



BSI Standards Publication

Management of terminology resources — Terminological markup framework

National foreword

This British Standard is the UK implementation of ISO 16642:2025. It supersedes BS ISO 16642:2017, which is withdrawn.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 committee manager.

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© The British Standards Institution 2025
Published by BSI Standards Limited 2025

ISBN 978 0 539 27587 2

ICS 01.020; 35.240.30

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 December 2025.

Amendments/corrigenda issued since publication

Date	Text affected



**International
Standard**

ISO 16642

**Management of terminology
resources — Terminological
markup framework**

*Gestion des ressources terminologiques — Plate-forme pour le
balisage de terminologies informatisées*

**Third edition
2025-12**

Reference number
ISO 16642:2025(en)

Full document details: BS ISO 16642:2025

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Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Modular approach	4
5 Generic model for describing terminological data	6
5.1 Principles	6
5.2 Metamodel	7
5.3 Example	9
6 Requirements for compliance to TMF	9
7 Interchange and interoperability	10
8 Representing languages	10
9 Defining a TML	11
9.1 Requirements	11
9.2 Defining interoperability conditions	11
10 Implementing an XML-serialized TML	11
10.1 General	11
10.2 Implementing the metamodel	11
10.3 Anchoring data categories	12
10.3.1 General	12
10.3.2 Styles and vocabulary	12
10.4 Constraints on datatypes	13
10.5 Implementing annotations	13
10.6 Implementing brackets	13
Annex A (informative) Conformance of terminological data to TMF: example scenario	14
Bibliography	18

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 document 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).

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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 third edition cancels and replaces the second edition (ISO 16642:2017), which has been technically revised.

The main changes are as follows:

- The scope is no longer restricted to representing terminological data in XML format. Terminological markup languages can be serialized in any formats, but they are exemplified in this document in XML.
- DatCatInfo PIDs have been updated.
- Terms and definitions have been updated according to the latest International Standards.
- Examples have been updated to reflect ISO 30042:2019.
- [Annex A](#) has been significantly revised in order to show two TMF-compliant XML-based serialization examples of the same terminological data.

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.

Introduction

Terminological data are collected, managed and stored in a wide variety of systems, typically database management systems, ranging from personal computer applications for individual users to large terminology database systems operated by major companies and governmental agencies. Terminology databases comprise various types of information, called “data categories”, and can adopt different structural models. However, terminological data often need to be shared and reused in a number of applications, and this sharing is facilitated when the data adhere to a common model. To facilitate co-operation and to prevent duplicate work, it is important to develop standards and guidelines for creating and using terminological data collections (TDCs) as well as for sharing and exchanging data.

This document presents a modular approach for analysing existing TDCs and designing new ones. It also provides a framework for defining terminological markup languages (TMLs) that are interoperable.

This document refers to DatCatInfo, an example of an available data category repository (DCR). DatCatInfo is an online database of information about the types of data that can be included in TDCs and other language resources. It is available at www.datcatinfo.net.

Management of terminology resources — Terminological markup framework

1 Scope

This document specifies a framework for representing data recorded in terminological data collections (TDCs). This framework includes a metamodel and methods for describing specific terminological markup languages (TMLs), exemplified in this document in eXtensible Markup Language (XML). The mechanisms for implementing constraints in a TML are defined, but not the specific constraints for individual TMLs.

This document is designed to support the development and use of computer applications for terminological data and the exchange of such data between different applications. This document also defines the conditions that allow the data expressed in one TML to be mapped onto another TML.

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 and terminology science — Vocabulary*

ISO 12616-1, *Terminology work in support of multilingual communication — Part 1: Fundamentals of translation-oriented terminography*

ISO 26162 (all parts), *Management of terminology resources — Terminology databases*

ISO 30042, *Management of terminology resources — TermBase eXchange (TBX)*

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 terminology databases for use in standardization at the following addresses:

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

3.1

basic information unit

information unit (3.13) attached to a *component* (3.3) of the *metamodel* (3.15) that can be expressed by means of a single *data category* (3.7)

EXAMPLE Term, note.