BS EN 62665:2016

BSI Standards Publication

Multimedia systems and equipment — Multimedia e-publishing and e-books technologies — Texture map for auditory presentation of printed texts

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National foreword

This British Standard is the UK implementation of EN 62665:2016. It is identical to IEC 62665:2015. It supersedes BS EN 62665:2012 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EPL/100, Audio, video and multimedia systems and equipment.

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.

Published by BSI Standards Limited 2016

ISBN 978 0 580 89615 6
ICS 33.160.60; 35.240.20; 35.240.30

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

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2016.

Amendments/corrigenda issued since publication

Date	Text affected

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62665

March 2016

ICS 33.160.60; 35.240.20; 35.240.30

Supersedes EN 62665:2012

English Version

Multimedia systems and equipment - Multimedia e-publishing and e-books technologies - Texture map for auditory presentation of printed texts (IEC 62665:2015)

Systèmes et appareils multimédia - Technologies de l'édition électronique multimédia et des livres électroniques - Carte de texture pour la présentation auditive de textes imprimés
(IEC 62665:2015)

Multimediageräte und -systeme - Multimedia e-publishing und e-book Technologien -Textur Abbildung für die auditive Darstellung von gedruckten Texten
(IEC 62665:2015)

This European Standard was approved by CENELEC on 2016-01-15. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 62665:2016 E

European foreword

The text of document 100/2431/CDV, future edition 2 of IEC 62665, prepared by Technical Area 10 “Multimedia e-publishing and e-book technologies” of IEC/TC 100 “Audio, video and multimedia systems and equipment” was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62665:2016.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2016-10-15
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2019-01-15

This document supersedes EN 62665:2012.

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In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 62875:2015	NOTE	Harmonized as EN 62875:2015.

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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MULTIMEDIA SYSTEMS AND EQUIPMENT – MULTIMEDIA E-PUBLISHING AND E-BOOK TECHNOLOGIES – TEXTURE MAP FOR AUDITORY PRESENTATION OF PRINTED TEXTS

FOREWORD

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International Standard IEC 62665 has been prepared by technical area 10: Multimedia e-publishing and e-book technologies, of IEC technical committee 100: Audio, video and multimedia systems and equipment.

This second edition cancels and replaces the first edition published in 2012 and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition.

a) Two different control codes are described by the different terms: "control codes for text" and "control codes for speech".
b) Pack processing and LZSS processing are shown in their additional subclauses.
c) An example of the header file "Speechio.h" is added.
d) An example of error correction encoding is shown in additional Annex D.

The text of this standard is based on the following documents:

CDV	Report on voting
100/2431/CDV	100/2507/RVC

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

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

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

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

A bilingual version of this publication may be issued at a later date.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

Information interchange via printed documents between blind or visually impaired people has been carried out by using Braille. However, in order to be able to read Braille, particular tuition is required. Learning Braille is very difficult for aged as well as visually non-impaired people.

Printed documents with texts and text-encoded texture maps can be interchanged by ordinary circulation or publication mechanisms. They are readable as ordinary printed materials and comprehensible by blind or visually impaired people with the support of decoding and auditory presentation equipment.

Today, interchanging of printed documents has become wide-spread and international. The text-encoding scheme to generate a texture map should therefore be standardized at an international level.

Patent

The International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of patents as listed below:

PATENT No. 3499220 (Japan)
PATENT No. 4439756 (Japan)
PATENT No. 4744745 (Japan)
PATENT No. 4772631 (Japan)

IEC takes no position concerning the evidence, validity and scope of these patent rights.

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MULTIMEDIA SYSTEMS AND EQUIPMENT – MULTIMEDIA E-PUBLISHING AND E-BOOK TECHNOLOGIES – TEXTURE MAP FOR AUDITORY PRESENTATION OF PRINTED TEXTS

1 Scope

In order to generate a texture map for auditory presentation of printed text information, this International Standard specifies

– a text encoding scheme to generate a texture map,
– a physical shape and dimension of the texture map for printing,
– additional features for texture map printing,
– texture map decoding and an auditory presentation of decoded texts.

These specifications enable the interchange of documents and publications between visually impaired and non-impaired people.

2 Terms and definitions

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

2.1
texture map
two dimensional cell patterns which include alignment lines and a data matrix which is generated from text data compression and error correction encoding

2.2
auditory presentation equipment
equipment including an engine to carry out a text-to-speech

3 Texture map

3.1 Names of elements

A shape and names of a texture map are indicated in Figure 1. The shape represents the M size in Table 1.