BS ISO 26162-1:2019

BSI Standards Publication

Management of terminology resources — Terminology databases

Part 1: Design

Documents
Document Sharing Hub

Full document details: BS ISO 26162-1:2019

National foreword

This British Standard is the UK implementation of ISO 26162-1:2019. Together with BS ISO 26162-2:2019, it supersedes BS ISO 26162:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee TS/1, Terminology.

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 2019
Published by BSI Standards Limited 2019

ISBN 978 0 539 00247 8

ICS 01.020; 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 30 November 2019.

Amendments/corrigenda issued since publication

Date	Text affected

Documents
Document Sharing Hub

Full document details: BS ISO 26162-1:2019

INTERNATIONAL STANDARD

ISO 26162-1

First edition
2019-11

Management of terminology resources — Terminology databases —

Part 1: Design

Gestion des ressources terminologiques — Bases de données terminologiques —

Partie 1: Conception

Reference number
ISO 26162-1:2019(E)

Documents
Document Sharing Hub
© ISO 2019

Full document details: BS ISO 26162-1:2019

COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

© ISO 2019 – All rights reserved

Documents
Document Sharing Hub

Full document details: BS ISO 26162-1:2019

Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **1**
3.1 Concepts ... 1
3.2 Terminology databases ... 2

4 Terminology database design ... **4**
4.1 General ... 4
4.2 Terminological metamodel ... 5
4.3 Data categories ... 7
4.3.1 General ... 7
4.3.2 Types of data categories ... 8
4.3.3 Shared resources ... 9
4.3.4 Concept relations ... 10
4.4 Concept entries ... 11
4.4.1 Concept orientation ... 11
4.4.2 Language ... 11
4.4.3 Dependency and repeatability of data categories ... 12
4.4.4 Data granularity ... 12
4.4.5 Data elementarity ... 13
4.4.6 Data-modeling variation ... 13
4.5 Roles ... 14

Annex A (informative) **Terminology database excerpt based on the terminological metamodel — Example** ... **15**

Bibliography ... **19**

© ISO 2019 – All rights reserved

Documents
Document Sharing Hub

Full document details: BS ISO 26162-1:2019

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 37, *Language and terminology*, Subcommittee SC 3, *Management of terminology resources*.

This first edition of ISO 26162-1, together with ISO 26162-2, cancels and replaces ISO 26162:2012, which has been technically revised.

The main changes compared to the previous edition are as follows:

— the document has been split into parts. The first part is focusing on the design of terminology database design, the second part on the development of terminology management systems;

— all references to generic software design principles and specific use cases have been removed.

A list of all parts of the ISO 26162 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

© ISO 2019 – All rights reserved
Documents
Document Sharing Hub
Full document details: BS ISO 26162-1:2019

Introduction

Terminologies are the totality of concepts in given subject fields represented by terms and other designations and described by using additional terminological data. In general, these data are organized in structured terminology databases and are usually manipulated in specific software applications called terminology management systems. Terminology databases usually vary with regard to their underlying data models and consist of different sets of data categories, while terminology management systems generally differ depending on their functionality and the platform they are designed for.

The ISO 26162 series gives guidance on designing terminology databases and on essential terminology management system features. The series can also be used to evaluate the conformance and suitability of terminology databases and terminology management systems.

© ISO 2019 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 26162-1:2019

Management of terminology resources — Terminology databases —

Part 1:
Design

1 Scope

This document specifies general, i.e. implementation- and use-case-independent terminology database design principles to enable maximum efficiency and quality in terminology work. Thus, this document supports creating, processing, and using high quality terminology. The intended audiences of this document are terminologists, translators, interpreters, technical communicators, language planners, subject field experts, and terminology management system developers.

This document describes a maximum approach, i.e. terminology database design for distributed, multilingual terminology management. It can also be used for designing smaller solutions.

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.

ISO 704, *Terminology work — Principles and methods*

ISO 1087, *Terminology work — Vocabulary*

ISO 12620, *Management of terminology resources — Data category specifications*

ISO 16642:2017, *Computer applications in terminology — Terminological markup framework*

ISO 23185, *Assessment and benchmarking of terminological resources — General concepts, principles and requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1087 and the following apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1 Concepts

3.1.1
object
anything perceivable or conceivable

Note 1 to entry: Objects can be material (e.g. an engine, a sheet of paper, a diamond), immaterial (e.g. a conversion ratio, a project plan) or imagined (e.g. a unicorn, a scientific hypothesis).

© ISO 2019 – All rights reserved

Documents
Document Sharing Hub
Full document details: BS ISO 26162-1:2019

Note 2 to entry: Objects can undergo changes which cause conceptual or designation change.

[SOURCE: ISO 1087:2019, 3.1.1, modified — Note 2 to entry added.]

3.1.2
concept
unit of knowledge created by a unique combination of characteristics

Note 1 to entry: Concepts are not necessarily bound to particular natural languages. They are, however, influenced by the social or cultural background which often leads to different categorizations.

Note 2 to entry: Due to their dynamic nature, concepts are also defined as units of thinking (see ISO 704:2009, 5.1 and DIN 2342:2011-08, 4.1).

[SOURCE: ISO 1087:2019, 3.2.7, modified — former Note 2 to entry removed and replaced by a new Note 2 to entry.]

3.1.3
designation
designator
representation of a *concept* (3.1.2) by a sign which denotes it in a domain or subject

Note 1 to entry: A designation can be linguistic or non-linguistic. It can consist of various types of characters, but also punctuation marks such as hyphens and parentheses, governed by domain-, subject-, or language-specific conventions.

Note 2 to entry: A designation may be a *term* (3.1.4) including appellations, a proper name, or a symbol.

[SOURCE: ISO 1087:2019, 3.4.1]

3.1.4
term
designation (3.1.3) that represents a general concept by linguistic means

EXAMPLE "laser printer", "planet", "pacemaker", "chemical compound", "¾ time", "Influenza A virus", "oil painting".

Note 1 to entry: Terms may be partly or wholly verbal.

[SOURCE: ISO 1087:2019, 3.4.2]

3.2 Terminology databases

3.2.1
terminology database
termbase
database comprising a *terminological data collection* (3.2.4)

[SOURCE: ISO 30042:2019, 3.28, modified — admitted term "terminology database" made preferred term and preferred term "termbase" made admitted term.]

3.2.2
data model
graphical and/or lexical representation of data, specifying their properties, structure, and inter-relationships

[SOURCE: ISO/IEC 11179-1:2015, 3.2.7]

3.2.3
terminological metamodel
data model (3.2.2) that describes the basis for designing and implementing *terminological data collections* (3.2.4)

© ISO 2019 – All rights reserved
Documents
Document Sharing Hub
Full document details: BS ISO 26162-1:2019