
Večpredstavnostni sistemi in oprema - Večpredstavnostne tehnologije za e-založništvo in e-knjige - Besedno vodilo za predstavitev tiskanega besedila slušateljem

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

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Systèmes et appareils multimédia - Technologies de l'édition électronique multimédia et des livres électroniques - Carte de texture pour la présentation auditive de textes imprimés

<https://standards.iteh.ai/catalog/standards/sist/09cd985c-c16f-48ae-8b34-f0fec4ed764d/sist-en-62665-2012>

Ta slovenski standard je istoveten z: EN 62665:2012

ICS:

33.160.60	Večpredstavni (multimedijski) sistemi in oprema za telekonference	Multimedia systems and teleconferencing equipment
35.240.30	Uporabniške rešitve IT v informatiki, dokumentiranju in založništvu	IT applications in information, documentation and publishing

SIST EN 62665:2012

en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 62665:2012](#)

<https://standards.iteh.ai/catalog/standards/sist/09cd985c-c16f-48ae-8b34-f0fec4ed764d/sist-en-62665-2012>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62665

July 2012

ICS 33.160.99

English version

**Multimedia systems and equipment -
Multimedia e-publishing and e-book technologies -
Texture map for auditory presentation of printed texts
(IEC 62665:2012)**

Systèmes et appareils multimédia -
Technologies de l'édition électronique
multimédia et des livres électroniques -
Carte de texture pour la présentation
auditive de textes imprimés
(CEI 62665:2012)

Multimediasysteme und -geräte -
Multimedia E-Publishing und E-Book-
Technologien -
Textur-Abbildung für die auditive
Umsetzung von gedruckten Texten
(IEC 62665:2012)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

This European Standard was approved by CENELEC on 2012-06-13. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 100/1882/CDV, future edition 1 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 62665:2012.

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) 2013-03-13
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-06-13

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

Endorsement notice

The text of the International Standard IEC 62665:2012 was approved by CENELEC as a European Standard without any modification.

ITeH STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 62665:2012
<https://standards.iteh.ai/catalog/standards/sist/09cd985c-c16f-48ae-8b34-f0fec4ed764d/sist-en-62665-2012>



IEC 62665

Edition 1.0 2012-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE



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

Systèmes et appareils multimédia – Technologies de l'édition électronique multimédia et des livres électroniques – Carte de texture pour la présentation auditive de textes imprimés

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

T

ICS 33.160.99

ISBN 978-2-88912-045-1

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

FOREWORD	3
INTRODUCTION	5
1 Scope	6
2 Terms and definitions	6
3 Shape of texture map	6
3.1 Names of parts	6
3.2 Size and data volume	8
3.3 Encoding method of texture map from texts	8
3.4 Input specification	10
3.5 Encode function: SpeechioEncode	10
3.6 Generated symbol function: SpeechioSymbol	11
3.7 Error correction	11
3.8 Decoding method from texture map to texts	11
3.9 Example of use of function	13
4 Printing of texture map image	13
4.1 General	13
4.2 Size of image	14
4.3 Position of the texture map and margin on paper	14
Annex A (informative) Preparation of input texts (for Japanese)	16
Annex B (informative) Preparation of input texts (for English)	19
Annex C (informative) Other specifications	20
Bibliography	24
Figure 1 – Names of parts of the texture map	7
Figure 2 – Flow chart of generating texture map from texts	9
Figure 3 – Flow chart of text-decoding from texture map	12
Figure 4 – Positioning of texture map on paper and its margin	15
Figure 5 – Example of a texture map arrangement	15
Figure C.1 – Position of notch designating the texture map	20
Figure C.2 – Extension of a texture map (1)	21
Figure C.3 – Extension of a texture map (2)	22
Figure C.4 – Example of auditory presentation equipment (named Speechio)	22
Figure C.5 – Example of auditory presentation equipment (named Speechio Plus)	23
Table 1 – Sizes and data volume of texture maps	8
Table 2 – Size of printed texture map	14
Table A.1 – Control code for voice output	17
Table A.2 – End of a sentence control code	18
Table B.1 – Basic character sets of the end of sentence	19
Table B.2 – Abbreviation including ‘.’	19

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.

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.

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

CDV	Report on voting
100/1882/CDV	100/1923/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.

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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 62665:2012](https://standards.iteh.ai/catalog/standards/sist/09cd985c-c16f-48ae-8b34-f0fec4ed764d/sist-en-62665-2012)

<https://standards.iteh.ai/catalog/standards/sist/09cd985c-c16f-48ae-8b34-f0fec4ed764d/sist-en-62665-2012>

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 training 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.

Patents

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.

<https://standards.iteh.ai/catalog/standards/sist/09cd985c-c16f-48ae-8b34-016e4764dred-c21ec2112>

The holder of these patent rights has assured the IEC that he/she is willing to negotiate licences either free of charge or under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of these patent rights is registered with IEC. Information may be obtained from:

Original Design Inc.

4-16-2 Ikebukuro, Toshima-ku

Tokyo, Japan 171-0014

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

ISO (www.iso.org/patents) and IEC (<http://patents.iec.ch>) maintain on-line data bases of patents relevant to their standards. Users are encouraged to consult the data bases for the most up to date information concerning patents.

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

1 Scope

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 pattern which includes alignment lines and a data matrix which is generated from text data compression and error correction encoding

<https://standards.iteh.ai/catalog/standards/sist/09cd985c-c16f-48ae-8b34-f0fec4ed764d/sist-en-62665-2012>

2.2

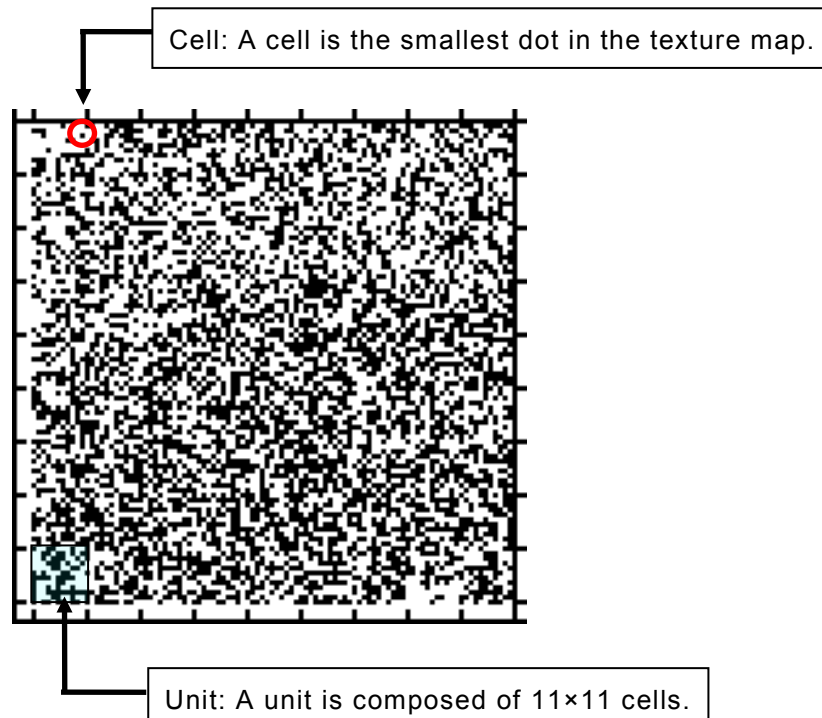
auditory presentation equipment

software engine to convert text to speech

3 Shape of texture map

3.1 Names of parts

The shape of a texture map and the name of each part are indicated in Figure 1.



IEC 617/12

iTeh STANDARD PREVIEW (standards.iteh.ai)

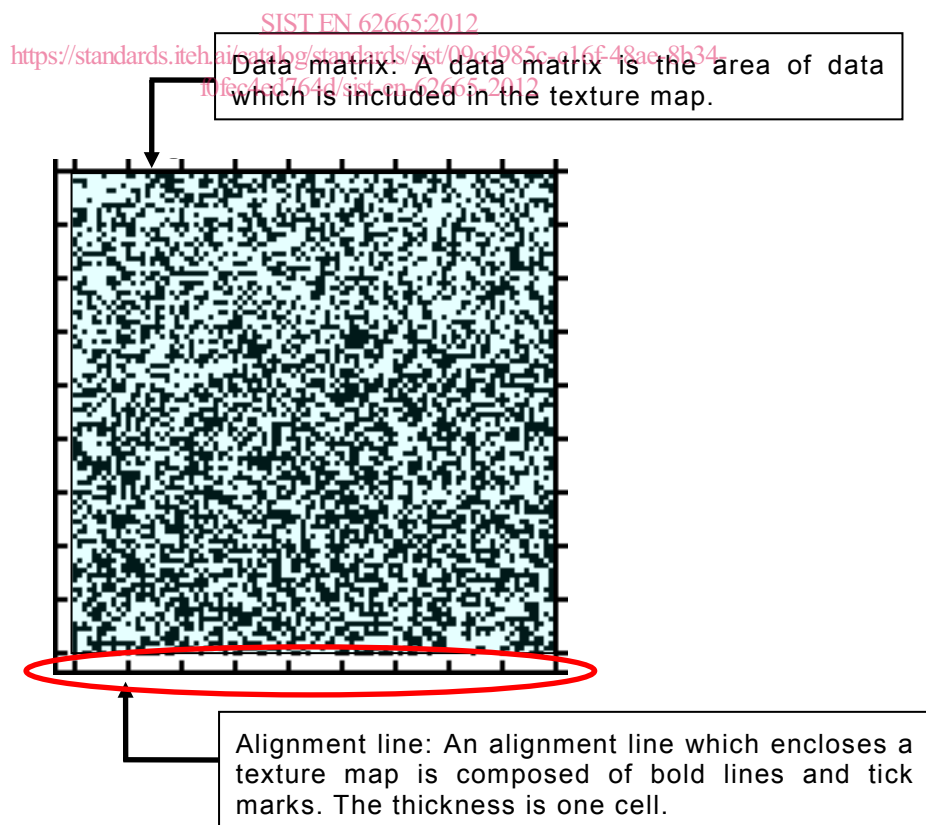


Figure 1 – Names of parts of the texture map

IEC 618/12