

PD ISO/IEC TS 30135-5:2014



BSI Standards Publication

# Information technology — Digital publishing — EPUB3

Part 5: Media Overlay

**bsi.**

...making excellence a habit.™

**National foreword**

This Published Document is the UK implementation of ISO/IEC TS 30135-5:2014.

The user's attention is drawn to the fact that the UK committee voted against this document at the enquiry stage. While considering the specification of EPUB to be technically sound, the committee had a number of concerns with the editorial quality of the specification, specifically the grouping of terms and definitions, the use of cross-references between parts, and the typographic layout of the document. The UK committee were concerned that this could present obstacles to interpretation by any user who had not participated in the development of EPUB and was unfamiliar with assumptions and interpretations made by other users.

The UK participation in its preparation was entrusted to Technical Committee ICT/-/1, Information systems co-ordination.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2015.

Published by BSI Standards Limited 2015

ISBN 978 0 580 82303 9

ICS 35.240.30

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 January 2015.

**Amendments/corrigenda issued since publication**

Date	Text affected
------	---------------

---

---

---

**Information technology — Digital  
publishing — EPUB3 —**

**Part 5:  
Media Overlay**

*Technologies de l'information — Publications numériques — EPUB3 —  
Partie 5: Superposition de 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](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

## 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.

In other circumstances, particularly when there is an urgent market requirement for such documents, the joint technical committee may decide to publish an ISO/IEC Technical Specification (ISO/IEC TS), which represents an agreement between the members of the joint technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/IEC TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/IEC TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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 TS 30135 series were prepared by Korean Agency for Technology and Standards (as KS X 6070 series) with International Digital Publishing Forum and were adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, Information technology, in parallel with its approval by the national bodies of ISO and IEC.

ISO/IEC TS 30135 consists of the following parts, under the general title *Information technology — Document description and processing languages — EPUB 3*:

- *Part 1: Overview*
- *Part 2: Publications*
- *Part 3: Content Documents*
- *Part 4: Open Container Format*
- *Part 5: Media Overlay*
- *Part 6: Canonical Fragment Identifier*
- *Part 7: Fixed-Layout Documents*

# EPUB Media Overlays 3.0



Recommended Specification 11 October 2011

## THIS VERSION

<http://www.idpf.org/epub/30/spec/epub30-mediaoverlays-20111011.html>

## LATEST VERSION

<http://www.idpf.org/epub/30/spec/epub30-mediaoverlays.html>

## PREVIOUS VERSION

<http://www.idpf.org/epub/30/spec/epub30-mediaoverlays-20110908.html>

*A diff of changes from the previous draft is available at [this link](#).*

*Please refer to the [errata](#) for this document, which may include some normative corrections.*

Copyright © 2010, 2011 International Digital Publishing Forum™

All rights reserved. This work is protected under Title 17 of the United States Code. Reproduction and dissemination of this work with changes is prohibited except with the written permission of the [International Digital Publishing Forum \(IDPF\)](#).

EPUB is a registered trademark of the International Digital Publishing Forum.

## Editors

Marisa DeMeglio, DAISY Consortium

Daniel Weck, DAISY Consortium

## TABLE OF CONTENTS

### [1. Overview](#)

- [1.1. Purpose and Scope](#)
- [1.2. Relationship to Other Specifications](#)
- [1.3. Terminology](#)
- [1.4. Conformance Statements](#)

### [2. Media Overlay Document Definition](#)

- [2.1. Introduction](#)
- [2.2. Content Conformance](#)
- [2.3. Reading System Conformance](#)
- [2.4. Media Overlay Document Definition](#)
  - [2.4.1. The `smil` Element](#)
  - [2.4.2. The `head` Element](#)
  - [2.4.3. The `metadata` Element](#)
  - [2.4.4. The `body` Element](#)
  - [2.4.5. The `seq` Element](#)
  - [2.4.6. The `par` Element](#)
  - [2.4.7. The `text` Element](#)
  - [2.4.8. The `audio` Element](#)

### [3. Creating Media Overlays](#)

- [3.1. Overview](#)
- [3.2. Relationship to the EPUB Content Document](#)
  - [3.2.1. Structure](#)
  - [3.2.2. Granularity](#)
  - [3.2.3. Embedded Audio and Video](#)

- [3.2.4. Text-to-Speech](#)
- [3.3. Semantic Inflection](#)
- [3.4. Associating Style Information](#)
- [3.5. Packaging](#)
  - [3.5.1. Including Media Overlays](#)
  - [3.5.2. Media Overlays Metadata Vocabulary](#)
- [4. Playback Behaviors](#)
  - [4.1. Loading the Media Overlay](#)
  - [4.2. Basic Playback](#)
    - [4.2.1. Timing and Synchronization](#)
    - [4.2.2. Rendering Audio](#)
    - [4.2.3. Rendering EPUB Content Document Elements](#)
  - [4.3. Interacting with the EPUB Content Document](#)
    - [4.3.1. Navigation](#)
    - [4.3.2. Embedded Audio and Video](#)
    - [4.3.3. Text-to-Speech](#)
  - [4.4. Skippability and Escapability](#)
    - [4.4.1. Skippability](#)
    - [4.4.2. Escapability](#)
- [A. Media Overlays Schema](#)
  - [A.1. Using the Media Overlays Schema](#)
- [B. Examples of Clock Values](#)
- [C. Acknowledgements and Contributors](#)
- [References](#)

## > 1 Overview

---

### > 1.1 Purpose and Scope

#### **This section is informative**

This specification, EPUB Media Overlays 3.0, defines a usage of [SMIL] (Synchronized Multimedia Integration Language), the Package Document, the EPUB® Style Sheet, and the EPUB Content Document for representation of audio synchronized with the EPUB Content Document.

This specification is one of a family of related specifications that compose EPUB 3, the third major revision of an interchange and delivery format for digital publications based on XML and Web Standards. It is meant to be read and understood in concert with the other specifications that make up EPUB 3:

- The EPUB 3 Overview [EPUB3Overview], which provides an informative overview of EPUB and a roadmap to the rest of the EPUB 3 documents. The Overview should be read first.
- EPUB Publications 3.0 [Publications30], which defines publication-level semantics and overarching conformance requirements for EPUB Publications.
- EPUB Content Documents 3.0 [ContentDocs30], which defines profiles of XHTML, SVG and CSS for use in the context of EPUB Publications.
- EPUB Open Container Format (OCF) 3.0 [OCF3], which defines a file format and processing model for encapsulating a set of related resources into a single-file (ZIP) EPUB Container.

### > 1.2 Relationship to Other Specifications

#### **This section is informative**