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**Management of terminology  
resources — TBX-compliant  
representation of concept relations  
and subject fields**

*Gestion des ressources terminologiques — Représentation des  
relations conceptuelles et des domaines conforme à TBX*



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## 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](http://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](http://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](http://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*.

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](http://www.iso.org/members.html).

## Introduction

This document describes best practices for specifying subject fields and concept relations in terminology databases (termbases). It also demonstrates how to represent subject fields and concept relations in terminological document instances in a way that is compliant with ISO 30042.

Concept relations for specific TBX dialects are specified in the form of dedicated TBX modules. Subject fields can be declared in the TBX backmatter or implemented through an XML namespace. This document is intended to maximize interoperability of these types of information.

Throughout this document, reference is made to data categories (DCs). To maximize interoperability, it is essential that termbases use the same DCs, as described in this document, for the same purposes. DatCatInfo<sup>[2]</sup> is a publicly available electronic repository of data category specifications. Data categories used in the examples in this document are taken from DatCatInfo.

This document complements ISO 30042.



# Management of terminology resources — TBX-compliant representation of concept relations and subject fields

## 1 Scope

This document provides requirements and recommendations for representing subject fields and concept relations in TBX-compliant terminological document instances. Examples in this document utilize the DCA style of TBX markup.

## 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 1087, *Terminology work and terminology science — Vocabulary*

ISO 12620-1<sup>1)</sup>, *Management of terminology resources — Data categories — Part 1: Specifications*

ISO 12620-2<sup>2)</sup>, *Management of terminology resources — Data categories — Part 2: Repositories*

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

W3C, *SKOS Simple Knowledge Organization System Reference*, W3C Recommendation 18 August 2009. Available at: <https://www.w3.org/TR/skos-reference/>

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1087, ISO 12620-1, ISO 12620-2, ISO 30042 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

#### concept relation

relation between concepts

[SOURCE: ISO 1087:2019, 3.2.11]

### 3.2

#### hierarchical relation

hierarchical concept relation

*generic relation (3.3) or partitive relation (3.4)*

[SOURCE: ISO 1087:2019, 3.2.12]

1) Under preparation. Stage at the time of publication: ISO/DIS 12620-1:2021.

2) Under preparation. Stage at the time of publication: ISO/DIS 12620-2:2021.