatible with, the ISO Base Media File Format (ISO/IEC 14496-12 and ISO/IEC 15444-12), which is used by the MP4 file format (ISO/IEC 14496-14) and the Motion JPEG 2000 file format (ISO/IEC 15444-3) among others. This part of ISO/IEC 14496 enables timed text and subtitle streams to

- be used in conjunction with other media streams, such as audio or video,
- be used in an MPEG-4 systems environment, if desired,
- be formatted for delivery by a streaming server, using hint tracks, and



Information technology — Coding of audio-visual objects —

Part 30:

Timed text and other visual overlays in ISO base media file format

1 Scope

This part of ISO/IEC 14496 describes the carriage of some forms of timed text and subtitle streams in files based on the ISO base media file format (ISO/IEC 14496-12). The documentation of these forms does not preclude other definition of carriage of timed text or subtitles; see, for example, 3GPP Timed Text (3GPP TS 26.245).

2 Normative references

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

W3C Recommendation, Timed Text Markup Language 1.0, Second Edition¹⁾

ISO/IEC 14496-12, Information technology — Coding of audio-visual objects — Part 12: ISO base media file format²)

W3C Community Group Report, WebVTT: The Web Video Text Tracks Format³)

3GPP TS 26.245, Transparent end to-end Pocket switched Streaming Service (PSS); Timed text format

IETF RFC 3986, Uniform Resource Identifier (URI): Generic Syntax

¹⁾ http://www.w3.org/TR/ttaf1-dfxp/

²⁾ ISO/IEC 14496-12 is technically identical to ISO/IEC 15444-12.

³⁾ http://www.w3.org/2013/07/webvtt.html