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## Terminology work in support of multilingual communication —

### Part 1: Fundamentals of translation-oriented terminography

*Travail terminologique appuyant la communication multilingue —*

*Partie 1: Principes fondamentaux de la terminographie axée sur la traduction*

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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)).

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

This document was prepared by Technical Committee ISO/TC 37, Language and terminology, Subcommittee SC 2, Terminology workflow and language coding.

This document cancels and replaces the ISO 12616:2002, which has been technically revised.

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

- Focus on the broader environment in which terminology workers operate
- Deepening of the aspect of terminological data management and addition of processes, tools and skills necessary for terminology tasks
- Updates aligned with the technical state-of-art and the evolution of the profession

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

Terminology work is conducted by people with different backgrounds and for different purposes. This document focuses on the fundamentals necessary to perform basic terminology work in translation contexts. While occasionally more details are given, the document provides the minimum information necessary to set up and work in the simplest form of a terminology data collection (TDC).

For clear communication, the title “terminology worker” was chosen to represent anyone doing terminology work as an ancillary function of their professional activities. A terminology worker might be a translator, project manager or technical communicator and might work as a single-person enterprise, at language service providers, or in-house at companies or other organisations. Terminologists and terminology workers share the same basic skill set covered in this document; however, terminologists have knowledge and competences beyond what is described here and will be discussed further in the future ISO 12616-2.

One of the most common scenarios for a terminology worker is the following: a client produces documentation in a particular domain in a source language and asks a translator to translate a variety of interrelated documents. Since no terminology was provided, the translator recognises that it would be beneficial to document the terminology found during translation work to maintain consistency across documents in the target language. The translator carries out the necessary tasks and follows terminographical best practices and data modelling principles as described in this document.

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# Terminology work in support of multilingual communication —

## Part 1: Fundamentals of translation-oriented terminography

### 1 Scope

This document specifies fundamentals of translation-oriented terminography to provide guidance for producing sound bilingual or multilingual terminology collections. This part of ISO 12616 deals with the main tasks, skills, processes and technologies for translation-oriented terminography practiced by terminology workers in simple settings. Terminology workers are translators, project managers or technical communicators who do terminology work as part of their job, but are not full-fledged terminologists. The more complex tasks and processes performed by terminologists and more sophisticated technologies generally used in larger production environments will be covered in the future ISO 12616-2.

### 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 704:2009, *Terminology work — Principles and methods*

ISO 1087:2019, *Terminology work and terminology science — Vocabulary*

ISO 639, *Codes for the representation of names of languages*

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

ISO 17100:2015, *Translation services — Requirements for translation services*

ISO/DIS 26162-1, *Management of terminology resources — Terminology databases — Part 1: Design*

ISO 15188:2001, *Project management guidelines for terminology standardization*

ISO 30042:2019, *Management of terminology resources — TermBase eXchange (TBX)*

### 3 Terms and definitions

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

##### **terminology worker**

person whose role is to perform *terminology work* (3.8) as an ancillary function of other professional activities

### 3.2

#### **terminologist**

expert who performs *terminology work* (3.8) as a main function of a professional activity

### 3.3

#### **technical communicator**

expert who defines, creates and delivers information products for the safe, efficient and effective use of products (technical systems, software, services).

### 3.4

#### **data category**

##### **DC**

class of data items that are closely related from a formal or semantic point of view

EXAMPLE /part of speech/, /subject field/, /definition/.

Note 1 to entry: A data category can be viewed as a generalisation of the notion of a field in a database.

Note 2 to entry: In running text, such as in this document, data category names are enclosed in forward slashes (e.g. /part of speech/).

[SOURCE: ISO 30042:2019]

### 3.5

#### **terminological data collection**

##### **TDC**

text or data resource consisting of *concept entries* (3.7)

### 3.6

#### **terminological data**

data related to concepts (3.16) or their *designations* (3.17)

### 3.7

#### **concept entry**

#### **terminological entry**

##### **entry**

collection of *terminological data* (3.6) related to only one *concept* (3.16)

[SOURCE: ISO/FDIS 26162-1:2019(E)]

### 3.8

#### **terminology work**

#### **terminology management**

work concerned with the collection, description, processing and presentation of concepts (3.16) and their designations (3.17)

Note 1 to entry: Terminology work can be carried out in a systematic or an ad-hoc fashion.

### 3.9

#### **terminography**

part of *terminology work* (3.8) concerned with the recording and presentation of *terminological data* (3.6)

### 3.10

#### **term extraction**

*terminology work* (3.8) that involves the identification and excerpting of *terminological data* (3.6) by searching through a *text corpus* (3.12)

Note 1 to entry: *Terminological data* (3.6) of primary interest are typically *designations* (3.17), definitions and contexts.

Note 2 to entry: Term extraction is often supported by dedicated software tools.



[SOURCE: ISO/FDIS 1087:2019(E)]

### 3.11

#### **term identification**

part of *term extraction* (3.10) involving recognition and selection of *designations* (3.17)

### 3.12

#### **text corpus corpus**

collection of natural language data brought together for *terminology work* (3.8)

[SOURCE: ISO/FDIS 1087:2019(E)]

### 3.13

#### **candidate term**

*designation* (3.17) that has been collected by means of *term extraction* (3.10) but has not been reviewed by means of *term assessment* (3.14)

### 3.14

#### **term assessment**

process of rating *designations* (3.17) based on agreed criteria

Note 1 to entry: Criteria commonly include acceptability, usability and clarity.

### 3.15

#### **object**

anything perceivable or conceivable

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

[SOURCE: ISO/FDIS 1087:2019(E)] <https://standards.iteh.ai/catalog/standards/sist/86eb83db-6d27-440c-9545-1b04f6acec25/iso-dis-12616-1>

### 3.16

#### **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 categorisations.

[SOURCE: ISO/FDIS 1087:2019(E)]

### 3.17

#### **designation**

#### **terminological unit**

representation of a *concept* (3.16) by a sign which denotes it in a domain or subject

Note 1 to entry: In this standard, terminological unit is used for the content of the /term/ field in a database.

[SOURCE: ISO/FDIS 1087:2019(E)]

### 3.18

#### **term**

*designation* (3.17) that represents a general *concept* (3.16) by linguistic means

[SOURCE: ISO/FDIS 1087:2019(E)]

**3.19**  
**proper name**  
**name**

*designation* (3.17) that represents an individual *concept* (3.16)

EXAMPLE “International Organization for Standardization”, “IBM®<sup>1)</sup>”, “British Isles”, “United Nations”.

[SOURCE: ISO/FDIS 1087:2019(E)]

**3.20**  
**appellation**

*term* (3.18) that is applied to a group of *objects* (3.15) whose relevant properties are identical

EXAMPLE “Nokia 7 Plus®” (mobile phone), “Adobe® Acrobat® X Pro” (software), “Road King®” (motorcycle<sup>2)</sup>).

[SOURCE: ISO/FDIS 1087:2019(E)]

**3.21**  
**symbol**

*designation* (3.17) that represents a *concept* (3.16) by non-linguistic means

Note 1 to entry: There are several types of symbols such as graphical symbols (ISO 3864 all parts) and letter symbols (ISO 80000 all parts).

[SOURCE: ISO/FDIS 1087:2019(E)]

**3.22**  
**data granularity**  
degree of precision of data

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Note 1 to entry: For example, the set of individual *data categories* /part of speech/, /grammatical gender/, and /grammatical number/ provides for greater data granularity than does the single *data category* /grammar/.

[SOURCE: ISO/DIS 26162-1]

**3.23**  
**data elementarity**

principle whereby a data field contains only one data element

[SOURCE: ISO/DIS 26162-1]

**3.24**  
**term autonomy**

principle whereby all *terms* (3.18) in a *concept entry* (3.7) are considered independent sub-units and can be described using the same set of *data categories* (3.4)

[SOURCE: ISO/DIS 26162-1]

**3.25**  
**concept orientation**

principle whereby a *concept entry* (3.7) describes a single *concept* (3.16)

Note 1 to entry: A concept entry can contain multiple terms, which are therefore considered semantically equivalent.

[SOURCE: ISO/DIS 26162-1]

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**3.26****repeatability**

principle whereby a *data category* (3.4) can be repeated within a *concept entry* (3.7) and whereby it can also be combined with other *data categories* (3.4)

**3.27****prescriptive terminology work**

approach for managing terminology that indicates preferred usage

**3.28****descriptive terminology work**

approach for managing terminology that documents the way *designations* (3.17) are used in contexts without indicating preferred usage

**3.29****source language**

language of the content to be translated

[SOURCE: ISO 18587:2017, 3.2.2]

**3.30****target language**

language into which *source language* (3.29) content is translated

[SOURCE: ISO 18587:2017, 3.2.4]

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## 4 Fundamentals of terminology management

### 4.1 Goals

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Terminology management has different goals. A basic goal is that users of a terminology data collection are able to retrieve terminological information that answers their question. The collection must thus cover the pertinent subject areas and terminologies. Concept entries in the collection must be correct and complete and not exhibit any data integrity issues with other entries in the collection.

An extension of the basic goal above for translation support is that data is optimised for use in computer-aided translation systems. Such systems have a terminology component. During the translation process, the content of the translation segment is matched against the terminology data collection (TDC). Matches are displayed in the terminology component or made available for easy integration into the translation in the target-language segment.

### 4.2 Work environments

Work in pursuit of this goal is performed in many different work environments with one person or several doing terminology work, supported by tools, following working methods along a particular workflow, etc. They document the result of their work, and their work is guided by training and documentation. They have certain skills and deal with one, two or many languages.

Figure 1 shows a list of features that characterise work environments where terminology work is performed. The colour intensity shows the varying degree of complexity of a feature. For example, the top-most arrow indicates that terminology work may support one process in simple environments and several processes in more complex environments.

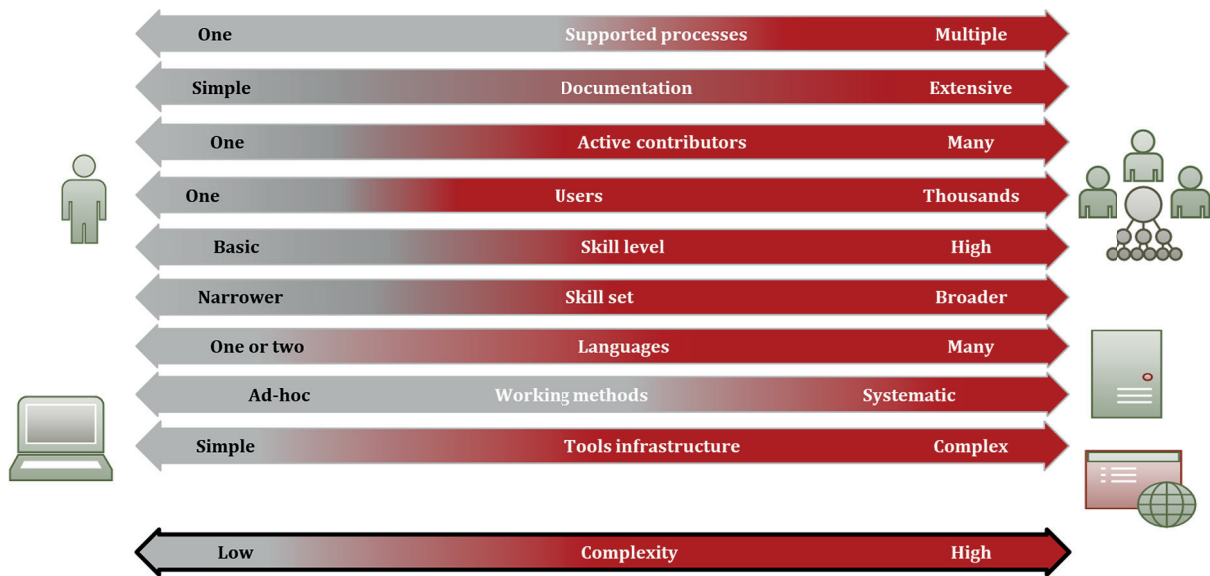


Figure 1 — Level of complexity in different environments

The type or complexity of the feature varies from one environment to the next or even from one project within the environment to the next project, as the colour shading indicates

**EXAMPLE** A freelance translator who works on terminology for a patent translation project is the only active contributor to the TDC and the only user of the data. Although he does not do terminology work fulltime, he may have a very high level and broad set of terminology skills. And for certain concepts he may need to go very deeply into terminological analysis.

**EXAMPLE** In contrast, a terminologist works in a complex tools infrastructure. She is one of many terminologists who serve dozens of languages. In one project, she might be doing only ad-hoc terminology work (see [section 4.4.2](#)) to try to solve a particular problem quickly.

Much of this standard applies to any environment. The main focus, however, is on the simpler types of environments, which can be characterised as follows:

- In simpler environments, one process (e.g. support of the translation process) is the main focus.
- The need for documentation both as part of the TDC (e.g. in the form of data categories) and outside of the repository (e.g. in the form of a guide or training material) is low.
- There is one active contributor or only a few. They can include the translator, a subject matter expert, and the client. And there may only be a few users. That means that the workflow is quite simple.
- The skill level is assumed to be low and fairly narrow. But this document covers anything that is necessary to set up a correct entry with a minimum of terminological information.
- All sections of this document can be helpful in a monolingual environment. But terminology work for at least two languages is assumed.
- Ideally, a terminology worker has a terminology management system (TMS) available, but many aspects of this standard also apply to simpler repositories (e.g. spreadsheets).

### 4.3 Translation vs. terminology work

Terminology work shall not be confused or equated with the activity of translation. Translation is defined as “the set of processes of rendering source language content into target language content in written form” (ISO 17100:2015).