

# INTERNATIONAL STANDARD



**Audio, video multimedia systems and equipment – Multimedia e-publishing and e-book technologies – Raster-graphics image-based e-books**



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INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

ICS 33.160.99; 35.140; 35.240.30

ISBN 978-2-8322-4490-6

**Warning! Make sure that you obtained this publication from an authorized distributor.**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

# **AUDIO, VIDEO MULTIMEDIA SYSTEMS AND EQUIPMENT – MULTIMEDIA E-PUBLISHING AND E-BOOK TECHNOLOGIES – RASTER-GRAPHICS IMAGE-BASED E-BOOKS**

## FOREWORD

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The text of this International Standard is based on the following documents:

CDV	Report on voting
100/2817/CDV	100/2918/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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- withdrawn,
- replaced by a revised edition, or
- amended.

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## INTRODUCTION

Scanning of existing printed books is presently carried out widely to store their content in an electronic format: raster-graphics image-based e-books. The scanning includes number of parameters and sometimes results in poor-quality scanned data due to inappropriate parameter settings.

The scanning devices with storage memory and automatic document feeders enable swift production of raster-graphics image-based e-books with a brief procedure that does not require advanced skills and knowledge.

Scanning schemes can have many attributes which affect to the quality of raster-graphics image-based e-books, such as environmental conditions, sheet cutting/scanning operation, resolution, highlight washout point, tone curve adjustment/black point setup, post-processing and encoding. For example, inadequate selection of the scanning resolution can cause moiré in halftone images and discontinuation of lines in text images. The purpose of this document is to specify a scanning scheme for developing raster-graphics image-based e-books. When conforming to this document, a reasonable quality of raster-graphics image-based e-books is to be expected.



# AUDIO, VIDEO MULTIMEDIA SYSTEMS AND EQUIPMENT – MULTIMEDIA E-PUBLISHING AND E-BOOK TECHNOLOGIES – RASTER-GRAPHICS IMAGE-BASED E-BOOKS

## 1 Scope

This document specifies the scanning scheme to develop raster-graphics image-based e-books from existing printed books.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 61966-2-1, *Multimedia systems and equipment – Colour measurement and management – Part 2-1: Colour management – Default RGB colour space – sRGB*

ISO 12639, *Graphic technology – Prepress digital data exchange – Tag image file format for image technology (TIFF/IT)*

## 3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 3.1

#### **bitmap image of sourcebook**

two-dimensional raster data of each page of a sourcebook that can be aligned in exactly same page order as the sourcebook

### 3.2

#### **raster-graphics image-based e-book**

category of an e-book which consists of the bitmap image of sourcebook

### 3.3

#### **sourcebook**

printed book to be scanned

## 4 Raster-graphic image-based e-book

### 4.1 General

The creation sequence for raster-graphics image-based e-books is shown in Figure 1.