SLOVENSKI STANDARD
SIST EN 62605:2017

01-maj-2017

Nadomešča:
SIST EN 62605:2011

Večpredstavnostni sistemi in oprema - Večpredstavnostne tehnologije za e-založništvo in e-knjige - Izmenjevalni format za e-slovarje (IEC 62605:2016)

Multimedia systems and equipment - Multimedia e-publishing and e-books technologies - Interchange format for e-dictionaries (IEC 62605:2016)

Multimediageräte und -systeme - Multimedia e-publishing und e-books - Austauschformat für elektronische Wörterbücher (IEC 62605:2016)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Systèmes et équipements multimedia - Publication et livres électroniques multimedia - Format d'échange pour les dictionnaires électroniques (IEC 62605:2016)

SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ac3b7f9005f3/sist-en-62605-2017

Ta slovenski standard je istoveten z: **EN 62605:2016**

ICS:

01.140.40	Založništvo	Publishing
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 62605:2017 **en,fr,de**

2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

SIST EN 62605:2017

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4e0b-8d72-ac3b7f9005f3/sist-en-62605-2017

SIST EN 62605:2017

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 62605

November 2016

ICS 33.160.60; 35.240.20; 35.240.30

Supersedes EN 62605:2011

English Version

Multimedia systems and equipment - Multimedia e-publishing and e-books - Interchange format for e-dictionaries (IEC 62605:2016)

Systèmes et équipements multimedia - Publication et livres électroniques multimedia - Format d'échange pour les dictionnaires électroniques
(IEC 62605:2016)

Multimediageräte und -systeme - Multimedia e-publishing und e-books - Austauschformat für elektronische Wörterbücher
(IEC 62605:2016)

This European Standard was approved by CENELEC on 2016-03-16. 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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

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.

SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/8c907b05-5e7f-4fe3-9bbc-375d4fe2e172/sist-en-62605-2017

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.

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

© 2016 CENELEC All rights of exploitation in any form and by any means reserved worldwide for CENELEC Members.

Ref. No. EN 62605:2016 E

SIST EN 62605:2017

European foreword

The text of document 100/2430/CDV, future edition 2 of IEC 62605, 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 62605:2016.

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)	2017-05-18
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2019-11-18

This document supersedes EN 62605:2011.

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 62605:2016 was approved by CENELEC as a European Standard without any modification.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ee93e9b8-e377-4e0b-8d72-ac3b7f9005f3/sist-en-62605-2017

IEC 62448:2013	NOTE	Harmonized as EN 62448:2014.
ISO 3166-1	NOTE	Harmonized as EN ISO 3166-1.

SIST EN 62605:2017

Annex ZA
(normative)
Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC/TS 62229	2006	Multimedia systems and equipment - Multimedia e-publishing and e-book - Conceptual model for multimedia e-publishing	-	-

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4e0b-8d72-ac3b7f9005f3/sist-en-62605-2017

SIST EN 62605:2017

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4e0b-8d72-ac3b7f9005f3/sist-en-62605-2017

SIST EN 62605:2017

IEC 62605

Edition 2.0 2016-02

INTERNATIONAL STANDARD

Multimedia systems and equipment – Multimedia e-publishing and e-books – Interchange format for e-dictionaries

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4e0b-8d72-ac3b7f9005f3/sist-en-62605-2017

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 33.160.60; 35.240.20; 35.240.30

ISBN 978-2-8322-3102-9

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

® Registered trademark of the International Electrotechnical Commission

SIST EN 62605:2017

CONTENTS

FOREWORD....5
INTRODUCTION....7
1 Scope....8
2 Normative references....8
3 Terms and definitions....8
4 Position and requirements for interchange format for e-dictionaries....8
4.1 Interchange format for e-dictionaries in contents creation/distribution model....8
4.2 Requirements for interchange format for e-dictionaries....9
5 File formats....9
6 Semantics....10
Annex A (normative) XMDF-LeXML format....11
A.1 General....11
A.2 Overview of the format's structure....11
A.3 Elements and attributes....12
A.3.1 General....12
A.3.2 Page_ID....12
A.3.3 Object_ID....12
A.3.4 Char_ID....12
A.3.5 Reading....12
A.3.6 Filename....13
A.3.7 Standard character....13
A.3.8 Standard character string....13
A.3.9 Extended character....14
A.3.10 Extended character string....14
A.3.11 External character....14
A.3.12 External character string....16
A.3.13 External extended character string....16
A.3.14 Coordinates....16
A.3.15 Polygonal_region....17
A.3.16 Color....17
A.3.17 Date....18
A.3.18 Time....18
A.3.19 Country....18
A.3.20 Personal_name....18
A.3.21 Organization_name....20
A.3.22 Address....20
A.3.23 Permission....22
A.3.24 Keyword....24
A.3.25 Telephone_number....24
A.3.26 Mail_address....25
A.4 Description format details....25
A.4.1 General....25
A.4.2 Book information modules <bvf>....26
A.4.3 Content management module <body_module>....41
A.4.4 Event info module <event_info>....59

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4e0b-8d72-ac3b7f9005f3/sist-en-62605-2017

SIST EN 62605:2017

A.4.5 Parts data module <parts_module> 66
A.4.6 Object instances 72
A.5 Available color names 119
A.6 Localization 120
A.6.1 Possible additions 120
A.6.2 Standard characters 120
A.6.3 Characters usable for reading 121
A.6.4 Line breaking methods 121
A.6.5 Sorting rules for <search_table_def> 122
A.6.6 Additional attributes for <enable_key_type> 123
A.6.7 Normalization methods for <key_normalization> 124
A.6.8 Character encoding conversions 124
A.7 Adaptation 124
A.8 Specification of the XMDF-LeXML format in the RELAX NG syntax 124
Annex B (normative) LeXML format 160
B.1 General 160
B.2 Elements for content structure 160
B.2.1 Parameter entity definition 160
B.2.2 Root elements 162
B.2.3 headword-related elements 166
B.2.4 Main-text related elements 169
B.2.5 Subheadword related elements 174
B.2.6 Other block elements 178
B.2.7 Media related elements 182
B.2.8 Other structural elements 184
B.3 Inline elements 190
B.3.1 Labels 190
B.3.2 pronunciation/accent – related elements 192
B.3.3 Part-of-speech related and other elements 194
B.3.4 Other dictionary-specific elements 195
B.3.5 Text-decoration related elements 205
B.3.6 Typesetting-related elements 210
B.3.7 Other elements 213
B.4 Specification of the LeXML format in the DTD syntax 220
Bibliography 234

Figure 1 – Contents creation/distribution model 8
Figure 2 – Contents creation/distribution model (modified) 9
Figure 3 – Relationship between concepts 9
Figure A.1 – XML tree structure 11
Figure A.2 – Example of valign="middle" 74
Figure A.3 – Example of dropped capital 80
Figure A.4 – Left and right margin of a paragraph 80
Figure A.5 – Horizontal writing in vertical text 88
Figure A.6 – Ruby 89
Figure A.7 – Example of search page object instance rendering 115

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4c0b-8d72-ac3b7f9005f3/sist-en-62605-2017

SIST EN 62605:2017

Table A.1 – Base characters for reading 13
Table A.2 – Standard character set 13
Table A.3 – Usable characters for a telephone number 25
Table A.4 – Characters usable for email addresses 25
Table A.5 – Characters usable for the lookup key 58
Table A.6 – Color names 120
Table A.7 – Examples of additional standard character sets 121
Table A.8 – Example of additional characters usable for readings 121
Table A.9 – Example of additional sorting rules 122
Table A.10 – Example of additional language specific attributes for <enable_key_type> 123

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4e0b-8d72-ac3b7f9005f3/sist-en-62605-2017

SIST EN 62605:2017

INTERNATIONAL ELECTROTECHNICAL COMMISSION

_____

MULTIMEDIA SYSTEMS AND EQUIPMENT – MULTIMEDIA E-PUBLISHING AND E-BOOKS – INTERCHANGE FORMAT FOR E-DICTIONARIES

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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4e0b-8d72-ae3b7f910f53/sist-en-62605-2017

International Standard IEC 62605 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 2011. This edition constitutes a technical revision.

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

a) Ref element is added to facilitate cross reference between entries.
b) A new version of LeXML format, which is one of the base formats of the first edition, has been expanded and becomes Annex B. (The existing format becomes Annex A.)

SIST EN 62605:2017

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

CDV	Report on voting
100/2430/CDV	100/2506/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 website 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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4e0b-8d72-ac3b7f9005f3/sist-en-62605-2017

SIST EN 62605:2017

INTRODUCTION

Markets for multimedia e-books and e-publishing require standardization of formats for e-book data interchange among associated people, authors, data preparers, publishers and readers. The formats are classified into submission format, interchange format and reader's format. The submission format supports an interaction between authors and data preparers. The reader's format depends on e-publishing equipment. The interchange format provides an interchange format for data preparers and publishers and therefore should be e-publishing equipment independent.

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.

IEC takes no position concerning the evidence, validity and scope of this patent right.

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

Sharp Corporation,
22-22 Nagaike-cho,
Abeno-ku,
Osaka 545-8522,
Japan

iTeh STANDARD PREVIEW
(standards.iteh.ai)

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.

SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4e0b-8d72-ae5b71900bf3/sist-en-62605-2017

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.

SIST EN 62605:2017

MULTIMEDIA SYSTEMS AND EQUIPMENT – MULTIMEDIA E-PUBLISHING AND E-BOOKS – INTERCHANGE FORMAT FOR E-DICTIONARIES

1 Scope

This International Standard specifies the interchange format for e-dictionaries among publishers, content creators and manufacturers.

This International Standard does not address the following aspects:

- data formats for reading devices;
- elements necessary for final print reproduction only;
- rendering issues related to physical devices;
- security issues such as DRM for documents.

2 Normative references

iTeh STANDARD PREVIEW
(standards.iteh.ai)

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/e993c9bb-c377-4e0b-8d72-ac3b7f900513/sist-en-62605-2017

IEC TS 62229:2006, *Multimedia systems and equipment – Multimedia e-publishing and e-book – Conceptual model for multimedia e-publishing*

3 Terms and definitions

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

3.1
manufacturer
organization or person that manufactures hardware and/or software of the e-book

4 Position and requirements for interchange format for e-dictionaries

4.1 Interchange format for e-dictionaries in contents creation/distribution model

The conceptual model for multimedia e-publishing (IEC TS 62229) defines a contents creation/distribution model shown in Figure 1.

Author <--(1)--> **Data preparer** <--(2)--> **Publisher** --(3)--> **Reader**

IEC

Key

(1) content data in submission format

(2) content data in interchange format

(3) content data in reader's format

Figure 1 – Contents creation/distribution model

SIST EN 62605:2017

It should be noted that the role of manufacturers of e-dictionary hardware and software overlaps that of the publisher in Figure 1. Therefore, a slightly modified model will be assumed for this International Standard, as shown in Figure 2.

Author <--(1)--> **Data preparer** <--(2)--> **Publisher (manufacturer)** --(3)--> **Reader**

IEC

Figure 2 – Contents creation/distribution model (modified)

This International Standard specifies the interchange format between data preparers and publishers, i.e. a format for (2) in Figure 2, though it may be used as a reader's format.

4.2 Requirements for interchange format for e-dictionaries

An interchange format for e-dictionaries needs to address the following.

- Description of keywords, links from the keywords to entries (link data) and the order of the entries.
- Description of articles for each entry (entry data). This includes text, image, and other multimedia functionalities generally required for e-books.
- Description of bibliographical data and other data. This should include the name of the author and the publisher, the title of the content and the explanatory note. The relationship between these concepts is visually represented in Figure 3.
- Description of contents written in various languages.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 62605:2017
https://standards.iteh.ai/catalog/standards/sist/ec93c9bb-c377-4e0b-8d72-ac3b7f1005f3/sist-en-62605-2017

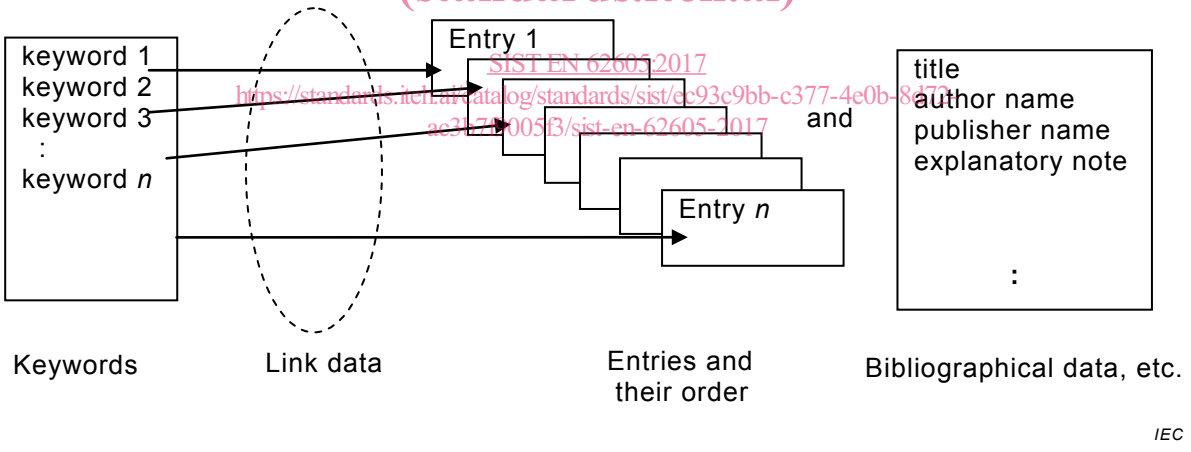

Figure 3 – Relationship between concepts

5 File formats

This International Standard defines two XML-based formats. One is based on XMDF (as described in IEC 62448:2013, Annex B) and LeXML. The format is hereafter called XMDF-LeXML format. The other is based solely on LeXML 3.0. They are presented in Annex A and Annex B, respectively.

NOTE LeXML is proposed by Digital ASSIST Ltd. Its original specifications are found at http://www.d-assist.com/index.html (in Japanese).