

Fourth edition 2022-07

# Terminology work — Principles and methods

Travail terminologique — Principes et méthodes



#### ISO 704:2022(E)

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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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 37, *Language and terminology*, Subcommittee SC 1, *Principles and methods*.

This fourth edition cancels and replaces the third edition (ISO 704:2009), which has been technically revised.

The main changes are as follows:

- the structure and content have been adapted based on ISO 1087;
- concept models in accordance with ISO 24156-1 have been introduced;
- clauses on associative concept relations have been extended;
- appellations and proper names are treated more comprehensively and more systematically;
- where necessary, existing examples have been adapted or replaced, and new examples have been introduced.

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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

#### Introduction

#### 0.1 Overview

This document specifies state-of-the-art principles and methods of terminology work. According to ISO 1087:2019, 3.5.1, terminology work is "work concerned with the systematic collection, description, processing and presentation of concepts and their designations" in various domains and subjects. It is multidisciplinary and draws support from several disciplines (e.g. logic, epistemology, philosophy of science, linguistics, translation studies, information science, cognitive science). It combines elements from many theoretical approaches that deal with the description, ordering and transfer of knowledge.

Terminology work according to this document is concerned with terminology used for unambiguous communication in natural language, in particular special languages. The goal of terminology work as described in this document is, thus, a clarification and standardization of terminology for communication between humans. Terminology work can also support knowledge modelling, information modelling, data modelling and classification, but this document does not cover these fields.

This document is intended to standardize the essential elements for terminology work. The general purposes of this document are to provide a common theoretical framework and to explain how this framework should be implemented by organizations or individuals involved in terminology work. This document also provides the fundamentals for terminology science teaching and training, in particular for the training of terminologists or terminology workers.

Thus, this document is intended to provide assistance to those carrying out various terminology work activities. The principles and methods should be observed not only for the manipulation of terminological information but also in the planning and decision-making involved in managing terminology. The main activities include, but are not limited to, the following:

- identifying concepts and concept relations;
- analysing and structuring concept fields on the basis of identified concepts and concept relations;
- analysing and developing concept systems on the basis of concept fields;
- visualizing concept systems, for example by means of traditional concept diagrams or Unified Modeling Language-based concept models;
- defining concepts;
- assigning linguistic or non-linguistic designations to concepts;
- creating and maintaining terminology resources, principally in print and electronic media (terminography).

Objects, concepts, definitions and designations are fundamental to terminology work and therefore form the basis of this document. Objects are perceived or conceived and abstracted into concepts. Concepts are represented by designations and/or definitions. The set of designations and concepts belonging to one special language constitutes the terminology of a specific domain or subject.

For referencing objects, concepts, definitions and designations in accordance with the current state of the art, the following wording conventions are used in this document:

- Objects:
  - are perceived or conceived;
  - are **abstracted into** or **conceptualized as** concepts.
- Concepts:
  - depict or correspond to objects or groups of objects;

- are **represented** or **expressed by** linguistic or non-linguistic designations or by definitions;
- are connected by concept relations and organized into concept systems that are structured according to concept relations.
- Definitions:
  - define, represent or describe concepts.
- Designations:
  - designate or represent concepts;
  - are assigned to concepts;
  - refer to objects.

Figure 1 illustrates these wording conventions in graphical form.

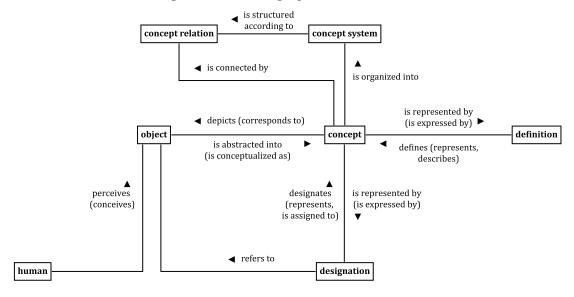


Figure 1 — Graphical illustration of wording conventions

#### 0.2 Notations

In running text of this document, the following notations are used starting with <u>Clause 4</u>:

- terms designating concepts defined in ISO 1087 and in this document are in italics;
- other terms and proper names are indicated by double quotation marks;
- objects, concepts, properties, characteristics, types of characteristics and criteria of subdivision are indicated by single quotation marks;
- examples are boxed;
- symbols do not have any specific markup.

These notations are intended to facilitate the distinction between different types of references and other text throughout this document.

The examples in this document have been chosen for illustrative purposes and are specific to the language(s) in question. Translation into other languages can necessitate the selection of other examples to illustrate the points.