



Terminology Work Revisited according to ÖNORM A 2704:2015

Fachinformation 22 / Technical information 22

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The authors wish to thank Christiane Takacs-Schwarzinger and Dagmar Gromann for their valuable comments on an earlier draft of the present publication.

1 Introduction

In May 2015, the Austrian Standards Institute published a revised version of ÖNORM A 2704 "Terminologiearbeit – Grundsätze und Methoden" (Terminology work – Principles and methods). With the former version dating from 1990, the members of Austrian Standards Committee 033 *Terminology and other language and content resources* opted for a thorough evaluation of the 1990 standard and renegotiation of the contents to be included in the revised version, allowing for extensive changes both in terms of content and structure.

The recently revised standard has two main objectives. The first is to provide a succinct, yet comprehensive overview of the well-proven principles and methods of terminology work that many people need when doing terminology work. Secondly, it also aims at describing and anticipating future trends in terminology work that have recently been appearing on the horizon.

The present publication is intended to make the new ÖNORM A 2704 known to all those interested in terminology work who are not proficient in German. The authors decided to select and zoom in on those parts of the standard that might offer a significant added value to an international audience. Thus, the present publication focuses on the concept and core processes of terminology work (Section 2), concept modelling (Section 3), on names and name-like designations (Section 4) as well as application scenarios (Section 5). An English version of the ÖNORM A 2704 table of contents is provided in the annex to this publication and shows the full scope of the standard.

2 Terminology work: concept and core processes

2.1 Concept 'terminology work'

In Subclause 3.27, ÖNORM A 2704:6 defines terminology work as "activity aiming at ordering concepts, describing concepts, and assigning designations to concepts and vice versa". This definition emphasises the fact that terminology work is a concept-oriented endeavour. At this level the standard does not predetermine how terminology work is to be done. The tasks that need to be carried out within terminology work are not mentioned in the definition. In this respect, ÖNORM A 2704 chooses a more open approach compared to the definition in ISO 1087-1:10, which defines terminology work as "work concerned with the systematic collection, description, processing and presentation of concepts and their designations". Thus, ÖNORM A 2704 does not rule out terminology-related activities that do not share the feature "systematic". On the contrary, in Subclause 5.2 on types of terminology work ÖNORM A 2704 explicitly mentions the *ad-hoc* approach as a legitimate type of terminology work. Even ad-hoc terminology work reaches out to the conceptual level to find a solution for a specific terminological problem.

The general motivation for engaging in terminology work is the need for solutions of problems in specialised communication. The overall goal is to contribute to more efficiency in specialised communication, to avoid misunderstandings and to facilitate information access. As in ISO 704:1, ÖNORM A 2704 states that the principles of terminology work apply to all subject fields.

2.2 Core processes of terminology work¹

While the ÖNORM A 2704 definition of terminology work does not include any reference to processes or methods, a note to the definition does: "The individual processes of terminology work are identifying, collecting, processing, harmonising,

¹ Cf. ÖNORM A 2704:49ff.



presenting, and using terminology." These core processes of terminology work are elaborated in Subclause 5.3 of ÖNORM A 2704:

- Identifying terminology involves all necessary actions to select the terminology (concepts and designations) which is to undergo the subsequent processes.
- Collecting terminology means recording terminological data about concepts and their designations.
- Processing terminology involves various editing tasks to turn collected terminological data into information that is
 relevant for terminology users. Necessary actions may range from drawing up concept fields, concept diagrams or
 concept models, to writing definitions and proofreading terminological entries.
- Harmonising terminology means taking actions to standardise the terminology for a given community of users.
- Presenting terminology is making terminology available to and thus usable for users. The strategies in this respect largely depend on pragmatic factors such as information needs of the target groups, number of languages and subject fields involved, available technologies, etc.
- Using terminology comprises both active use (e.g. technical writing, translation) and passive use such as look-up for reference purposes.

Although some of these processes overlap conceptually with processes mentioned in ISO 704:v, it is evident that ÖNORM A 2704 takes a broader perspective on the scope of terminology work. The standard also tries to take account of the dynamics that terminology experts and terminology users have to cope with, both with regard to conceptual changes and changes in designation usage. Thus, the core processes listed above are part of a planning and quality assurance framework. The illustration below visualises the cyclic character of processes relevant to terminology work. It also gives credit to the prototypical forms of terminology work and to the fact that the terminology expert may be the core actor, but still is only one of many actors that play a role in terminology work (Figure 1):



Figure 1: Core processes of terminology work.





3 Going from concept diagrams to concept models

In a systematic approach to terminology work, terminology experts do not only work with individual concepts, but also look at groups of interrelated concepts. While designations and definitions may serve as a basis to describe such concept groups, it is difficult to give a conceptual overview using textual means, especially when many concepts are involved. As a remedy for this, terminology experts display concept relations in concept diagrams or concept models².

EXAMPLE 1

A concept system 'wood' may be displayed as a rake diagram using partitive relations in traditional ISO notation (Figure 2; cf. ISO 704:vii):



Figure 2: Rake diagram 'wood' according to ISO 704 notation (English version of Figure 5 in ÖNORM A 2704:15).

According to the ISO 24156-1 notation, which is based on the Unified Modeling Language (ISO/IEC 19505-1 and ISO/IEC 19505-2) and which was used in ÖNORM A 2704, a corresponding concept model provides the following Figure 3. The "{complete}" note states that the concept model contains all partitive concepts of the underlying concept system:



Figure 3: Concept model 'wood' according to the ISO 24156-1 notation used in ÖNORM A 2704 (English version adapted from Figure 18 in ÖNORM A 2704:19).

² Defined as "concept diagrams ... formed by means of a formal language" (ISO 24156-1:1).





EXAMPLE 2

A concept system 'terrorism' may be displayed as a tree diagram using generic relations in traditional ISO notation (Figure 4; cf. ISO 704:vii):



Figure 4: Part of a tree diagram 'terrorism' (adapted from Löckinger 2005:29).

According to the ISO 24156-1 notation, a corresponding concept model provides the following Figure 5:



Figure 5: Part of a concept model 'terrorism' (adapted from Löckinger 2005:29).





The main advantages of concept models over traditional concept diagrams are the following:

- a) The underlying notation is derived from a freely available specification that has been standardised both by the Object Management Group and ISO. Thus, it is based on a reliable reference which is regularly reviewed and updated (cf. Löckinger 2015:9).
- b) UML tools can interpret the semantics (concept relations) supporting the graphical representation, which facilitates interchange of concept models between various tools (cf. Löckinger 2015:9).
- c) In the future, concept models may be used to generate terminological definitions and vice versa, given that more research is carried out on the (semi-)automatic operations necessary to achieve this goal (cf. Löckinger/Kockaert/Budin 2015:78).

In all probability, future international terminology work standards will also favour UML-based concept models. An overview of UML tools, which can be used for concept modelling in terminology work, is available in Object Management Group (2015).

4 Dealing with names and name-like designations in terminology work

4.1 General

In Subclause 4.5, ÖNORM A 2704:24ff. gives a detailed account of designations as terminological units. The three main types of designations treated are terms, names and symbols. Figure 6 shows the ÖNORM A 2704 concept model 'designation', depicted in accordance with ISO 24156-1:



Figure 6: Concept model 'designation'.

However, the ÖNORM standard goes well beyond this traditional distinction, especially by providing a comprehensive classification system of names. Also, the standard places an emphasis on mixed forms of designations that cannot be clearly classified as one of the three main types, as such mixed forms are appearing more and more often in terminological practice. ÖNORM A 2704:34ff. includes a comprehensive discussion of names and name-like designations and thus helps terminology experts deal with these more troublesome designations in their daily practice.

In ÖNORM A 2704:6, names are defined as "partly or wholly verbal designation[s] used to refer to a unique object or several identical objects". As designations with distinct properties, names play a crucial role in specialised communication about virtually all fields of human activity. They are intended to describe concepts and objects that are of special interest in a given linguistic or non-linguistic context. Thus, names are of vital importance in many fields of research and practice, for at least three reasons:

a) First, with the ever-increasing digitisation of both the professional world and private life, e-commerce and similar services are used by a growing number of people who have Internet access. In those applications, product classification systems help consumers to browse the relevant product categories and find the product of their choice. Having found a product to their liking, they are at the most granular classification system level where often brand names





appear to identify company-specific products (cf. ISO 22274:38). Product names also appear in standardised product classification systems such as eCI@ass[®], in this case for illustrative purposes (cf. eCI@ss e.V., 2012).

- b) Second, names often have a particular legal status, such as names subject to trademarks. Commercial enterprises and similar entities try to increase the popularity of their products by creating brand names that are protected by trademark and similar laws. Their main motivation is to set their goods or services apart from similar products offered by their competitors, ideally in a legally binding way (cf. Schütz 2001:96). Thus, diverging interests between various market participants operating in similar market segments are regularly negotiated before courts, e.g. the European Court of Justice. Recent examples include the court proceedings over "skype" and "SKY" (cf. Judgment of 5 May 2015) or over "KAJMAN" and the Lacoste crocodile figurative mark (cf. Judgment of 30 September 2015).
- c) Third, names "breathe life into things" (Danesi 2011:175), which distinguishes them from terms, defined in ÖNORM A 2704:5 as "designation[s] used to refer to a general concept and formed by verbal means"³. In other words, names create or evoke emotional thoughts that add to their well-known identification function for the object(s) in question (cf. Danesi 2011:175f.,185). In information technology, the name "Windows[®]" is a case in point, especially in comparison to the ordinary term "operating system".

4.2 Names⁴

The above has prompted the Austrian Standards Committee 033 to develop a comprehensive classification system for names based on onomastic literature and in cooperation with onomasticians and nomenclature experts (cf. Löckinger 2015:7). A resulting concept model according to ISO 24156-1 looks as follows (Figure 7):

³ The traditional distinction between 'general concept' and 'individual concept' has been maintained in ÖNORM A 2704, while at the

international level efforts are under way to eliminate this distinction in future terminology work standards.

⁴ Cf. ÖNORM A 2704:34ff.







Figure 7: Concept model 'name', derived from ÖNORM A 2704:34ff.





A detailed classification such as the one indicated above makes it easier to model terminological data. Using appropriate data categories, fine-tuned filter and export options may be realised in terminological resources, e.g. "search all product names with registered trademarks" or "export all place names that have been officially recognised".

A recent example of the complexity of name matters can be found in the legal dispute over the designation "Kornspitz". This designation had been successfully registered as a trademark by the Austrian enterprise Backaldrin.

"Under that trade mark, Backaldrin produces a baking mix which it supplies primarily to bakers. They turn that mix into a bread roll which is oblong in shape and has a point at both ends. Backaldrin consented to the use of that trade mark by those bakers and the foodstuffs distributors supplied by them in the sale of that bread roll" (Judgment of 6 March 2014, point 12).

A competitor in this market segment, Pfahnl, filed for revocation of Backaldrin's trademark stating "that the bakers using the baking mix provided by Backaldrin do not generally inform their customers [...] that the sign 'KORNSPITZ' has been registered as a trade mark or that the bread rolls are produced using that mix" (Judgment of 6 March 2014, point 10). The Austrian Patent Office granted Pfahnl's application, against which Backaldrin appealed before the Austrian Supreme Patent and Trade Mark Court. The Austrian Supreme Patent and Trade Mark Court, however, was unsure how to deal with Backaldrin's appeal, so it referred the matter to the European Court of Justice, which stated the above quotations in its preliminary ruling. Finally, the Austrian Supreme Court of Justice recently ruled that this designation, although previously registered as a trademark, has become a common designation ("verkehrsübliche Bezeichnung", "gebräuchliche Bezeichnung", see OGH-Entscheidung dated 11.08.2015) for denoting the bread rolls in question. However, this ruling applies to bread rolls only and is valid in Austria, while the baking mix is not affected, nor are countries other than Austria. This results in a complex terminological situation with regard to "Kornspitz":

1. In Austria, it is both

- a) an ordinary term for bread rolls of the shape described above which is sold to end users, independently of the baking mix used for their production, and
- b) an appellation (registered trademark) denoting the baking mix supplied by Backaldrin to its corporate customers, which is not affected by the court ruling.

2. In other countries, it is both

- a) an appellation (registered trademark) denoting bread rolls of the said shape which have been produced using Backaldrin's specific baking mix, and
- b) an appellation (registered trademark) for Backaldrin's baking mix used to produce the bread rolls.

As a consequence, a terminological resource would hold at least three concept-oriented terminological entries: one for a), one for b) and d), and one for c) with additional information on the legal status where relevant.

4.3 Proper names vs. appellations⁵

While the distinction between proper names or appellations may be obvious in many cases, there are also names that may be attributed to either category depending on their form and reference to objects. Cases in point are names of honorary distinctions: While "Nobel Peace Prize" is an appellation (denoting several identical objects), "Nobel Peace Prize 2013" is a proper name (denoting a single object). Names of scientific and technological phenomena, names of documents and position titles are other examples of this mixed name type (cf. ISO 704:56ff.). The same applies to a whole range of scientific names that are part of nomenclatures. In biology, for instance, one and the same name may either refer to a specific living organism or an abstract group of living organisms. Sometimes, the formatting of the name therefore differs (italics vs. regular font). Thus, for terminology work, it is important to note that there are grey areas where the distinction between proper names and appellations is not as clear-cut as one might think.

⁵ Cf. ÖNORM A 2704:39ff.





4.4 Name-like designations⁶

Similarly, ÖNORM A 2704 covers designations that do not seem to be terminological units at first sight, but turn out to be such upon closer inspection. Due to the growing importance of computer-based identification systems, the unambiguous labelling of goods or animals, for instance, is a necessity in modern commercial and private life. In the European Union, bovines must be labelled using ear tags. The codes on these ear tags (e.g. "AT 99 1117 347") may well be interpreted as proper names. Similar provisions exist with regard to motor vehicles, which must be identifiable by means of vehicle identification numbers, e.g. "SARHT000BC0000023".

Other coding and/or numbering systems are intended to describe groups of identical objects using name-like designations. A case in point are company-specific article numbers such as "101 181 163" or occurrences of the International Standard Book Number (ISBN) such as "978-3-85402-245-9".

4.5 Mixed designations

In today's world of multimodal communication by means of computers, smartphones and similar electronic devices, designations of a mixed type are becoming more and more common, especially with regard to symbols and proper names or appellations. A case in point is **(b)** <u>LG</u>⁷. This designation is (or contains) a proper name ("LG"). At the same time, it is (contains) a symbol and a slogan. Going even beyond the current proposals put forward in ÖNORM A 2704, terminology experts need a more detailed classification of symbols and mixed symbol/name designations (cf. Löckinger 2015:7f.).

5 Making the case with application scenarios⁸

When it comes to terminology work, the general demands, options, and limitations will differ from case to case. Correspondingly, the various principles, methods and processes will be of different relevance from one terminology work project to the other. ÖNORM A 2704 can be understood as an inventory of modules from which terminology experts can select what appears adequate for individual terminology work needs. Some fundamentals will be of great importance to most terminology work settings, such as the principles governing the choice or formation of designations. However, if the aim is to deliver a descriptive account of terminology usage (as it is done in preparation of harmonisation or standardisation processes), these principles will be of less relevance to the terminology expert.

ÖNORM A 2704 aims at offering guidance to terminology experts and decision makers on how to make use of this modular structure when implementing terminology work. To that end, Clause 6 of the standard comprises three selected application scenarios: corporate terminology work in companies, standardisation-related terminology work, and ad-hoc translation-oriented terminology work.

The presentation of these application scenarios starts with general considerations on the role of terminology work in the given scenario, or on the need to split a scenario into subsets of process models. This general outline is followed by a list of decisions to be taken, and processes to be set up. The verbal description is followed by a visual flowchart representation. Figure 8 below visualises the process model for the first phase of introducing terminology work in a company setting. Where applicable, numbers refer to the relevant subclauses in ÖNORM A 2704.

⁶ Cf. ÖNORM A 2704:41f.

⁷ Taken from http://www.lg.com/lg3-common/images/global/lg-logo-fb.png (and cropped).

⁸ Cf. ÖNORM A 2704:55ff.





Figure 8: Visualisation of a corporate terminology work scenario (English version of Figure 25 in ÖNORM A 2704:57).



6 Conclusion

Standards on terminology work principles and methods need to undergo revision as other technical standards. Being informed about current developments in national and international standardisation will be an asset for committees in standardising bodies working on comparable standards. Thus, the authors of the present publication seek to contribute to and add impetus to relevant national and international standardisation efforts, especially those centring around ISO 704 and ISO 12616.

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Fachinformation 22

Herausgeber:

Austrian Standards Institute Heinestraße 38 1020 Wien Austria www.austrian-standards.at

Redaktion: Austrian Standards Institute E-Mail: media@austrian-standards.at

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ÖNORM EN ISO 9001 zertifiziert Certified by SQS