
**Terminology products and services —
Overview and guidance**

Produits et services en terminologie — Aperçu et orientation

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

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Terminology products and services — Overview and guidance

1 Scope

This International Standard identifies and describes a wide range of terminology products and services so that suppliers of these products and services and their clients can have a common understanding as well as shared expectations in their delivery. This International Standard outlines some of the generally-accepted terminology practices to be followed in the development and delivery of terminology products and services as well as some of the desired quality features that should characterize the products and services produced. This International Standard is intended as guidance for work contracts in the field of terminology. This International Standard focuses on terminology in specialized language as opposed to general language resources.

For general language resources, i.e. lexicographical products, a standard is under development and will be available in the future.

2 Normative references

The following referenced documents are indispensable for the application 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 1951:2007, *Presentation/representation of entries in dictionaries — Requirements, recommendations and information*

3 Terms and definitions

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

3.1

candidate terminology

set of designations that has been extracted from one or more documents but has not been reviewed to determine its validity as actual terminology

3.2

deliverable

(project management) any measurable, verifiable outcome, result or item to be produced within a specific timeframe to complete a project or part of a project

NOTE Often used more narrowly in reference to an external deliverable, which is a deliverable that is subject to approval by the project sponsor, client or other stakeholder.

3.3

designation

representation of a concept by a sign which denotes it

NOTE In terminology work, three types of designation are distinguished: symbols, appellations and terms.

[ISO 1087-1:2000, definition 3.4.1]

3.4 embedded terminology
any set of terminology that is part of another larger printed document and that provides definitions or language equivalents for the designations in the printed document

NOTE In electronic documents, one finds a similar concept to the embedded glossary but it is called an on-line glossary or a hyperlinked glossary.

3.5 generally-accepted terminology practices GATP
standards, rules, conventions and recommended procedures to be followed when producing terminographical products and terminology services

3.6 macrostructure
arrangement of entries in a collection

[ISO 1087-1:2000, definition 3.7.7]

3.7 microstructure
arrangement of data in each entry of a collection

[ISO 1087-1:2000, definition 3.7.8]

3.8 stipulative definition
definition that assigns a particular meaning that is valid only within a specific context or document

NOTE A stipulative definition can even go so far as to contradict the lexical definition or may change its extension beyond the norms of understanding in its subject field.

3.9 terminographical product
terminology product consisting of a set of designations and terminological and/or linguistic information to support special language use

3.10 terminography
part of terminology work concerned with the recording and presentation of terminological data

[ISO 1087-1:2000, definition 3.6.2]

3.11 terminology
<language for specific purposes (LSP)> set of designations belonging to one special language

NOTE 1 Adapted from ISO 1087-1:2000, definition 3.5.1.

NOTE 2 This concept differs from another concept represented by the homograph **terminology** (3.12).

3.12 terminology
<knowledge theory> science studying the structure, formation, development, usage and management of terminologies in various subject fields

NOTE 1 Adapted from ISO 1087-1:2000, definition 3.5.2.

NOTE 2 This concept differs from another concept represented by the homograph **terminology** (3.11).

3.13**terminology product**

product that supports special language use or the field of terminology

NOTE Products that support special language use refer to dictionaries, databases, and other products for the dissemination of specialized terminology while products that support the field of terminology refer to journals, training manuals, tools, etc.

3.14**terminology service**

service that involves the production and/or dissemination of terminology or terminographical products or supports education in the field of terminology

3.15**terminology tool**

terminology product that is a computer application intended to assist in the production and delivery of terminology products and services or in information retrieval

3.16**textual support**

information recorded in a definition, context, note or other descriptive information

4 Terminology products**4.1 Introduction to terminology products**

The following is a listing of terminology product categories that can be delivered in the field of terminology. The delivered product is a physical and tangible product developed in response to a user's specific needs. Therefore, the terminology product may be more customized than the basic product category listed below. Customization aspects are given for many of the products. Delivered products may also be interim products or services used to develop other deliverables.

4.2 Terminology product categories

This product category includes all delivered products in the form of a tangible product that supports special language use.

Terminology products fall into four categories:

- terminographical products;
- terminology documents;
- educational products;
- terminology tools.

4.3 Terminographical products**4.3.1 Terminographical product categories**

This product category includes all products that provide a terminology or terminologies and terminological and/or linguistic information to support special language use.

The deliverable may range from a single designation to hundreds of thousands of entries. It may include some general language words (lexica).

This category represents the largest set of products and forms the core of the terminology products produced by terminologists. This category includes:

- printed terminologies;
- electronic terminologies;
- terminology databases;
- systematic terminologies for information management;
- terminology lists;
- vetted terminologies;
- terminology equivalents;
- pictorial terminologies;
- multimedia terminology products.

4.3.2 Printed terminologies

4.3.2.1 Basic category

This category includes any terminographical product that is a closed set of designations in one or more specialized fields of knowledge with some textual support for at least some of the entries and disseminated in printed format. It may contain some lexical entries. This category does not include collections consisting of lists of terms or term-equivalent pairs (see 4.3.6.5 or 4.3.9). This type of terminographical product is comparable to and may be converted into an electronic terminology (see 4.3.3).

Printed terminologies are usually bound in a book or take the form of loose-leaf pages. The microstructure of the entries in the printed terminology ranges from a simple entry containing a term with a single textual support, most often a definition, to a complex entry with many term variants and synonyms and many types of linguistic, terminological or even encyclopaedic, information. Lexical entries may be included. A range of terminological or linguistic information, such as incorrect usage, level of language, or geographic usage may be specified for some entries. Term variants or synonyms may be included and are usually accessed by cross-references. The subject field is generally specified in the title; in some cases subfields are indicated for some designations in the printed terminology. The layout is often in columns but some information may be shown in rows or in indented paragraphs. The macrostructure, the main body of the printed terminology, is organized in alphabetical, sequential or systematic order. If systematically organized, access is by alphabetical or sequential ordering (as in an index) depending on the language. The document may include a preface, forward, appendices, bibliographic information or citations. Updating requires reprinting. Printed terminologies are similar to and often formatted like lexicographical dictionaries (see ISO 1951).

The products in this category may be called a dictionary, a specialized dictionary, a glossary, a vocabulary, a lexicon or a terminology.

Printed terminologies may be classified as monolingual, bilingual or multilingual terminologies. Monolingual terminologies contain terminology entries for one language. These products may be called a specialized glossary, a vocabulary, a lexicon, a unilingual dictionary, a monolingual dictionary or simply a dictionary. Monolingual terminologies are arranged in alphabetical or sequential order, or accessed by means of an alphabetical, sequential or numerical index. The microstructure contains at least one designation and a definition or similar description.

A bilingual terminology includes entries in two languages and may be called a lexicon, a bilingual glossary, a bilingual dictionary or a bilingual vocabulary. It is arranged in alphabetical or sequential order, most often by the source language; the other language equivalents may be accessed with an alphabetical, sequential or

numerical index or a table of equivalents. The microstructure contains at least one term in each of the two languages, and one textual support element. There may be exceptions when one of the language pairs does not have a term for a given concept. Entries often have terminological and/or linguistic information in only the source language.

Multilingual terminologies contain more than two languages and are arranged in alphabetical or sequential order, most often by the source language; the equivalents in the other languages, if they are accessed, are listed in an alphabetical, sequential or numerical index or a table of equivalents. The microstructure contains terms in at least some of the languages, and has at least one textual support element; entries often have terminological and/or linguistic information in only the source language. Because there are multiple languages, language identifiers are required.

The deliverable ranges from the provision of the designations and textual support that make up the entries in the printed terminology to a complete end product. If the deliverable is limited to the information in the microstructure of the printed glossary, this will include the designation or designations, any linguistic and/or terminological information and the textual support, which can take the form of a definition, context, encyclopaedic information or note. If term variants and/or synonyms are included, cross-references may be required. Subfield specification may be required for some entries. An index may be required, especially in cases when the entries are numbered or appear in classified order.

More specifically, a deliverable for a bilingual terminology includes pairs of designations in two languages. Any terminological, linguistic or encyclopaedic information may be required in one or both languages depending on the nature of the terminology. The deliverable may include an index, indexes or a table of equivalents.

A deliverable for a multilingual terminology includes sets of equivalent designations in more than two languages along with language identifiers. Any terminological, linguistic or encyclopaedic information may be required in one or more languages depending on the nature of the terminology. The deliverable may include an index, indexes or a table of equivalents.

If the deliverable is the final end product, this may involve numerous publication tasks such as the preparation of the preface and forward, the design of the cover, the formatting and proofreading.

The deliverable is often customized in regards to the following aspects:

- macrostructure (appendices, bibliography, list of citations, incorrect usage);
- microstructure (usage labels such as level of language, geographic usage);
- level of completeness.

4.3.2.2 Printed embedded terminologies

An embedded terminology is a glossary or collection of printed terminology entries listed in a larger document such as a report, textbook, standard or statute. It often includes definitions and may include stipulative definitions.

It is most often monolingual but may be bilingual or multilingual and is limited to a single subject area or to the area of the document.

When the terminology is embedded in a legally binding document (e.g. statute, regulation, contract), the definitions are usually stipulative; when the terminology is embedded in a standard, the definitions are normative.

Printed embedded terminologies are comparable to on-line embedded terminologies (see 4.3.3.2).

4.3.3 Electronic terminologies

4.3.3.1 Basic category

This category includes any terminographical product that is a fixed collection of electronic terminology entries accessible from various entry points. The product includes a query function but does not have an updating function. For multimedia terminology products, see 4.3.10.

These products are monolingual, bilingual or multilingual with similar characteristics as those described under the monolingual, bilingual or multilingual terminology database (see 4.3.4). Because of their electronic nature, these products may be accessed on a single computer, networked or via the web.

The deliverable ranges from the provision of the designations and textual support that make up the entries to a complete end product. In the case of a final end product, the deliverable will require one or more terminology services (see Clause 5). In the case of an end product, the deliverable may take the form of a CD-ROM, an electronic file (e.g. pdf file) or a web-enabled file (e.g. html, xml). It may be generated from a terminology database (see 4.3.4) or converted from a printed terminology (see 4.3.2). Customization is limited to the display options, not the configuration of the information as in terminology databases (see 4.3.4).

This category includes:

- on-line embedded terminologies;
- hyperlinked terminologies;
- mobile terminologies.

4.3.3.2 On-line embedded terminologies

On-line terminologies are smaller sets of electronic terminology entries (i.e. electronic terminology) that appear in a larger electronic document such as a section in a CD-Rom, a web page within a website or a frame within a webpage. It may be generated from a terminology database, taken from an existing electronic dictionary or converted from a printed dictionary. The display is preset, not variable. It most often includes definitions and may include stipulative definitions. It is most often monolingual but may be bilingual or multilingual. It is limited to a single subject area or to the area of the document.

When the terminology is embedded in a legally binding document (e.g. statute, regulation contract), the definitions are usually stipulative; when the terminology is embedded in a standard, it is considered normative.

On-line embedded terminologies are comparable to printed embedded terminologies (see 4.3.2.2).

4.3.3.3 Hyperlinked terminologies

Hyperlinked terminologies are sets of electronic terminology entries that sit behind an electronic document. The entries are not visible unless one mouses over the term or clicks on it. The terminology is hyperlinked to a set of entries so as to provide the definition or definition-like information in a pop-up box, as required. The number of entries and the way the entries are displayed and linked to the electronic document are customized according to the needs of the deliverable.

4.3.3.4 Mobile terminologies

Mobile terminologies are collections of electronic terminology entries formatted for mobile technology such as cell phones and personal information devices.

4.3.4 Terminology databases

Terminology databases are collections of electronic data categories that allow one to manage a stock of terminology by recording and updating terminological data and their terminological, linguistic and

administrative information. This category includes any terminographical product that involves continually adding and/or updating designations and terminological, linguistic and administrative information in a terminology management system. This terminology product category is not to be confused with the category of products that develop tools or applications for terminology management (see 4.6.2). Terminology databases include a query function as well as updating functions (add, edit and delete) to allow for dynamic updating. A basic database includes data categories for at least one designation, and language identifier(s) and administrative categories, such as the creation date for managing the data. The actual data categories selected for inclusion in the database will vary according to user needs (see data category registry). If the content of the database is limited to a single subject field, a subject-field data category is not required. If the database is not specialized in a given subject field, it includes at least one data category to indicate the subject field. If the database contains more than one language, it includes language identifiers. The display format may be fixed or may vary according to user profiles. The database may be stand-alone, networked or web-enabled.

These products may be called a terminology management system, a terminology bank, a term bank, a term database and are not to be confused with electronic terminologies (see 4.3.3).

The deliverable can vary widely and may range from the development of the terminology management system (TMS), (i.e. the development and structure of the data categories and any templates) to the terminology data to populate the TMS. The deliverable takes the form of a computer file or a web-enabled file.

The deliverable is customized in regards to the following aspects:

- language: monolingual, bilingual or multilingual;
- data categories: number and type;
- subject fields: one or more;
- database type: relational, flat, object-oriented;
- normativity: level;
- multimedia: types of integrated multimedia;
- display: format and what content.

Terminology databases can be classified as monolingual, bilingual or multilingual terminology databases.

Monolingual terminology databases are developed in a single language. In addition to the data category to record designations, the deliverable contains at least one other field or data category with a definition or concept description.

Bilingual terminology databases include terminology in two languages. The deliverable contains at least designations and language identifiers in each of the two languages, although there may be some entries with only a term (or a term and its synonymous terms) and corresponding terminological and/or linguistic information in only one language.

Multilingual terminology databases include terminology in more than two languages. The deliverable includes a data category to identify each language and one to record the designations in each language. The deliverable contains at least terms in some, if not all of the languages, although there may be some entries with only a term (or a term and its synonymous terms) and terminological and/or linguistic information in only one language.

4.3.5 Systematic terminologies for information management

4.3.5.1 Basic category

Systematic terminologies are collections of terminological entries arranged systematically according to classes or in concept systems. These products tend to be used for knowledge engineering, information and content management. The output of the products may be used for data and metadata management, management of recorded information and information retrieval. These products are often called a dictionary or specialized dictionary, synonym dictionary or maybe take more specific designations such as nomenclature, taxonomy, ontology or thesaurus.

The deliverables are produced as electronic and/or printed versions and the printed version usually has an alphabetical or sequential index. Most often the deliverable is produced in one language but may be in two or more languages and may include definitions in one or more languages.

This category of products includes:

- nomenclatures;
- taxonomies;
- thesauri;
- ontologies.

4.3.5.2 Nomenclatures

This category of systematic terminologies includes any collection of specialized terminology compiled according to pre-established naming rules in classified order. The product does not include definitions but may include the rules. The deliverable is produced usually in one language but may be in one or more languages. It often includes acronyms or abbreviations.

4.3.5.3 Taxonomies

This category of systematic terminologies includes any collection of structured designations in classified order, which specify hierarchical relationships (generic and partitive) and/or equivalence relationships or synonymy. Products that deal only with synonymous relationships are often called synonym rings. The deliverable is produced usually in one language but may be in more than one language and it may include definitions in one or more languages.

4.3.5.4 Thesauri

This category of systematic terminologies includes any collection of structured designations used as descriptors for information management. The structured designations are organized into descriptor displays that include a preferred designation (descriptor), its hierarchical relations (broader, narrower terms), associative relations (related terms) and synonymous relations (used for). Other relations may be specified. In the descriptor display, scope notes may include definitions or definition-like information. Usually the deliverable is produced in one language but may be in more than one language.

4.3.5.5 Ontologies

This category of systematic terminologies includes any structured set of concepts whose relationships are indicated and presented in a diagram or model to facilitate machine processing. The complex set of relationships may be of any type and the designations representing the concepts may be displayed in various formats. Given its complexity the deliverable is most often produced in one language.

4.3.6 Terminology lists

4.3.6.1 Basic category

This category of terminographical products contains either possible candidate designations or established terminology in publishable form. A terminology list may be compiled manually, or extracted automatically from a document, corpus or terminology database. The list of designations may be numbered, ordered (alphabetically, sequentially or historically) or random. The list entry does not include textual support but may include terminological or linguistic information such as gender. Each list entry may be associated with a source or an author.

This terminographical product category includes:

- manual lists of candidate terminology;
- automated lists of candidate terminology;
- lists of pre-translation terminology;
- lists of publishable terminology;
- lists of terms for controlled language.

4.3.6.2 Manual lists of candidate terminology

Manual lists of candidate terminology are listings of possible designations compiled manually from specialized documents. The deliverable is most often a single list in one language but may be in pairs of languages. The lists may include the source documents from which the designations have been extracted. In semi-automated systems, the candidate designation is selected manually, even though the associated source or author may be formatted automatically.

4.3.6.3 Automated lists of candidate terminology

In automated lists, candidate designations are extracted from one or more electronic documents, corpora, translation memories, aligned texts or terminology databases. The deliverable is extracted automatically by electronic means, usually in one language at a time or in pairs. The entries in the list may a) include fragments of linguistic environment such as in a concordance list, b) include statistical information such as frequency or c) be annotated.

4.3.6.4 Lists of pre-translation terminology

Lists of pre-translated terminology contain text-specific designations drawn from the source language text to be translated with or without equivalent designations in the target language. The list is displayed a) in the order the terms appear in the source text, b) according to frequency or c) in alphabetical/sequential order. The deliverable may be produced manually, or extracted from a terminology database, a monolingual corpus, an aligned bilingual concordance or translation memory.

4.3.6.5 Lists of publishable terminology

Lists of publishable terminology contain established terminology drawn from a document, corpus or terminology database. The deliverable is compiled manually or generated automatically. It is intended as a finished product and may be published, either in electronic or printed form. It may be called a lexicon, vocabulary, glossary and even a dictionary, if it is extensive.

The list of publishable terminology most often takes the form of a bilingual list of terminology and its equivalents or a list of terminology with multiple equivalents.

Bilingual lists contain terminology in one language with equivalents in another language. They are usually displayed in pairs, often in two columns. The deliverable may be compiled and researched manually or may be generated from a terminology database, aligned texts or translation memory. The list of terminology in one language with equivalents may be arranged alphabetically in an integrated list of both languages, in separate lists in inverted order or in a numbered list cross-referenced in an index.

Multilingual lists contain a list of terminology in one language with equivalents in more than two languages. They are displayed a) alphabetically in inverted tables of equivalents for each language or b) alphabetically/sequentially or numbered according to the source language with an index for each target language.

4.3.6.6 Lists of terms for controlled language

Lists of terms for controlled language contain preferred designations and/or their non-preferred synonyms. This list is often called a control vocabulary. The list is to be used for information content management (i.e. writing, editing). The deliverable is most often produced in one language, occasionally in more than one language and often includes lexica.

4.3.7 Vetted terminologies

4.3.7.1 Basic category

This category of terminographical products includes any product in any format that has been screened by an authorizing body such as a standardizing body or client for sensitivity or correctness prior to dissemination.

This category of terminology product includes:

- classified terminologies;
- approved or prescribed terminologies.

4.3.7.2 Classified terminologies

This category of vetted terminologies includes any terminographical product in any format that is not disseminated to the general public but to a restricted group of users.

4.3.7.3 Approved or prescribed terminologies

This category of vetted terminologies includes any terminographical product in any format that has been screened and accepted by an authorizing body or client for correctness. This category also includes both normative terminology and recommendations. These products may be printed or electronic. This category does not include terminology bulletins and advisories (see 4.4.2).

A recommendation is a document that stipulates the terminology that is recommended or advisable in a given context while a terminology standard is a normative document that stipulates the terminology that must be used in a given context.

The deliverable may take the form of a stand-alone printed or electronic document that is comparable to a printed terminology (see 4.3.2) or electronic terminology (see 4.3.3). When the terminology entries are incorporated in a section of a standard, the product is comparable to a printed embedded terminology (see 4.3.2.2) or an on-line terminology (see 4.3.3.2).

4.3.8 Terminology equivalents

This terminographical product category includes any designation (term or appellation) provided in another language as a translation solution, often delivered by a terminology research service (see 5.7.2), a terminology hotline service (see 5.7.3) or terminology look-up service (see 5.7.4). It is communicated orally or

in writing such as e-mail, letter or fax. The deliverable may include additional terminological or linguistic information.

4.3.9 Pictorial terminologies

This terminographical data category includes any collection of images and accompanying designations that label the images. The deliverable often includes an index of all the designations used on the images. It is usually produced in one language but may include more than one language. It may be in electronic or printed format.

4.3.10 Multimedia terminology products

This terminographical data category includes any collection of designations provided as sound, image or video files. The deliverable may be called a speech dictionary or audio dictionary. It should be noted that as technology evolves, this category will require a more detailed classification.

4.4 Terminology documents

4.4.1 Basic terminology document categories

This category of terminology products includes any document that deals with terminology issues and questions. Terminographical entries do not constitute the bulk of the document's content, although it may include embedded terminologies. These documents may be printed or electronic.

This category of terminology products includes:

- terminology journals;
- terminology bibliographies or catalogues;
- prescriptive terminology documents;
- terminology policy documents.

4.4.2 Terminology journals

This category of terminology documents includes any periodical (i.e. document published with a given periodicity) that deals with terminology issues and other topics of interest to the profession. These documents often include printed embedded terminologies (see 4.3.2.2) or on-line terminologies (see 4.3.3.2) in the case of electronic journals.

Terminology bulletins are considered to be a specialized form of journal or periodical that regularly provides information on the latest terminology and on current terminology products and services (e.g. language advisories).

The deliverable may involve producing the entire journal, a special issue of a journal, bulletins, a specific bulletin or simply an article or articles for a journal or bulletin.

4.4.3 Terminology bibliographies/catalogues

This category of terminology documents includes any bibliography that lists bibliographic information for the purposes of producing a terminology product or service as well as any catalogue that itemizes terminology activities or projects producing terminology products or services.

4.4.4 Prescriptive terminology documents

This category of terminology documents includes any standard or recommendation in the field of terminology. These documents are often called terminology standards but this category does not include terminology standards or recommendations where the bulk of the document includes terminographical entries.

4.4.5 Terminology policy documents

This category of terminology documents includes any authoritative document that stipulates the objectives, processes, means, standards, and roles and responsibilities for the management of terminology in a given context. Terminology policy documents are issued by a governing body for applicability within its mandate and require input from and endorsement by executives of the organization. This category includes: terminology governance policies, terminology programme strategies and terminology standardization directives.

Terminology governance policies are high-level authoritative policy documents that stipulate the objectives, and roles and responsibilities for the management of terminology in a given context while terminology programme strategies are high-level policy documents that stipulate the overall view of how stated objectives will be achieved in the management of terminology in a given context.

Terminology standardization directives are detailed authoritative documents that stipulate the roles and responsibilities, and the processes, means and standards to be used to achieve stated objectives for the management of terminology in a given context. A terminology standardization directive is issued by a governing body for applicability within its mandate and requires input from and endorsement by senior managers of the organization.

4.5 Educational products

4.5.1 Educational product categories

This product category includes any product developed for teaching in a formal educational institution or for less formal training in the context of professional development. This category includes any product or any document, printed or electronic, used to teach terminology, train terminologists or advance the profession of terminology. These deliverables are usually produced in one language but often deal with more than one language.

This category of products includes:

- terminology curricula;
- terminology manuals;
- terminology courses;
- terminology seminars;
- terminology tutorials.

4.5.2 Terminology curricula

This category of terminology product includes any document that specifies the content and material to be used in teaching terminology.

4.5.3 Terminology manuals

This category of terminology product includes any product that describes how to do terminology work.

4.5.4 Terminology courses

This category of terminology product includes any learning/teaching material prepared for the purposes of teaching or training in the field of terminology or terminology work.

4.5.5 Terminology seminars

This category of terminology product includes any specific material prepared on a particular terminology issue for the purposes of teaching, training or professional development.

4.5.6 Terminology tutorials

This category of terminology product includes any material prepared as training material. The delivered product should include practical exercises.

4.6 Terminology tools

4.6.1 Terminology tool categories

This category of terminology products includes any computer application that assists terminologists in the production and delivery of terminology products and services. It should be noted that a deliverable can be developed as a single tool, in combination with other tools in an integrated system or adapted and customized from existing applications. This category includes:

- terminology management system applications;
- terminology extraction tools;
- computer-assisted terminology tools;
- terminology look-up tools;
- terminology comparison tools;
- terminology publishing tools;
- terminology annotation tools;
- terminology conversion tools;
- terminology statistical tools;
- terminology indexing tools;
- terminology work flow tools;
- terminology submission tools;
- terminology replacement tools;
- terminology checkers;
- terminology tools for localization;
- text alignment tools for terminology;
- concordance tools for terminology.

4.6.2 Terminology management system applications (TMS application)

This category of terminology tools includes any computer application or combination of applications that allows for the addition, deletion and modification of terminology as well as the retrieval of terminological information in a terminology database. The application may produce a fixed record format or may have a variable record format to accommodate variable data categories based on user profiles. These tools are used in the development of terminology databases (see 4.3.4).

4.6.3 Terminology extraction tools

This category of terminology tools includes any computer application that identifies and selects candidate terminology in an electronic text based on statistical analysis, linguistic tagging or a combination of the two.

4.6.4 Computer-assisted terminology tools

This category of terminology tools includes any computer application or combination of applications that assist in extracting, capturing and formatting terminological information.

4.6.5 Terminology look-up tools

This category of terminology tools includes any computer application that retrieves terminology and/or terminological information in a terminology database. The deliverable provides read-only access.

4.6.6 Terminology comparison tools

This category of terminology tools includes any computer application that assists in managing terminology by comparing multiple terminology resources for the purposes of exclusion, avoidance of duplication and flagging missing terminology.

4.6.7 Terminology publishing tools

This category of terminology tools includes any computer application or combination of applications that allows one to retrieve terminology in publishable format from a terminology management system. The deliverable includes functions that assist in the design and layout of terminology entries for publication.

4.6.8 Terminology annotation tools

This category of terminology tools includes any computer application that assists in tagging terms with attributes in an XML or other structured format.

4.6.9 Terminology conversion tools

This category of terminology tools includes any computer application or combination of applications that convert terminological resources from one format to another. The deliverable may include de-formatting applications.

4.6.10 Terminology statistical tools

This category of terminology tools includes any computer application that establishes the frequency usage of terms, candidate terms or other designations in a text.

4.6.11 Terminology indexing tools

This category of terminology tools includes any computer application that indexes open text in order to find terminology in an electronic file.

4.6.12 Terminology work flow tools

This category of terminology tools includes any computer application that manages operational tasks associated with terminology work. The deliverable includes a number of functions such as file management, file distribution, versioning, tracking billable time and scheduling.

4.6.13 Terminology submission tools

This category of terminology tools includes any computer application that automates the operation of submitting an addition or deletion in a terminology management system or proposing a modification to the information stored in a terminology management system.

4.6.14 Terminology replacement tools

This category of terminology tools includes any computer application that automatically replaces incorrect terminology or updates terminology in source documents or translation memories.

4.6.15 Terminology checkers

This category of terminology tools includes any computer application that verifies whether control vocabulary has been used.

4.6.16 Terminology tools for localization

This category of terminology tools includes any computer application that records the terminology to be used during the localization process.

4.6.17 Text alignment tools for terminology extraction

This category of terminology tools includes any computer application that aligns translated texts for the purpose of identifying candidate terminology and its linguistic environment. The deliverable may include applications that propose one or more possible translation equivalents based on the translations in the aligned text.

4.6.18 Concordance tools for terminological analysis

This category of terminology tools includes any computer application that indexes all the words in a document or corpus along with a portion of the passage in which they occur. The deliverable may index the words alphabetically, by frequency or other criteria and the portion of the passage displayed may also be specified.

5 Terminology services

5.1 Introduction to terminology services

The following is a listing of terminology service categories that can be delivered in the field of terminology. The deliverable is intangible, in opposition to the terminology product, and is a service developed in response to a user's specific needs. Therefore, the terminology service may be more customized than the basic service category listed below. Deliverables may also be interim services used to develop other deliverables.

5.2 Terminology service categories

This service category includes all deliverables in the form of a service that supports special language use.

Terminology services fall into seven categories:

- terminology consulting services;
- terminology management services;
- services for the preparation and delivery of terminographical resources;
- tool development services;
- reference and information services;
- educational services;
- certification services.

5.3 Terminology consulting services — Strategic consulting and project-specific consulting

This service category includes any advice provided to establish and/or improve overall delivery and management of clients' terminology resources, products and/or services. The deliverable can be divided into: strategic consulting (terminology policies etc.) and project-specific consulting.

Strategic consulting is advice on terminology policy and strategy to support the overall delivery and management of clients' terminology resources or services. The deliverable will often involve the development of business cases and return on investment analyses.

Project-specific consulting is advice provided to establish or improve delivery and management of clients' terminology resource (e.g. terminology database), products or services (e.g. tutorial, course, hotline service).

5.4 Terminology management services

5.4.1 Terminology management service categories

This service category includes any service that involves organizing, coordinating, monitoring and evaluating terminology operations and delivering terminology resources.

This terminology service category includes:

- human resource management;
- information technology management;
- resource life cycle management;
- prescriptive terminology management;
- work flow analysis;
- committee work;
- project management;
- product dissemination and sales;
- marketing and promotion;
- client relationship management;
- legal issues management.

5.4.2 Human resource management

This terminology management service category includes any service that involves recruiting, training, evaluating, monitoring and supervising personnel who produce terminology resources, products or services.

5.4.3 Information technology management

This terminology management service category includes any service that involves installing, maintaining, updating and upgrading the necessary software and hardware for the delivery of terminology products and services. It includes the provision of technical client support (e.g. help desk).

5.4.4 Resource life cycle management

This terminology management service category includes any service to keep terminology and terminographical resources and documentation current (e.g. identifying outdated material and gaps to be filled in).

5.4.5 Prescriptive terminology management

This terminology management service category includes any service to update, maintain, disseminate and enforce terminology standards such as controlled language usage.

5.4.6 Work flow analysis

This terminology management service category includes any service to develop, coordinate, evaluate and modify the steps involved in terminology processes and in the delivery of terminology resources.

5.4.7 Committee work

This terminology management service category includes any service to establish and administer a terminology committee, including the preparation of terminology files and other documents and the organization of meetings.

5.4.8 Project management

This terminology management service category includes any or all of the terminology services involved in managing a specific terminology project.

5.4.9 Product dissemination and sales

This terminology management service category includes any service that involves delivering or optimizing the distribution of terminology products and services.

5.4.10 Marketing and promotion

This terminology management service category includes any service that involves advertising and promoting terminology products and services (e.g. preparing a market study).

5.4.11 Client relationship management

This terminology management service category includes any service that involves managing client relations (e.g. customer surveys, feedback mechanisms, user needs analysis).

5.4.12 Legal issues management

This terminology management service category includes any service that involves managing issues that have a legal consequence such as copyright, royalties, contracts, liability, patents for tools, etc.

5.5 Services for the preparation and delivery of terminographical resources

5.5.1 Categories for the preparation and delivery of terminographical resources

This terminology service category includes any operational service required for the preparation of a terminographical product. Not all products require all steps. For example, dictionary consolidation would require some but not all of the following steps. See also 5.4.

This terminology service category includes:

- needs analysis;
- organizational structure;
- source identification and collection;
- data collection;
- data analysis;
- data conversion;
- data recording;
- data maintenance;
- data evaluation;
- data validation;
- content review;
- resource production.

5.5.2 Needs analysis

This category includes any operational service that involves assessing user needs and determining required product characteristics.

5.5.3 Organizational structure

This category includes any operational service that involves creating the database structure (e.g. selecting data categories) and associated templates for electronic resources. For print resources, it is the operational service of identifying entry elements and designing layout (i.e. macrostructure and microstructure).

5.5.4 Source identification and collection

This category includes any operational service that involves identifying, gathering and building a library or corpus of printed or electronic documents for data collection.

5.5.5 Data collection

This category includes any operational service that involves identifying and extracting domain specific terms and terminological information.

5.5.6 Data analysis

This category includes any operational service that involves analysing and organizing the data to turn it into a terminographical product.

5.5.7 Data conversion

This category includes any operational service that involves converting terminological data from one format to another.

5.5.8 Data recording

This category includes any operational service that involves entering data, either into a given record format or into specified data categories.

5.5.9 Data maintenance

This category includes any operational service that involves editing, deleting and/or archiving the data content of a terminographical product or resource.

5.5.10 Data evaluation

This category includes any operational service that involves reviewing the terminographical data for quality control or maintenance of a terminographical product or resource.

5.5.11 Data validation

This category includes any operational service that involves reviewing format and proofreading the terminographical data.

5.5.12 Content review

This category includes any operational service that involves reviewing the terminological content in a terminographical product or resource.

5.5.13 Resource production

This category includes any operational service that involves producing a terminographical resource in one or more media formats (e.g. print, CD-Rom, website, various electronic formats, etc.).

5.6 Tool development

5.6.1 Tool development categories

This terminology service category includes any creation of new software applications for terminology. A project manager usually coordinates these activities.

This terminology service category includes:

- design and specifications;
- programming;

- user assistance;
- testing;
- versioning;
- tool customization.

5.6.2 Design and specifications

This category includes any service that provides design requirements and specifications for a given software tool. This involves the analysis of user needs and the identification of output deliverables.

5.6.3 Programming

This category includes any service that involves writing program codes for the implementation of requirements.

5.6.4 User assistance

This category includes any service that develops user manuals and other documentation as well as help systems for a terminographical product or resource.

5.6.5 Testing

This category includes any service that performs tests to ensure a tool meets the requirements and specifications, and functions properly. This involves the preparation of a test plan, tracking and solving problems.

5.6.6 Versioning

This category includes any service that involves managing the various levels of the software application during or after development.

5.6.7 Tool customization

This category includes any service that involves adapting existing software applications for specific needs.

5.7 Reference and information services

5.7.1 Reference and information service categories

This terminology service category includes any service that provides terminological and other language-related information such as terminology look-up or translation solutions.

This terminology service category includes:

- terminology research service;
- terminology hotline service;
- terminology look-up service;
- information referencing service;
- information brokerage service;
- discussion group service.

5.7.2 Terminology research service

This category includes any service that carries out terminology research and provides research findings in response to a given request.

5.7.3 Terminology hotline service

This category includes any service that provides terminology equivalents and information, including translation solutions, grammatical and linguistic information.

5.7.4 Terminology look-up service

This category includes any service that involves querying specific terminographical resources.

5.7.5 Information referencing service

This category includes any service that provides references to appropriate documentation and bibliographic sources for terminology.

5.7.6 Information brokerage service

This category includes any service that provides names of terminologists and other language specialists.

5.7.7 Discussion group service

This category includes any service that involves the creation of a discussion group and/or the monitoring of an on-line discussion.

5.8 Education and training services**5.8.1 Education and training service categories**

This terminology service category includes any service that provides education and/or training courses and material in terminology and other language-related domains.

This terminology service category includes:

- curriculum development services;
- course development services;
- terminology teaching/training services.

5.8.2 Curriculum development services

This category includes any service that involves preparing teaching and training material (e.g. for programmes, seminars, tutorials) in the field of terminology.

5.8.3 Course development services

This category includes any service that involves preparing teaching and training material for a specific terminology course, seminar or tutorial.

5.8.4 Terminology teaching/training services

This category includes any service that involves the delivery of academic terminology courses, seminars and tutorials or the delivery of practical terminology courses, seminars and tutorials for the purposes of training or professional development.

5.9 Accredited certification service (for future development)

This terminology service category includes any certification service that evaluates and certifies the qualifications of a terminologist on behalf of a certification body or evaluates and certifies a terminology product or service on behalf of a certification body.

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Annex A (informative)

Recommended practices for developing quality terminology products and services

A.1 Introduction

The following criteria establish guidelines based on generally-accepted terminology practices (GATP) in terminology and current technological capabilities. The criteria below should be taken into consideration in the design and specifications of a terminology project, as well as in the acceptance of the project. The importance of some of the individual criteria in a given project may depend on any combination of the subject matter involved, the desired end use, technical constraints or client preferences.

The role of the terminologist is to produce a product or service of the highest possible quality within the scope of the requirements and objectives as stated by the client. The terminologist should advise the client whether an existing product or service that satisfies the needs of the client already exists and on the feasibility of delivering a product or service, in the event of instability of concept systems within the subject field. The terminologist should explain the potential impacts of the client's choices in relation to defining the deliverable. The terminologist should be well versed in terminology standards and practices so as to be able to apply standards and adapt practices for the client.

A.2 General terminology practice

A.2.1 Methodology

Terminologists should engage the client in a thorough discussion to define the project scope (e.g. coverage of the subject field, extent of research, amount of detail of the deliverable, inclusion of older terminology, intended end users and their needs, need for standardization, etc.) and level of effort expected to produce the desired deliverable. Cost and time should be budgeted accordingly.

Terminologists should follow sound project management practices, including regular client discussions and review to validate the work of the project. The methodology should include a validation phase when identifying user needs and requirements and for both content and structure of the deliverable (e.g. testing, conformance testing, performance measurement).

Design and conception of products should be based on a single-concept approach as opposed to a lexical approach. Systematic terminology products are to be concept-based as opposed to being based on classification schema.

The terminologist should adhere to sound data modelling for the structure and design of products and services. Quality terminology products should be designed for ease of maintenance and updating. A terminologist has a responsibility to inform the client about opportunities for repurposing data as much as possible.

A.2.2 Clarity of expression

The information contained in the product should be conveyed in a clear, concise and logical construct.