AS ISO/IEC 14496.17—2006

Australian Standard™

Information technology—Coding of audio-visual objects

Part 17: Streaming text format

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 19 April 2006.
This Standard was published on 8 May 2006.

The following are represented on Committee IT-029:

Australian Broadcasting Authority (ABA)
Australian Broadcasting Corporation (ABC)
Australian Consumers Association
Australian Subscription Television
CSIRO Mathematical & Information Services
Department of Defence (Australia)
Free TV Australia
School of Computer Science and Mathematics
Victoria University of Technology
Special Broadcasting Service (SBS)
The University of New South Wales
University of Wollongong

This Standard was issued in draft form for comment as DR 06075.

Australian Standard™

Information technology—Coding of audio-visual objects

Part 17: Streaming text format

First published as AS ISO/IEC 14496.17—2006.

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

ISBN 0 7337 7398 2

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 14496-17:2006, *Information technology—Coding of audio-visual objects,* Part 17*: Streaming text format*.

The objective of this Standard is to provide the Australian multimedia industry with a generic method for coding of text at very low bitrate, for creation of subtitles and karaoke song texts to be coded and transported as separate text streams for presentation jointly with other components of an audiovisual presentation for use in mobile services over IP.

Standards Australia is in the process of adopting most of ISO/IEC 14496 series Standards. Refer to the website for current list.

The terms 'normative' and 'informative' are used 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:

(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:

Reference to International Standard		*Australian Standard*	
ISO/IEC		AS ISO/IEC	
14496	Information technology – Coding of audio-visual objects	14496	Information technology – Coding of audio-visual objects
14496-18	Part 18: Font compression and streaming	14496.18	Part 18: Font compression and streaming

Only international references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

CONTENTS

Page

INTRODUCTION

This International Standard was developed in response to the need for a generic method for coding of text at very low bitrate as one of the multimedia components within audiovisual presentations. This International Standard allows for example subtitles and Karaoke song texts to be coded and transported as separate text streams for presentation jointly with other components of an audiovisual presentation at bitrates that are sufficently low for use in mobile services over IP.

AUSTRALIAN STANDARD

Information technology — Coding of audio-visual objects —

Part 17:
Streaming text format

1 Scope

This International Standard specifies the coded representation of textual information for timed presentation on screens. The text may be streamed in association with video and audio, in which case the text may represent subtitles e.g. with translations of the associated audio in another language, or as an aid to the hard of hearing; another example is the text of a song in a Karaoke application. However, the text may also be streamed as a stand-alone application without any associated video and audio. The streaming text format is specified in a transport agnostic manner, so as to allow transport over a large variety of transport means, while providing a reasonable level of random access and error robustness.

The text streams are defined as byte streams that are capable of carrying text access units of a specified format, optionally interleaved with data needed for the decoding of the text stream. The format of text streams and text access units is specified, as well as signaling and decoding of text streams.

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 14496-18:2004, *Information technology — Coding of audio-visual objects — Part 18: Font compression and streaming*

3GPP TS 26.245: 2003, Timed text format (Release 6)

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
text stream
byte stream capable of carrying text access units of a specified format, optionally interleaved with data needed for the decoding of the text stream

3.2
text access unit
individually accessible portion of data within a text stream

NOTE Each text access unit contains the coded representation of text data. For presentation, the text access unit can be associated with a single time stamp.