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Terminology work — Harmonization of concepts and terms

Travaux terminologiques — Harmonisation des concepts et des termes

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Foreword

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ISO 860 was prepared by Technical Committee ISO/TC 37, *Terminology and other language and content resources*, Subcommittee SC 1, *Principles and methods*.

This third edition cancels and replaces the second edition (ISO 860:1996), which has been technically revised.

Introduction

0.1 Overview

In spite of all the efforts made to coordinate terminologies as they develop, it is inevitable that overlapping and inconsistent terminologies will continue to be used because documents and policies are produced in different contexts. Differences between concepts and misleading similarities at the designation level create barriers to communication. Concepts and terms develop differently in individual languages and language communities, depending on professional, technical, scientific, social, economic, linguistic, cultural or other factors. Harmonization is, therefore, desirable because

— differences between concepts do not necessarily become apparent at the designation level,

— similarity at the designation level does not necessarily mean that the concepts behind the designations are identical,

— mistakes occur when a single concept is designated by two synonyms which by error are considered to designate two different concepts.

Harmonization starts at the concept level and continues at the term level. It is an integral part of standardization.

0.2 Conventions and notation

In this International Standard, tree diagrams are used to represent generic concept relations. The following notation is used throughout this International Standard:

— concepts are indicated by single quotes;

— designations are in boldface;

— characteristics are underlined;

— alpha-2 language codes are in small letters, boldface and italics;

— country codes are in capital letters;

— examples are boxed.

Terminology work — Harmonization of concepts and terms

1 Scope

This International Standard specifies a methodological approach to the harmonization of concepts, concept systems, definitions and terms.

This International Standard applies to the development of harmonized terminologies, at either the national or international level, in either a monolingual or a multilingual context.

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 704:2000 [1)], *Terminology work — Principles and methods*

ISO 1087-1:2000 [2)], *Terminology work — Vocabulary — Part 1: Theory and application*

ISO 10241:1992, *International terminology standards — Preparation and layout*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 1087-1 and the following apply.

3.1
concept harmonization
activity leading to the establishment of a correspondence between two or more closely related or overlapping concepts having professional, technical, scientific, social, economic, linguistic, cultural or other differences, in order to eliminate or reduce minor differences between them

NOTE The purpose of concept harmonization is to improve communication.

3.2
concept system harmonization
activity leading to the establishment of a correspondence between two or more closely related or overlapping concept systems having professional, technical, scientific, social, economic, linguistic, cultural or other differences, in order to eliminate or reduce minor differences between them

NOTE The purpose of concept system harmonization is to improve communication.

1) Under revision.

2) To be revised.

3.3
definition harmonization
activity leading to the description of a harmonized concept by an intensional definition that reflects the position of the concept in the harmonized concept system

3.4
term harmonization
activity leading to the selection of designations for a harmonized concept either in different languages or within the same language

NOTE Harmonized terms between different languages are equivalent terms; harmonized terms within the same language are either synonyms or term variants.

3.5
equivalence
relation between designations in different languages representing the same concept

[ISO 1087-1:2000, definition 3.4.21]

4 Harmonization of concepts and concept systems

4.1 Concept variation

4.1.1 General

Since concepts may vary slightly on account of differences in professional, technical, scientific, social, economic, linguistic, cultural or other environments, the harmonization of specific concepts or concept systems will assist in reducing ambiguity and misunderstanding in communication. Some examples of concept variation are shown in Example 1.

4.1.2 Example 1 — Concept variation due to differences in professional, scientific, cultural or socioeconomic environments

Differences	Example
Professional	'Bachelor degree' and 'licentiate degree' in different countries are not exactly the same but are close enough to be considered equivalent degrees.
Scientific	'word' in the field of linguistics varies according to different linguistic theories.
Cultural	For Europeans, 'North America' includes the US and Canada while in the Americas, 'North America' is the region comprising Canada, the US and Mexico.
Socioeconomic	The 'minimum acceptable standard of living' can have different extension within the context of the highly industrialized countries.

4.2 Feasibility study

4.2.1 Preliminary analysis

Before conducting concept harmonization, differences and similarities between concepts and concept systems shall be examined in order to determine the feasibility of harmonization. Preliminary issues will be concerned with whether the concept systems to be harmonized are from the same subject field, the extent to which both contain the same concepts and, if the content is overlapping, whether the harmonization project is to be directed towards the area of overlap, or all the concepts in the systems to be harmonized. See Annex A.

4.2.2 Analysis of the subject field

Harmonization is more likely to be possible if the following conditions are met:

a) a subset of the terminology of the subject field has already been harmonized;

b) the subject field is well established and relatively stable;

c) the subject field has a tradition of standardization.

4.2.3 Similarity between concepts

Whether the harmonization project will be carried out on concepts and concept systems in one language or across languages, a cursory comparison of some key concepts to be harmonized in each concept system shall be performed. This analysis shall determine:

a) which characteristics the concepts of each concept system have in common

   1) within a language,

   2) across languages;

b) which characteristics of the concepts differ from one concept system to another

   1) within a language,

   2) across languages;

c) which characteristics are essential to each key concept.

Successful concept harmonization is more likely to be possible if the following conditions are met:

— the concepts are closely related to each other and have common characteristics;

— the essential characteristics are the same or similar and reflect a similar perspective within the particular professional, technical, scientific, social, economic, linguistic, cultural or other environment;

— a correspondence can be established between the key concepts in each concept.

4.3 Harmonization procedure

4.3.1 Selection of concepts

The scope of the harmonization project will determine the concepts and concept systems to be harmonized.

4.3.2 Comparison of concept systems

All relevant concept systems shall be examined. Ideally, a new set of concept systems, containing all the material from all the sources to be harmonized, will be produced. However, there may be divergences in the criteria of subdivision which establish the need for separate displays. In this case, the point of divergence can be identified.

The comparative analysis of the different concept systems shall take account of the following:

a) the number of concepts included;

b) the relationships between concepts;

c) the depth of structuring;

d) the criteria of subdivision used to develop the concept system.

4.3.3 Harmonized concept system maintenance

Having assembled all relevant material into a set of concept systems for the purposes of overall control, it will be necessary to decide whether to retain them in this form for display purposes or to disaggregate them for particular applications. Another approach is to give the concept systems in their complete form even if only part is relevant to the specific context, distinguishing the relevant concepts, e.g. by emboldening or italics.

Depending on the scope of the harmonization project, it shall be necessary to decide whether

a) a harmonized concept system will be produced after harmonization has successfully been carried out, or

b) each concept system will be adapted to reflect the result of harmonization.

4.3.4 Harmonization of single concepts

4.3.4.1 General

Concepts shall be analysed by comparing their characteristics and not their designations. In practice, characteristics shall be found in the definition and sometimes in the explanatory note provided for each concept belonging to the concept system. Definitions shall be collected from reliable sources including all available expertise within the subject field.

After completing a comparative analysis of the definitions for one concept, it shall be determined which of the conditions described in 4.3.4.2 to 4.3.4.5 applies.

4.3.4.2 Concepts which are identical

4.3.4.2.1 General

The concepts in the different concept systems are exactly the same and their characteristics coincide. In this case, there is no need for concept harmonization. See Example 2. However, term harmonization may be necessary at a later stage to select the designation in each language, and to establish term equivalence between languages and synonymy and term variation within each language.

4.3.4.2.2 Example 2 — Identical concepts

A concept in a monolingual and a bilingual context for which there is no need for harmonization.

Harmonization within a language:

en **'**proenzyme' <medical biochemistry>

1. the precursor of an enzyme requiring proteolysis to render it active (source: Stedman's Medical dictionary)

2. an inactive precursor of an enzyme that can be converted to the active enzyme by proteolysis (source: Dorland's Illustrated M.D.)

3. an inactive enzyme precursor that is converted to the active form of the enzyme by proteolitic cleavage [source: Singleton, P. and Sainsbury, D. (1996): *Dictionary of microbiology and molecular biology,* Chichester / Toronto, Wiley]

Characteristics used to define the concept:

precursor of an enzyme (1) / inactive precursor of an enzyme (2, 3)
requiring proteolysis to render it active (1, 2) / converted to an active enzyme by proteolitic cleavage (3)

Regarding the difference found in the first characteristic [precursor of an enzyme (1) and inactive precursor of an enzyme (2, 3)], the solution lies within the context of the second characteristic [requiring proteolysis to render it active (1, 2) / converted into an active enzyme by proteolitic cleavage (3)], as it can be implied that before the process of proteolysis / proteolitic cleavage the precursor of the enzyme was not active.
After the analysis of the possible difference between proteolysis and proteolytic cleavage (proteolysis: the cleavage of proteins by proteases; proteolytic cleavage: the process of breaking proteins by proteases), it can be concluded that there is no difference. Therefore, the same characteristics are used to define the concept of 'proenzyme'; thus, there is no need for concept harmonization.

Harmonization across two languages:

en 'proenzyme' <medical biochemistry>

1. the precursor of an enzyme requiring proteolysis to render it active (source: Stedman's Medical dictionary)

2. an inactive precursor of an enzyme that can be converted to the active enzyme by proteolysis (source: Dorland's Illustrated M.D.)

3. an inactive enzyme precursor that is converted to the active form of the enzyme by proteolitic cleavage [source: Singleton, P. and Sainsbury, D. (1996): *Dictionary of microbiology and molecular biology,* Chichester / Toronto, Wiley]

For the analysis of the English characteristics, see above.

fr 'zymogène' <biochimie médicale>

1. precurseur inactif d'une enzyme, qui par activation protéolytique génère l'enzyme active [source: Devlin, E. and G. Pham (1993): *Vocabulaire du génie enzymatique*, Ottawa: Services gouvernementaux Canada]

2. precurseur d'une enzyme inactive qui par activation protéolytique deviendra active [source: *Cours de Biochimie,* Université Montpelier 1]

3. precurseur d'une enzyme non active qui est activée par un process de protéolyse (source: Institute National de la Recherche Agroalimentaire *Glossaire d'enzymologie*)

The analysis of the French characteristics used to define the concept 'zymogène' reveals that:

precurseur inactive d'une enzyme / precurseur d'une enzyme inactive / precurseur d'une enzyme non active (1, 2, 3)
qui par activation protéolique génère l'enzyme active (1, 2) / qui est activée par un process de protéolyse (3)

As in the case of English, qui par activation protéolique is the same as activée par un process de protéolyse.

Since the characteristics used to define the concepts of ***en*** 'proenzyme' and ***fr*** 'zymogène' are the same, the concepts correspond to each other; therefore, there is no need for concept harmonization across these two languages.

4.3.4.3 Partially overlapping concepts

4.3.4.3.1 General

If some of the essential characteristics of the concepts differ, there will be differences in the intension and the extension of each concept. This means there is a partial overlapping of the concepts. In these cases, subject specialists shall determine which of the following conditions applies:

a) The differences are minor and one concept can be used. Minor differences are often the result of differences in professional, technical, scientific, social, economic, linguistic, cultural or other environments. Considerable care may be needed in deciding on the location of the concept in the harmonized concept system; the concept shall be defined in a consistent manner in all languages, it may involve adjusting the essential and non-essential characteristics, or including some words of explanation concerning usage in notes to the concept definition. See Example 3.

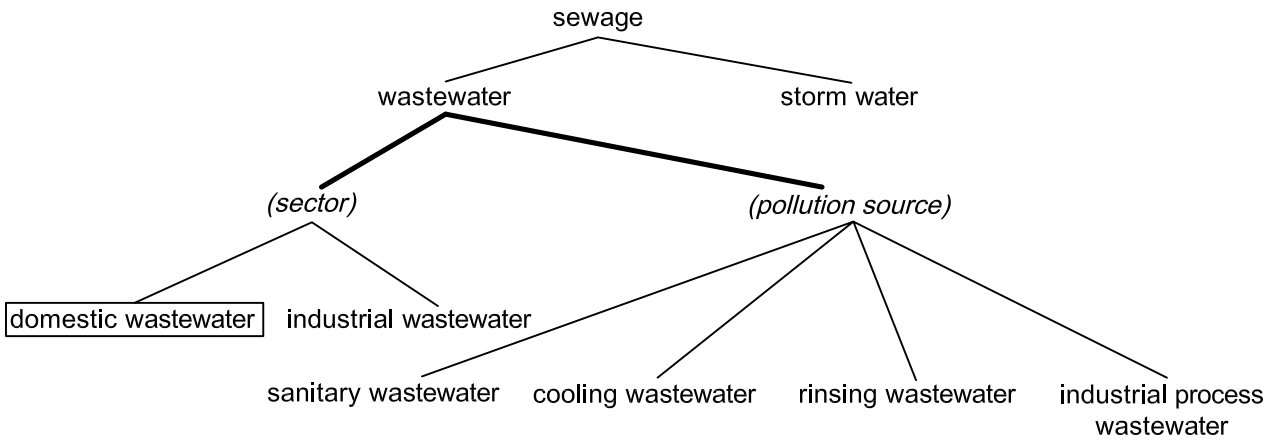
b) The differences are considerable. This means there are two or more different concepts being dealt with. The characteristics of each must be determined and different positions assigned to them in the corresponding concept system. See Example 4.

4.3.4.3.2 Example 3 — Concepts in a bilingual environment having minor differences

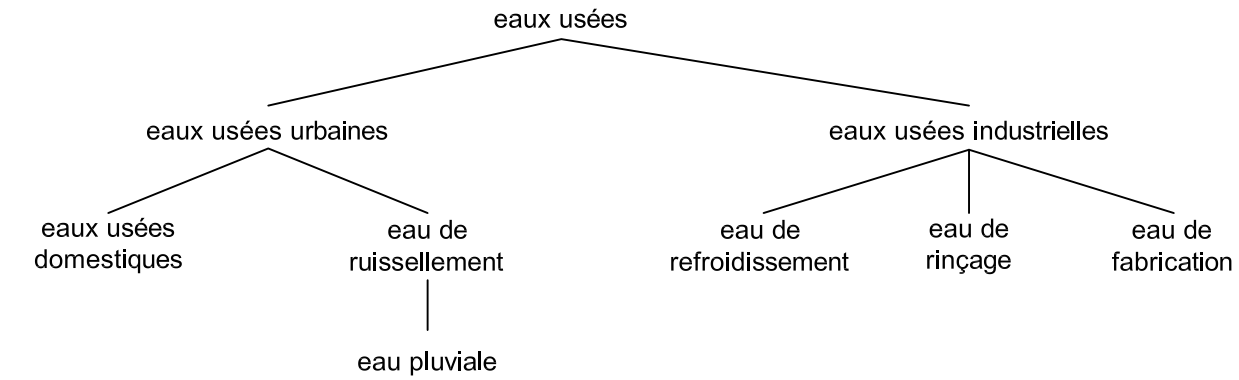
Concepts in a bilingual environment having minor differences that can be reduced or eliminated in order to harmonize them.

In the field of water pollution,

en 'domestic wastewater'



fr 'eaux usées domestiques'



Definitions of ***en*** 'domestic wastewater'**:**

1. Wastewater derived principally from dwellings, business buildings, institutions, and the like. (Department of State, Florida: *Domestic Wastewater facilities*, http://www.dep.state.fl.us/water/wastewater/dom/domdefn.htm#Domestic%20Wastewater)

2. Waterborne wastes from households (e.g. faecal matter, urine, and waste from bathroom basins. (Australian Government, Department of the Environment: *Environmental indicators for national state of the environment*, http://www.deh.gov.au/soe/ind.html)

3. Any wastewater produced by ordinary living uses, including liquid waste containing animal or vegetable matter in suspension or solution, or the water-carried waste from the discharge of water closets, laundry tubs, washing machines, sinks, dishwashers, or other source of water-carried wastes of human origin. (Department of Environmental Protection. State of Maine: *Definitions used with the Subsurface Wastewater Discharge and UIC Programs*, http://www.maine.gov/dep/blwq/docstand/uic/definitions.htm)

4. Effluent which contains constituents and characteristics similar to effluent from a residence. (The University of New Mexico: Wastewater Program. *Definitions* http://www.unm.edu/~sheaweb/sheamanual/envprot/wasteh2o/WASTEH2O.htm)

5. Wastewater from private residences and wastewater from other premises resulting from the use of water for personal washing, sanitary purposes or the discharge of human excrement and related matter. (City of Riverside Municipal Code: *Discharge of wastes into the public sewer and storm drain systems.* http://www.riversideca.gov/municipal_code/Title_14/12/120.html)

6. The water-carried wastes from kitchens, toilets, lavatories, and laundries. (California Association of Sanitation Agencies: *Glossary* http://www.casaweb.org/Glossary/GlossD.htm)

7. Wastewater containing human excrement and liquid household wastes. (Department of Public Health, Illinois Register: *Adopted Amendments*:http://www.idph.state.il.us/rulesregs/77-890adopted.pdf)

Definitions of ***fr*** 'eau usée domestique':

8. Eaux usées transportées par l'eau provenant des cuisines, des salles de bain, des buanderies, des drains de sol, etc. (Environnement Canada: *Glossaire* http://www.ec.gc.ca/water/fr/info/pubs/NSKit/f_gloss.htm)

9. Eaux usées d'origine résidentielle, commerciale ou institutionnelle (Glossaire Environnement INRA).

10. Eaux usées comprenant les eaux ménagères (eaux de cuisine, de lessive, de toilette, appelées «gray water» en anglais) et les eaux-vannes (matières fécales et urines, en provenance des W.C., appelées «black water» en anglais) (http://www.aquiris.be/index.html?page=20&lang=fr)

Analysis of characteristics:

a) wastewater / effluent (water mixed with waste matter) / waterborne waste / water-carried waste / eaux usées (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)

b) from dwellings, business buildings, institutions and the like / households / ordinary living uses / similar to that of residences / from residences and other premises / d'origine résidentielle, commerciale ou institutionelle (1, 2, 3, 4, 5, 10)

c) contains faecal matter, urine and waste from bathroom basins / discharge from WCs / personal washing / sanitary purposes / human excrement and related matter / provenant des salles de bain / eaux-vannes (2, 3, 5, 6, 7, 8, 10)

d) contains animal or vegetable matter in suspension or solution (3)

e) discharge from laundry tubs, washing machines, dishwashers / kitchens / liquid household wastes / provenant des cuisines / provenant des buanderies / provenant des drains de sol / eaux ménagères (3, 6, 7, 8, 10)

f) contains any other source of water-carried waste of human origin (3)

From this analysis, it can be seen that although the characteristics used to define these concepts are not exactly the same (e.g. some state that *domestic wastewater* comes only from households while others include also the wastewater from business buildings, commercial buidings, institutions and the like), and therefore the intension and the extension of the concepts do not coincide, the concepts are closely related and there is an important area of overlap so that by adjusting the essential and delimiting characteristics, the concept can be harmonized.

The definition of the harmonized concept is:

'domestic wastewater' / 'eaux usées domestiques'

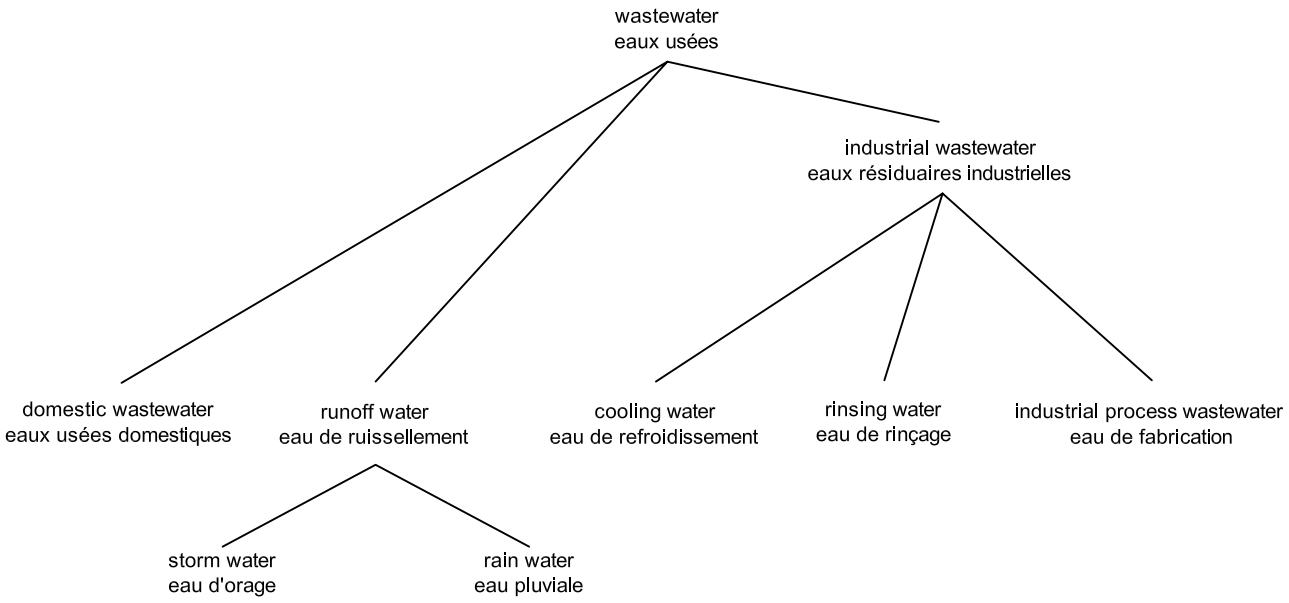
en wastewater from households, business buildings or institutions
NOTE Includes wastewater from kitchens, bathrooms, WCs, laundries, washing machines, etc.

fr eaux usées d'origine residentielle, commerciale ou institutionelle
NOTE Eaux provenant des cuisines, des salles de bain, des W.C., des buanderies, machines à laver, etc.

If the scope of the harmonization project were to harmonize all the concepts in the concept system, this process would be repeated for each concept.

After all concepts have been harmonized, the harmonized concept system is constructed using the same concept relations and the same criteria of subdivision. It would look as follows:

The harmonized concept system:



4.3.4.3.3 Example 4 — Considerable concept difference means that the concepts cannot be harmonized

‘small and medium-sized enterprise’

Within the context of the European Union, the definition of this concept is: an independent enterprise that has fewer than 250 employees and an annual turnover not exceeding € 40 million or a balance sheet total not exceeding € 27 million (source: European Centre for Business Research).

Characteristics:

independent enterprise
fewer than 250 employees, and
(annual turnover not exceeding € 40 million or
balance sheet total not exceeding € 27 million)

‘pequeña y mediana empresa’

In Argentina, this concept is defined as: empresa que tiene ventas hasta de 48 millones de pesos (en el comercio) (source: Fundes. Entorno empresarial).

Characteristics:

empresa (enterprise)
ventas hasta por 48 millones de pesos (annual sales up to ≈ € 13.3 million)

‘pequeña y mediana empresa’

In Mexico, this concept is defined as: empresa que tiene un máximo de 250 empleados (source: Secretaría de Economía).

Characteristics:

empresa (enterprise)
máximo 250 empleados (fewer than 250 employees)

‘small and medium-sized enterprise’

In Burkina Faso, this concept is defined as an enterprise that has fewer than 50 employees and has a turnover of up to 200 million CFA (source: Growing micro and small enterprises in Low Developing Countries).

Characteristics:

enterprise
fewer than 50 employees
annual turnover of up to 200 million CFA (≈ € 300,000)

The extension of the concept of ‘small and medium-sized enterprise’ varies considerably according to professional, economic and cultural factors. In general, the characteristics used to define this concept can vary a great deal from country to country and from one economic environment to another. Therefore, this concept cannot be harmonized in the context of different socioeconomic environments.

4.3.4.4 Concepts which exist in one concept system but not in another

When comparing concept systems between two different languages, it is possible to show concept nodes for which there is no designation in one of the languages, especially at a given point in time, or where concepts can be identified in one of the sources to be harmonized but not in another, e.g. where the concept is not considered relevant. For example, for Aboriginal groups in Canada, snow is an integral part of life. They have developed an understanding of the physical nature of snow and how it changes. They have also developed a very specific terminology for the different types of snow. On the other hand, for a tropical country, where there is no snow, the specific types of snow are irrelevant and most probably, there is no designation for them. If it is justifiable, these concepts can be inserted in their appropriate place in the harmonized concept system. A term may be selected for each concept at a later stage to establish equivalence.

4.3.4.5 Single concepts in a concept system which correspond to two or more concepts in another

When comparing concept systems between two different languages, it is possible to find a concept node in one concept system for which there are two or more corresponding concepts in the other. For example, the concept ‘library’ in English corresponds to two concepts in Japanese: ‘tosyokan’ and ‘tosyositu’. In this case, it is not possible to harmonize these concepts and a note explaining the situation shall be included. Considerable care may be needed in deciding on the location of each concept in the harmonized concept system.

4.3.5 Harmonization of concept systems

The goal of concept system harmonization is either to arrive at a single concept system that replaces existing concept systems or to create new concept systems that more clearly differentiate the concept systems from each other.

The harmonized concept system shall reflect the result of concept harmonization and shall be developed taking into account:

a) the number of concepts to be included;

b) the types of concepts included, i.e.:

   1) harmonized concepts,

   2) non-harmonized concepts (including a note explaining the situation),

   3) concepts which exist in one concept system but not in another and for which a decision was made to insert them in their appropriate places in the harmonized concept system;

c) the place of each concept in the harmonized concept system which shall be assigned according to its essential characteristics, the criteria of subdivision and the concept relations determined during the harmonization process;

d) the types of concept relationships determined during the harmonization process;

e) the criteria of subdivision established during the harmonization process;

f) the desired levels of depth of the harmonized concept system.

The harmonized concept system shall be constructed step by step as each concept that undergoes the process of harmonization is assigned its appropriate place within the concept system.

5 Harmonization of concept definitions

The result of concept harmonization shall be reflected in concept definitions. Therefore, consensus shall be reached on the characteristics that are essential to the intension of the harmonized concept and consequently essential to the harmonized definition. It may involve adjusting the essential and non-essential characteristics or adding a note with an explanation on the usage.

The harmonized definition shall consist of a single phrase that specifies the concept reflecting the position of the concept in the harmonized concept system. This requirement can best be met by using intensional definitions (see ISO 704, ISO 10241 and ISO 1087-1). In an intensional definition, a basic part states the superordinate concept to which the concept belongs, and a second part enumerates the delimiting characteristics which distinguish this concept from its coordinate concepts. See Example 3.

The rules for formulating definitions given in ISO 704 and ISO 10241 will ensure that definitions for the same concept in different languages are equivalent in content, i.e. have the same characteristics and when possible, the same or similar structures, but the author of the definition still has discretion in choosing the manner and form of the definition.

6 Harmonization of terms

6.1 General

Term harmonization is directed towards issues of term selection, establishment of equivalences, synonymy and term variation. Harmonization of terms is possible only if the underlying concepts are practically identical.

6.2 Term selection

6.2.1 Creation of terms in subject fields where there is a tradition of systematic term formation

If terms are to be created in an individual language, the structure of the concept system shall be reflected in term formation wherever possible. This is especially the case in subject fields with a long tradition of systematic term formation, such as the nomenclatures in chemistry, biology and medicine.

6.2.2 Term harmonization in subject fields where international cooperation is well established

6.2.2.1 General

Term harmonization in subject fields where international cooperation is common and well established should reflect the same characteristics of the concept, such as the ones shown in Example 5.

6.2.2.2 Example 5 — Term harmonization in subject fields where international cooperation is well established

Incoterms in the field of international trade:

en **delivered at frontier (DAF)**
de **geliefert Grenze (DAF**)
fr **rendu frontière (DAF)**
es **entregada en la frontera (DAF)**
it **reso frontiera (DAF)**

6.2.3 Replacement of established terms

6.2.3.1 General

Efforts towards harmonization sometimes lead to suggestions to replace well-established terminology, e.g. the term ***es* contaminación** (***en* pollution**; ***fr* pollution**) was to be replaced by the term ***es* polución** to make it more international, but as the usage of ***es* contaminación** was well established, in the end ***es* polución** was not introduced. Established terms shall only be replaced after careful consideration of the advantages and disadvantages of such a move, such as the one shown in Example 6.

6.2.3.2 Example 6 — Need to replace established terms

The term
***en* genetic manipulation** / ***es* manipulación genética** / ***fr* manipulation génétique**

was changed to
***en* genetic engineering** / ***es* ingeniería genética** / ***fr* génie génétique**

because the earlier term has negative connotations

6.2.4 Terms formed by translation of term elements of a foreign term

6.2.4.1 Identical characteristics of the concept should be used in the naming process of new terms, in order to achieve international term correspondence whenever possible. Harmonized terms can therefore be formed by translating the term or the morphological elements of a foreign term as shown in Example 7.

6.2.4.2 Example 7 — Terms formed by translating the term or term elements

***en* used fuel reprocessing plant**
***fr* usine de retraitement de combustible usé**
***es* planta de reprocesamiento de combustible agotado;**

***en* acute bacterial myocarditis**
***es* miocarditis bacteriana aguda**;

***en* theory of functions of a complex variable**
***fr* théorie des fonctions de variable complexe**
***es* teoría de funciones de variable compleja.**

6.2.5 Terms formed using identical or similar forms across languages

6.2.5.1 General

Harmonized terms can be formed using identical or similar forms of equivalent terms or term elements across languages. The forms are to be considered identical in spite of the variation in spelling, word patterns, pronunciation or the alphabet used as shown in Example 8.

6.2.5.2 Example 8 — Correspondence based on the form of term or term elements

***fr* philosophie** / ***en* philosophy** / ***es* filosofía**;

***en* accredited laboratory** / ***fr* laboratoire accrédité** / ***es* laboratorio acreditado** / ***ru* аккредитованная паборатория**

6.3 Establishment of equivalents, synonyms and term variants

6.3.1 General

Whether the harmonization project is carried out within a language or across languages, the result of term harmonization shall include the establishment of equivalences (across languages), and synonymy and term variation (within a language) when necessary. In the process of term harmonization, it is essential not to be misled by the superficial similarity of terms, by so-called "false friends" e.g. ***fr*** **cave** → ***en*** **cellar** –and not ***en*** **cave**; ***fr*** **prune** → ***en*** **plum** – not ***en*** **prune**.

6.3.2 Establishment of equivalence

6.3.2.1 General

Equivalence takes place between terms designating the same concept across languages as shown in Example 9.

6.3.2.2 Example 9 — Equivalence between terms designating the same concept

en **volcanic gas** / ***fr*** **gaz d'origine volcanique**;

fr **facteur d'hétérogénéité de dose** / ***en*** **uniformity ratio** / ***de*** **Überdosisfaktor** / ***es*** **factor de heterogeneidad de dosis**;

en **horse** / ***de*** **Pferd** / ***du*** **paard** / ***fr*** **cheval** / ***es*** **caballo**.

6.3.3 Establishment of synonymy and quasi-synonymy in one language

6.3.3.1 General

Synonymy and quasi-synonymy take place between terms designating the same concept within a language. Synonyms can be interchanged in any context while quasi-synonyms can be used indistinctively in some contexts but in others they cannot. Examples of synonymy and quasi-synonymy are shown in Example 10.

6.3.3.2 Example 10 — Synonymy and quasi-synonymy between well established terms within a language

Synonyms:

fr **particule microscopique** / **particule très fine** / **particule inframicroscopique**,
en **amplitude reflection factor** / **voltage reflection coefficient**,
es **instalación de filtrado** / **instalación jefe-secretaria**,
en **shuttering** / **formwork**

Quasi-synonyms:

en **library science** / **librarianship**

Context where these two terms can be used indistinctively:
1. The University of Illinois at Urbana-Champaign (UIUC) Archives is the major North American research center for the study of the history of librarianship, or
2. The University of Illinois at Urbana-Champaign (UIUC) Archives is the major North American research center for the study of the history of library science.

Context where these two terms cannot be used indistinctively:
1. From the surveys done in the law librarianship profession and from close examination... or
2. From the surveys done in the law library science profession and from close examination...

6.3.4 Establishment of term variation between terms in one language

6.3.4.1 General

Term variation takes place between terms designating the same concept within a language. The main types of term variation are:

a) geographical variants;

b) spelling variants;

c) register variants;

d) stylistic variants.

Instances of these are shown in Example 11.

6.3.4.2 Example 11 — Term variation between terms within a language

Geographical variants:

UK **lift** / US **elevator**,
ES **ordenador** / MX **computadora**.

Register:

***en* myocardial infarction** / **heart attack**,
***es* infarto al miocardio** / **ataque al corazón**.

Spelling variants:

UK **industrialised country** / US **industrialized country**,
UK **digital colour imaging** / US **digital color imaging**

Style:

***es* vida media** / **periodo de semidesintegración radiactiva**

6.4 Terminology planning

Priorities for terminology planning or other types of language planning within a particular language community may differ from those prevailing in international harmonization. The advantage of a supranational term is that it facilitates communication between language communities but, on the other hand, it may also be a hindrance to communication within a language community. The final decision about the form of a term shall be determined by individual language communities.

Annex A
(informative)

Concept harmonization process

Figure A.1 — The concept harmonization process

Bibliography

[1] ISO/IEC Guide 2:2004, *Standardization and related activities — General vocabulary*

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