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Presentation/representation of entries in dictionaries — Requirements, recommendations and information

Présentation/représentation des entrées dans les dictionnaires — Exigences, recommandations et information

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Foreword

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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.

ISO 1951 was prepared by Technical Committee ISO/TC 37, *Terminology and other language and content resources*, Subcommittee SC 2, *Terminographical and lexicographical working methods*.

This third edition cancels and replaces the second edition (ISO 1951:1997), the scope of which has been extended in order to address publishers' and users' needs by taking into account various types of electronic dictionaries and the constraints of single sourcing for producing dictionaries, as well as disseminating and reusing data in lexicographical practice.

Real dictionary entries used as examples in this International Standard only illustrate the principles of XML representation of lexicographical data and their associated presentations. They do not engage the publishers' responsibility.

Introduction

General aim of this International Standard

During the past decade, dictionary-making processes have undergone important changes due to the spread of electronic dictionaries. Consequently, lexicographers are faced with a growing diversification of methods during dictionary preparation and publishing.

This revised International Standard aims to support the creation and management of various types of dictionaries. It takes into account different ways of using dictionaries, especially such new functionalities of electronic documents as hyperlinks.

To allow dictionary content to be reused in different printed and electronic formats, lexicographers increasingly tend to create a single well-structured lexicographical source or data repository. In addition to reproducing all the typographical conventions described in the former edition of ISO 1951, this revised International Standard provides a specific model based on current best professional practices, in order to allow necessary production, exchange and management procedures.

In the text of this International Standard, the use of the auxiliary verb “shall” indicates a requirement or specification that is to be met precisely as stated; the use of the auxiliary verb “should” indicates a recommendation of a good way to do something that is to be followed unless a better way can be demonstrated to have been adopted; and the use of the auxiliary verb “can” indicates information that the user may find useful.

Presentation/representation of entries in dictionaries — Requirements, recommendations and information

1 Scope

This International Standard deals with monolingual and multilingual, general and specialized dictionaries. It specifies a formal generic structure independent of the publishing media and it proposes means of presenting entries in print and electronic dictionaries. The relationship between the formal structure and the presentation of entries used by publishers and read by users is explained in examples provided in the informative annexes.

The objective of this International Standard is to facilitate the production, merging, comparison, extraction, exchange, dissemination and retrieval of lexicographical data in dictionaries. Following a lexicographical lemma-oriented approach, it does not deal with concept-oriented works as defined in ISO 704.

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, *Terminology work — Principles and methods*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 704 and ISO 1087-1 and the following apply.

These definitions concern basic and unambiguous terms of dictionary structure and presentation, common in most types of dictionaries, which are within the scope of this International Standard. Terms considered specific to certain dictionaries have not been included here.

3.1
comment
metalinguistic information describing a **lexical unit** (3.8) by means of lexicographical **data elements** (3.3) or **compositional elements** (3.2)

3.2
compositional element
composite information unit made of elements

NOTE There are three families of compositional elements: **blocks** (3.2.1), **containers** (3.2.2) and **groups** (3.2.3).

3.2.1
block
factorizing structure
compositional element (3.2) used to factorize **elements** (3.5) that are shared as refiners by many instances of a specific element

NOTE Examples of blocks are provided in Tables 6 to 14.

3.2.2
container
refining structure
compositional element (3.2) used to supply additional information about one single specific **data element** (3.3) by the mean of other **elements** (3.5)

EXAMPLE A headword container is used for giving the pronunciation or the part of speech which refines a **headword** (3.6) which is itself the refined data element.

NOTE 1 Adapted from ISO 16642:2003, C.4.5.

NOTE 2 An example of a container is provided in Tables 4 and 5.

3.2.3
group
compositional element (3.2) used to aggregate several independent **elements** (3.5)

EXAMPLE A sense is described by a **group** of **elements** such as definition, subject field, etc.

NOTE An example of a group is provided in Tables 15 and 16.

3.3
data element
data category
unit of data for which the definition, identification, representation, and permissible values are specified by means of a set of attributes

[ISO/IEC 11179-1:2004, definition 3.3.8]

NOTE Lists of data elements are provided in Tables 1 and 2.

3.4
dictionary entry
lexicographical entry
entry
part of a dictionary which contains information related to one **lemma** (3.7) and its variants

3.5
element
any **data element** (3.3) or **compositional element** (3.2)

3.6
headword
entry word
lemma (3.7) that serves as the heading for an entry in a dictionary

3.7
lemma
base word
lexical unit (3.8) chosen according to lexicographical conventions to represent the different forms of an inflectional paradigm

EXAMPLE “Sell” is the lemma of the paradigm “sells, sold, selling, etc.”

3.8
lexical unit
unit of language, belonging to the lexicon of a given language and which is described or mentioned in a dictionary

3.9
lexicographical symbol
letter, punctuation mark, other typographical or graphic symbol or group of symbols or any combination thereof used to represent certain lexicographical or terminological data as displayed or output either singularly or in conjunction with another item of lexicographical data

3.10
nested entry
grouping structure for related dictionary entries that share a common headword

4 Formal description of dictionary entries

For the sake of clarity, the following formal model, thereafter called XmLex, is illustrated by short examples encoded according to an XML Definition Type Document called XmLex_V00 (for more information, see informative Annex C).

4.1 An overview of data elements and compositional elements

Dictionary entries can be seen as comments about topics, that are lexical units. An entry has a main topic (the headword); other topics (e.g. variants, translations) are said to be “related topics”. Topics and comments are data elements. Each data element has a content model. Data elements are grouped into compositional elements in order to produce an unambiguous and fully computable entry. Open lists of data elements and compositional elements are provided herein, and are extendable by the user for specific purposes.

Printed dictionaries generally use typographical conventions (normal/bold/italic), spatial disposition (before/after) and punctuation (comma or semicolon) to indicate relations between topics and comments. In the XmLex model,

— the position of an element is never used for expressing relations between two elements,

— there are no markers equivalent to typographical signs (comma or semicolon).

Compositional elements (containers, blocks and groups) are used to encode logical relations between comments and topics so that it is always possible, on one hand, to generate automatically any printed presentation and, on the other hand, to compute automatically all the relations between elements when transforming data (for inverting a bilingual dictionary for instance) or when reusing data in other contexts like translation memory systems or lexical databases.

This part of this International Standard

— describes data elements and their grouping in compositional elements needed for representing most common dictionary entries; [1)]

— specifies a formal dictionary model expressed in Extended Backus-Naur form which is often used as a formal notation to describe the syntax of a given language;

— gives in annexes examples of implementation and means of validation using XML, Xpointer, XSL and XHTML specifications.

1) For each data element, a conventional name and description is provided, based as far as possible on ISO 12620:1999. Free data elements, the type of which is definable by the user, allow extensions of the model for “negotiated interchange”.

4.1.1 Data elements

4.1.1.1 Lexical units

The following table gives the list of lexical units and comments that should be used in a standardized dictionary entry.

The first column contains a designation of the data element. The second gives its generic identifier as used in the formal model. The third column gives a short explanation, and the fourth refers to the first example (if available) of the data element in the annexes (the first number points to the example, the second indicates the line).

Table 1 — List of lexical units

Name	Generic identifier	Explanation	See: Annex Example Line
abbreviated form	AbbreviatedForm	Lexical unit formed by omitting words or letters from a longer form [...]. [Adapted from ISO 1087-1:2000, definition 3.4.9]	C 7 3
analogy	Analogy	Lexical unit having some similarity of meaning with the current lexical unit. [Adapted from ISO 1087-1:2000, definition 3.4.9]	C 10 4
antonym	Antonym	Lexical unit for which the concept constitutes the opposite of the concept represented by the current lexical unit. [Adapted from ISO 12620:1999, A.10.18.6]	C 5 45
compositional phrase	CompositionalPhrase	Any recurrent and conventional juxtaposition of words such as collocation, proverb, saying, etc.	C 4 15
derivation	Derivation	A change in the form of a lexical unit, usually modification in the base/root or affixation which signals a change in part-of-speech information.	C 5 9
example	Example	An instance that is typical of a lexical unit's usage in a specific sense.	C 4 10
false friend	FalseFriend	A lexical unit in one language that only appears to have formal or semantic similarity with a lexical unit in another language, but that does not represent the same concept. [Adapted from ISO 12620:1999, A.3.2]	C 15 6
free topic	FreeTopic	Lexical unit whose type is not defined in this International Standard.	C 18 5
full form	FullForm	The complete representation of a lexical unit for which there is an abbreviated form. [Adapted from ISO 12620:1992, A.2.1.7]	C 20 3
headword	Headword	Lemma heading a dictionary entry.	C 1 4

Table 1 — List of lexical units *(continued)*

Name	Generic identifier	Explanation	See: Annex Example Line
inflection	Inflection	The modification of the form of a word to express the different grammatical relationships into which it may enter.	C 22 5
international scientific term	InternationalScientificTerm	A term that is part of an international scientific nomenclature as adopted by an appropriate scientific body. [Adapted from ISO 12620:1999, A.2.1.4]	C 39 12
multiword unit	MultiWordUnit	A lexical unit made of more than one word and conveying only one sense.	C 1 42
symbol	Symbol	A designation of a concept by letters, numerals, pictograms or any combination thereof. [Adapted from ISO 12620:1999, A.2.1.13]	C 23 7
synonym	Synonym	A lexical unit that represents the same or a very similar concept as the headword in a dictionary entry. [Adapted from ISO 12620:1999, A.2.1.2]	C 5 27
translation	Translation	An equivalent lexical unit belonging to a target language.	C 1 15
variant	Variant	One of the alternative forms of a lexical unit. [Adapted from ISO 12620:1999, A.2.1.9]	C 32 5

Table 2 — List of comments

Name	Generic identifier	Explanation	See: Annex Example Line
attestation	Attestation	Date or period when a lexical unit has been observed.	C 11 8
case	Case	The form of a lexical unit (noun, pronoun, or modifier) that indicates its grammatical relationship to other words in a clause or sentence.	C 24 7
citation	Citation	Quotation from a book, article or document.	C 4 25
complement	Complement	Ancillary part of a lexical unit (the "to" preposition for an English verb for instance). [Adapted from ISO 16642:2003, C.4.10.2]	

Table 2 — List of comments *(continued)*

Name	Generic identifier	Explanation	See: Annex Example Line
definition	Definition	A statement that describes a concept and permits its differentiation from other concepts within a system of concepts. [Adapted from ISO 12620:1999, A.5.1]	C 4 61
display	Display	Synthetic text that can be shown instead of separate topics or comments.	C 2 33
etymology	Etymology	Information on the origin of a word and the development of its meaning. [Adapted from ISO 12620:1999, A.2.4.2]	C 4 6
formula	Formula	Figures, symbols or the like used to express a concept briefly, such as a mathematical or chemical formula. [Adapted from ISO 12620:1999, A.2.1.14]	C 16 3
frequency	Frequency	The relative commonness with which a lexical unit occurs. [Adapted from ISO 12620:1999, A.2.3.4]	C 19 3
free comment	FreeComment	A free metalinguistic used for describing a lexical unit.	C 17 1
geographical usage	GeographicalUsage	Lexical unit usage reflecting regional differences. [Adapted from ISO 12620:1999, A.2.3.2]	C 21 10
grammatical gender	GrammaticalGender	A set of two or more grammatical categories into which the nouns of certain languages are divided.	C 1 15
grammatical number	GrammaticalNumber	In many languages, the grammatical distinction that indicates the number of objects referred to by the lexical unit. [Adapted from ISO 12620:1999, A.2.2.3]	C 2 48
grammatical pattern	GrammaticalPattern	Grammatical structure in which the linguistic unit frequently occurs.	C 34 5
guide phrase	GuidePhrase	A phrase used to indicate a specific application of a word or sense.	C 2 50
insert	Insert	A text, table or picture describing some grammatical, encyclopaedic, scientific or cultural knowledge related to the dictionary entry or to several dictionary entries. This insert can be totally independent from the dictionary text.	
mood	Mood	A property of verbs that indicates the attitude of the speaker about the factuality or likelihood of what is expressed.	C 25 6

Table 2 — List of comments *(continued)*

Name	Generic identifier	Explanation	See: Annex Example Line
normative status	NormativeStatus	A term status qualifier assigned by an authoritative body, such as a standards body or a governmental entity with a regulatory function. [Adapted from ISO 12620:1999, A.2.9.1]	C 26 4
note	Note	Supplemental information pertaining to any other element in the data collection. [Adapted from ISO 12620:1999, A.8]	C 3 24
part of speech	PartOfSpeech	A category assigned to a lexical unit based on its grammatical and semantic properties. [Adapted from ISO 12620:1999, A.2.2.1]	C 1 11
person	Person	An indication of the grammatical person (1st, 2nd, 3rd, etc.) associated with a given inflected lexical unit.	C 25 7
pronunciation	Pronunciation	The representation of the manner by which a lexical unit is articulated. [Adapted from ISO 12620:1999, A.2.5] It can be represented either phonetically or phonologically.	C 11 3
range of application	RangeOfApplication	Scope within which a sense is true.	C 1 14
register	Register	Classification indicating the relative level of language individually assigned to a lexical unit. [Adapted from ISO 12620:1999, A.2.3.3]	C 24 9
search form	SearchForm	A lexical unit entered in a lexicographical entry for purposes of retrieval. [Adapted from ISO 12620:1999, A.10.6.3]	C 1 16
see	See	A cross-reference to a headword which is a synonym of the current headword.	C 3 5
see also	SeeAlso	A cross-reference to a related headword.	C 6 19
sense qualifier	SenseQualifier	Any indication about a sense (figurative, literary, old...).	C 1 45
sort key	SortKey	A lexical unit entered in a lexicographical entry for purposes of sorting when the order of entries does not follow the character-set collating sequence.	
source language	SourceLanguage	The language of a lexical unit that is to be translated into another language.	C 1 1

Table 2 — List of comments *(continued)*

Name	Generic identifier	Explanation	See: Annex Example Line
subcategorisation	Subcategorisation	The assignment of a lexical item to a subclass of its part of speech, especially with respect to the syntactic elements with which it can combine. NOTE This element only appears in grammatical containers.	C 21 4
subjectfield	SubjectField	An area of human knowledge. [Adapted from ISO 12620:1999, A.4]	C 2 11
syllabification	Syllabification	The division of a word reflecting its articulation by syllables, i.e., by uninterrupted units of pronunciation. [Adapted from ISO 12620:1999, A.2.6]	C 34 4
target language	TargetLanguage	The language into which a lexical unit is to be translated.	C 1 1
tense	Tense	A distinction of form in a verb to express distinctions of time or duration of the action or state it denotes.	C 31 5

4.1.2 Hierarchical structures: dictionary and entries

A dictionary is made of entries or nested entries.

Table 3 — List of high-level structures

Name	Generic identifier	Explanation	See: Annex Example Line
dictionary	Dictionary	A collection of dictionary entries or nested entries.	C 1 1
dictionary entry	DictionaryEntry	See definition: 3.4.	C 1 2
nested entry	NestEntry	See definition: 3.10.	D 1 8

An entry in a dictionary is made of data elements which are self-contained or combined within compositional elements.

4.1.3 Compositional elements

4.1.3.1 Containers

As far as possible, the XML encoding of an example is preceded by its printed view coming from a real dictionary. In this case, the whole entry is a boxed piece of text with a grey background on paper (green on a screen). If parts only of the entry are encoded, these parts [here “Farad n (F) DIN 1301”] appear on a white background on paper (yellow on a screen).

A container as defined in ISO 16642:2003, Annex C.4.5, is a structure used whenever a data element has to be refined by other data elements (a headword by its part of speech, a quotation by its author, a symbol by its source, etc.). Example:

Table 4 — Original data (from Annex C — Example 23)

F <phys> (unit of capacity : As/V) ● Farad n (F) DIN 1301

In this English-German dictionary, although “Farad”, “n”, “F” and “DIN 1301” are printed in linear order, there are relationships (dependencies) between these elements:

“Farad” part of speech is “n”

“Farad” symbol is “F”

“F” source is “DIN 1301”

Table 5 — Encoding (from Annex C — Example 23)

```
1. < TranslationCtn>
2.  <Translation>Farad</Translation>
3.  <PartOfSpeech value = 'noun'/>
4.   <SymbolCtn>
5.     <Symbol>F</Symbol>
6.     <Source>DIN 1301</Source>
7.   </SymbolCtn>
8. < TranslationCtn>
```

A translation container (<TranslationCtn>) is used to refine the translation (Farad) by its part of speech (<PartOfSpeech>). A symbol container (<SymbolCtn>) is used to refine the symbol (F) by its source (DIN 1301). This symbol container is embedded within the translation container in order to refine the translation by its symbol.

4.1.3.2 Blocks

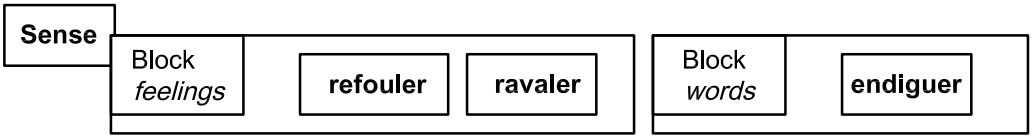
Printed dictionaries often use punctuation (comma or semicolon) to indicate relations between elements of an entry. For instance, in the following example (Table 6) “feelings”, between square brackets and before two translations which are separated by a comma, is a “range of application” that applies to these two translations. The semicolon closes the list of possible translations of “dam” when speaking of “feelings”. “Words” between square brackets opens a new “range of application”.

Blocks are used to encode this kind of logical relation.

Table 6 — Original data — Block with core components (from Annex C — Example 1)

dam ...
figurative [feelings] refouler, ravaler;
[words] endiguer

Table 7 — Schematic representation — Block with core components



There are three <Translation> sister nodes. A TranslationBlock is used to group two of them who share the same <RangeOfApplication>. Schematic representation:

Table 8 — Block encoding — Block with core components (from Annex C — Example 1)

```
1. <SenseGroup>
2.  <SenseQualifier>figurative</SenseQualifier>
3.  <TranslationBlock>
4.    <RangeOfApplication>feeling</RangeOfApplication>
5.    <Translation>refouler</Translation>
6.    <Translation>ravaler</Translation>
7.  </TranslationBlock>
8.  <TranslationBlock>
9.    <RangeOfApplication>words</RangeOfApplication>
10.   <Translation>endiguer</Translation>
11.  </TranslationBlock>
12. </SenseGroup>
```

Table 9 — Original data — Block with containers

cleave [kliv:] *v* (*pt* **cleaved** , **cleft** [kleft], *Lit* **clove** [kl..v]; *pp* **cleaved**, **cleft**, *Lit* **cloven** ['kl..v(.)n])

There are three derived forms for the preterit and three for the past participle of "Cleave". Each derived form can be refined by its pronunciation or its register.

Table 10 — Schematic representation — Block with containers

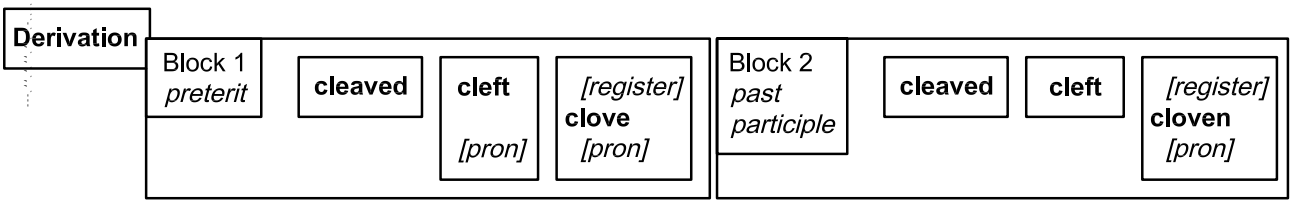


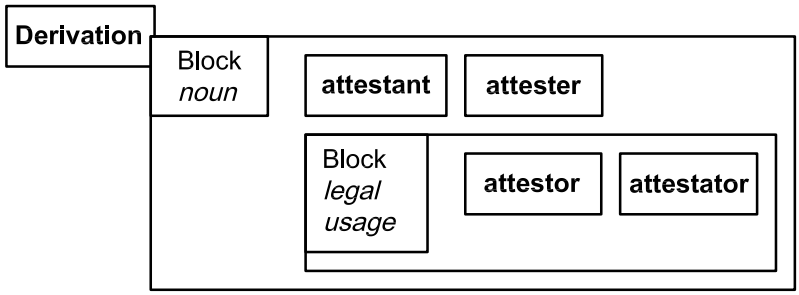
Table 11 — Block encoding — Block with containers

```
1.<DerivationBlock>
2.   <Tense value = 'preterit'/>
3.   <Derivation>cleaved</Derivation>
4.   <DerivationCtn>
5.     <Derivation>cleft</Derivation>
6.     <Pronunciation>kleft</Pronunciation>
7.   </DerivationCtn>
8.   <DerivationCtn>
9.     <Derivation>clove</Derivation>
10.    <Pronunciation>[kl..v]</Pronunciation>
11.    <Register value = 'literary'/>
12.  </DerivationCtn>
13. </DerivationBlock>
14. <DerivationBlock>
15.  <Tense value = 'pastParticiple'/>
16.  <Derivation>cleaved</Derivation>
17.  <Derivation>cleft</Derivation>
18.  <DerivationCtn>
19.    <Derivation>cloven</Derivation>
20.    <Pronunciation>'kl..v(.)n</Pronunciation>
21.    <Register value = 'literary'/>
22.  </DerivationCtn>
23. </DerivationBlock>
```

Table 12 — Original data — Derivation block

— **atÈtestable** *adj.*
— **at'testant, at'tester** *or esp. in legal usage* **at'testor, at'testator** *n.*
— **attestation (ÇætɛÈstelS«n)** *n.*

Table 13 — Schematic representation — Derivation block



A <DerivationBlock> is used to associate the <PartOfSpeech> to the four <Derivation>s. An embedded <DerivationBlock> is used to group the two last <Derivation>s with a common <RangeOfApplication>

The XmLex model defines blocks for seven topics: CompositionalPhrase, Derivation, Headword, Inflection, MultiWordUnit, Synonym and Translation.

Table 14 — Block encoding — Embedded derivation block

```
1. <DerivationBlock>
2.  <PartOfSpeech value = 'noun'/>
3.  <Derivation>at<Stress/>testant</Derivation>
4.  <Derivation>at<Stress/>tester</Derivation>
5.  <DerivationBlock>
6.    <RangeOfApplication>esp. in legal usage</RangeOfApplication>
7.    <Derivation>at<Stress/>testor</Derivation>
8.    <Derivation>at<Stress/>testator</Derivation>
9.  </DerivationBlock>
10. </DerivationBlock>
```

4.1.3.3 Groups

A group aggregates independent data elements, containers and blocks.

A group is a compositional element used for representing distinct (and repetitive) sets of information, for instance, multiple senses of a headword within an entry.

Table 15 — Example of groups (from Annex C — excerpts from Example 3)

pneumatophore 1. *(Bot)* Pneumatophor *n*, Atemwurzel *f*; 2. *(Zoo)* Pneumatophor *n*, Schwimmglocke *f*, Gasflasche *f (der Siphonophoren)*

Table 16 — Encoding (from Annex C — excerpts from Example 3)

```
1. <SenseGroup>
2.   <SubjectField>Bot</SubjectField>
3.   <TranslationCtn>
4.     <Translation>Pneumatophor</Translation>
5.     <PartOfSpeech value = 'noun'/>
6.   </TranslationCtn>
7. </SenseGroup>
8. <SenseGroup>
9.   <SubjectField>Zoo</SubjectField>
10.   <TranslationCtn>
11.     <Translation>Pneumatophor</Translation>
12.     <PartOfSpeech value = 'noun'/>
13.   </TranslationCtn>
14. </SenseGroup>
```

According to the subject field, the headword has two meanings. Each of them is described in a sense group (<SenseGroup>).

Table 17 — List of Groups

Name	Generic identifier	Explanation	See: Annex Example Line
homograph group	HomographGroup	A grouping element for the description of homographs.	C 1 10
sense group	SenseGroup	A grouping element for the description of one meaning of the headword in an entry. See definition: 3.2.3.	C 1 12

4.2 Formal structure of a dictionary entry

4.2.1 Formal grammar for high-level structures

A dictionary entry is made of

— one or more main lexical units (“headwords”) and their related lexical units (part of speech, pronunciation, orthographical variants, derivations, etc.),

— a description of each meaning of the headwords and related lexical units associated with that meaning (compositional phrases, multiword units, translations, synonyms, etc.).

When a headword has very different meanings, the entry can be split into sub-entries for each homograph or a separate entry (with a homograph number) can be generated for each meaning.

Several entries can be grouped inside a unique “nest” in order to assemble related headwords in a compact dictionary.

The model is expressed according to eBNF (extended Backus-Naur Form) conventions:

— terminals are nouns without delimiters; they are explained before they are used (example: Headword);

— symbols are delimited by <>;

— {} means 0, one or many;

— [ ] means 0 or 1;

— + means 1 or many.

Note the following.

— The order of the elements within a rule is never meaningful. For instance, within a container, repeatable refining elements may appear before and/or after the refined data element.

— Symbols whose name ends with “Value”, like <GrammaticalGenderValue>, or with “Type”, like <HeadwordType>, are not defined in this International Standard; they refer to permissible values defined either by ISO 12620:1999 or by the TC 37 Data Category Registry.

  Values are lists of permissible values allowed for a data element. For instance, <GrammaticalGenderValue> could contain “masculine”, “feminine”, “neuter”, etc.

  Types give additional information about the nature of a data element. For instance, <HeadwordType> will enumerate types of headwords (common noun, proper noun, prefix, suffix, geographical name, etc.).

An implementation of this model should always allow the user to add his own types or permissible values according to his needs.

— The description of a citation (CitationCtn) is not defined here. Its components have to be borrowed from ISO 15836 (Dublin Core) or ISO 12615 (Source references).

1.	<Dictionary> ::= <generalQualifiers> [sourceLanguage] [targetLanguage] {<DictionaryEntry> | <NestEntry> | <Insert>}
2.	<NestEntry> ::= <generalQualifiers> [sourceLanguage] [targetLanguage] {DictionaryEntry>}
3.	<DictionaryEntry> ::= [sortKey] [sourceLanguage] [targetLanguage] [homographNumber] <generalQualifiers> (Headword| HeadwordCtn| HeadwordBlock)+ {HomographGroup} | {SenseGroup} {MultiWordUnitCtn | CompositionalPhraseCtn| {<AdministrativeInformation>}
4.	<HomographGroup> ::= <generalQualifiers> [Headword| HeadwordCtn| HeadwordBlock] {<CoreComments> | <SenseGroup>} {<RelatedTopics>}
5.	<SenseGroup> ::= <generalQualifiers> [senseNumber] [targetLanguage] {<CoreComments>| <RelatedTopics>| <SenseGroup>} (See|SeeCtn)

6.	<RelatedTopic> ::= {AbbreviatedForm| <AbbreviatedFormCtn> Analogy |<AnalogyCtn>| <AnalogyBlock>| Antonym| <AntonymCtn> Citation| <CitationCtn>| CompanySpecificUsage| CompanySpecificUsageCtn| CompositionalPhrase| <CompositionalPhraseCtn>| <CompositionalPhraseBlock>| Derivation|<DerivationCtn>|<DerivationBlock>| Example|<ExampleCtn>| FalseFriend|<FalseFriendCtn>| FreeTopic|<FreeTopicCtn>| FullForm|<FullFormCtn>| Homonym| HomonymCtn| Inflection|<InflectionCtn>|<InflectionBlock>| InternationalScientificTerm|<InternationalScientificTermCtn>| MultiWordUnit|<MultiWordUnitCtn>|<MultiWordUnitBlock>| ProprietaryRestriction| ProprietaryRestrictionCtn| Synonym|<SynonymCtn>|<SynonymBlock>| Translation|<TranslationCtn>|<TranslationBlock>| Variant|<VariantCtn>}
7.	<HeadwordCtn> ::= <generalQualifiers> Headword {<CoreComments>| <RelatedTopics>}
8.	<HeadwordBlock> ::= <generalQualifiers> (Headword | HeadwordCtn)+ {<CoreComments>}
9.	<MultiWordUnitCtn> ::= <generalQualifiers> MultiWordUnit+ {<CoreComments>| <RelatedTopics>} {<SenseGroup>}
10.	<CompositionalPhraseCtn> ::= <generalQualifiers> CompositionalPhrase+ {<CoreComments>| <RelatedTopics>} {<SenseGroup>}
11.	<LinguisticComment> ::= Attestation|<AttestationCtn>| Case|<CaseCtn>| Complement|<ComplementCtn>| Display| Etymology|<EtymologyCtn>| Formation|<FormationCtn>| Formula|<FormulaCtn>| Frequency|<FrequencyCtn>| GeographicalUsage|<GeographicalUsageCtn>| GrammaticalGender|<GrammaticalGenderCtn>| GrammaticalNumber|<GrammaticalNumberCtn>| GrammaticalPattern| GrammaticalPatternCtn| GuidePhrase|<GuidePhraseCtn>| Mood|<MoodCtn>| NormativeStatus|<NormativeStatusCtn>| PartOfSpeech|<PartOfSpeechCtn>| Person|<PersonCtn>| Pronunciation|<PronunciationCtn>| RangeOfApplication|<RangeOfApplicationCtn>| Register|<RegisterCtn>| SearchForm|<SearchFormCtn>| Syllabification|<SyllabificationCtn>| Symbol|<SymbolCtn>| TypicalComplement| TypicalComplementCtn| Tense|<TenseCtn>| UsageNote|<UsageNoteCtn>

12.	<SemanticComment> ::= Definition|<DefinitionCtn>| SenseIndicator| SenseIndicatorCtn| SenseQualifier|<SenseQualifierCtn>| SubjectField|<SubjectFieldCtn>
13.	<CoreComments> ::= {<LinguisticComments>| <SemanticComments>| <CrossReferences>| <FreeElements>| <GeneralElements>| <AdministrativeInformations>}
14.	<CrossReferences> ::= SeeAlso
15.	<AdministrativeInformation> ::= Origination | Modification
16.	<FreeElements> ::= FreeComment| <FreeCommentCtn>
17.	<GeneralElements> ::= Note| <NoteCtn>| Source| <SourceCtn>
18.	<ContainerComplement> ::= <FreeElements>| <GeneralElements>
19.	<generalQualifiers> ::= [id] [class] [style] [xml:lang] [documentSize] [display]

4.2.2 Formal grammar for other lexical unit containers

20.	<AbbreviatedFormCtn> ::= <generalQualifiers> AbbreviatedForm {<CoreComments>| <RelatedTopics>}
21.	<AnalogyCtn> ::= <generalQualifiers> Analogy {<CoreComments>| <RelatedTopics>}
22.	<AntonymCtn> ::= <generalQualifiers> Antonym {<CoreComments>| <RelatedTopics>}
23.	<DerivationCtn> ::= <generalQualifiers> Derivation {<CoreComments>| <RelatedTopics>}
24.	<ExampleCtn> ::= <generalQualifiers> Example {<CoreComments>| <RelatedTopics>}
25.	<FalseFriendCtn> ::= <generalQualifiers> FalseFriend {<CoreComments>| <RelatedTopics>}
26.	<FreeTopicCtn> ::= <generalQualifiers> FreeTopic {<CoreComments>| <RelatedTopics>}
27.	<FullFormCtn> ::= <generalQualifiers> FullForm {<CoreComments>| <RelatedTopics>}
28.	<InflectionCtn> ::= <generalQualifiers> Inflection {<CoreComments>| <RelatedTopics>}
29.	<InternationalScientificTermCtn> ::= <generalQualifiers> InternationalScientificTerm {<CoreComments>| <RelatedTopics>}
30.	<SearchFormCtn> ::= <generalQualifiers> SearchForm {<CoreComments>| <RelatedTopics>}
31.	<SynonymCtn> ::= <generalQualifiers> Synonym {<CoreComments>| <RelatedTopics>}
32.	<TranslationCtn> ::= <generalQualifiers> Translation {<CoreComments>| <RelatedTopics>}
33.	<VariantCtn> ::= <generalQualifiers> Variant {<CoreComments>| <RelatedTopics>}

4.2.3 Formal grammar for blocks

34.	<AnalogyBlock> ::= <generalQualifiers> (Analogy| AnalogyCtn>| <AnalogyBlock>)+ {<CoreComments>}
35.	<CompositionalPhraseBlock> ::= <generalQualifiers> (CompositionalPhrase| <CompositionalPhraseCtn>| <CompositionalPhraseBlock>)+ {<CoreComments>}
36.	<DerivationBlock> ::= <generalQualifiers> (Derivation| <DerivationCtn>| <DerivationBlock>)+ {<CoreComments>}
37.	<HeadwordBlock> ::= <generalQualifiers> (Headword| <HeadwordCtn>| <HeadwordBlock>)+ {<CoreComments>}
38.	<InflectionBlock> ::= <generalQualifiers> (Inflection| <InflectionCtn>| <InflectiontionBlock>)+ {<CoreComments>}
39.	<MultiWordUnitBlock> ::= <generalQualifiers> (MultiWordUnit|<MultiWordUnitCtn>|<MultiWordUnitBlock>)+ {<CoreComments>}
40.	<SynonymBlock> ::= <generalQualifiers> (Synonym|<SynonymCtn>|<SynonymBlock>)+ {<CoreComments>}
41.	<TranslationBlock> ::= <generalQualifiers> (Translation|<TranslationCtn>|<TranslationBlock>)+ {<CoreComments>}
42.	<VariantBlock> ::= <generalQualifiers> (Variant|<VariantCtn>|<VariantBlock>)+ {<CoreComments>}

4.2.4 Formal grammar for other comment containers

43.	<AttestationCtn> ::= <generalQualifiers> Attestation {<ContainerComplement>}
44.	<CaseCtn> ::= <generalQualifiers> Case { Example| ExampleCtn| <ContainerComplement>}
45.	<DefinitionCtn> ::= <generalQualifiers> Definition {<ContainerComplement>}
46.	<EtymologyCtn> ::= <generalQualifiers> Etymology {<ContainerComplement>}
47.	<FormulaCtn> ::= <generalQualifiers> Formula [Source] <InflectionCtn> ::= Inflection { <LinguisticComment> }
48.	<FreeCommentCtn> ::= <generalQualifiers> FreeComment {<CoreComments>}
49.	<FrequencyCtn> ::= <generalQualifiers> Frequency {<ContainerComplement>}
50.	<GeographicalUsageCtn> ::= <generalQualifiers> GeographicalUsage {<ContainerComplement>}
51.	<GuidePhraseCtn> ::= <generalQualifiers> GuidePhrase {<ContainerComplement>}
52.	<GrammaticalGenderCtn> ::= <generalQualifiers> GrammaticalGender {<ContainerComplement>}
53.	<GrammaticalNumberCtn> ::= <generalQualifiers> GrammaticalNumber {<ContainerComplement>}
54.	<GrammaticalPatternCtn> ::= <generalQualifiers> GrammaticalPattern {<ContainerComplement>}
55.	<InsertCtn> ::= <generalQualifiers> Insert {<ContainerComplement>}

56.	<MoodCtn> ::= <generalQualifiers> Mood {Example| ExampleCtn| <ContainerComplement>}
57.	<NormativeStatusCtn> ::= <generalQualifiers> NormativeStatus {<ContainerComplement>}
58.	<NoteCtn> ::= <generalQualifiers> Note {<ContainerComplement>}
59.	<PartOfSpeechCtn> ::= <generalQualifiers> PartOfSpeech [Subcategorisation| SubcategorisationCtn] [GrammaticalGender] [GrammaticalNumber] {<ContainerComplement>}
60.	<PersonCtn> ::= <generalQualifiers> Person { Example| ExampleCtn| <ContainerComplement>}
61.	<PronunciationCtn ::= <generalQualifiers> Pronunciation {<ContainerComplement>}
62.	<RegisterCtn ::= <generalQualifiers> Register {<ContainerComplement>}
63.	<RangeOfApplicationCtn> ::= <generalQualifiers> RangeOfApplication {<ContainerComplement>}
64.	<SeeCtn> ::= <generalQualifiers> See { Corecomments } (HomographNumber) (SenseNumber) {<ContainerComplement>}
65.	<SenseIndicatorCtn> ::= <generalQualifiers> SenseIndicator {<ContainerComplement>}
66.	<SenseQualifierCtn> ::= <generalQualifiers> SenseQualifier {<ContainerComplement>}
67.	<SourceCtn> ::= <generalQualifiers> Source {<ContainerComplement>}
68.	<SubcategorisationCtn> ::= <generalQualifiers> Subcategorisation {<ContainerComplement> [SubcategorisationCtn]}
69.	<SubjectFieldCtn> ::= <generalQualifiers> SubjectField {<ContainerComplement>}
70.	<SyllabificationCtn> ::= <generalQualifiers> Syllabification {<ContainerComplement>}
71.	<SymbolCtn> ::= <generalQualifiers> Symbol { Source } {<ContainerComplement>}
72.	<TenseCtn> ::= <generalQualifiers> Tense { Example| ExampleCtn| <ContainerComplement>}
73.	<TypicalComplementCtn> ::= <generalQualifiers> TypicalComplement {<ContainerComplement>}
74.	<UsageNoteCtn> ::= <generalQualifiers> UsageNote { <CoreComments>}

4.2.5 Formal grammar for lexical units

75.	<AbbreviatedForm> ::= <generalQualifiers> [AbbreviatedFormType] <CoreComponentContent>
76.	<Analogy> ::= <generalQualifiers> <CoreComponentContent>
77.	<Antonym> ::= <generalQualifiers> [AntonymType] <CoreComponentContent>
78.	<Citation> ::= <generalQualifiers> [CitationType] <CoreComponentContent>

79.	<CompositionalPhrase> ::= <generalQualifiers> (<CompositionalPhraseType> <CoreComponentContent>
80.	<Derivation> ::= <generalQualifiers> [DerivationType] <CoreComponentContent>
81.	<Example> ::= <generalQualifiers> [ExampleType] [correctness] [CollocatorType] <CoreComponentContent>
82.	<FalseFriend> ::= <generalQualifiers> [FalseFriendType] [targetLanguage] <CoreComponentContent>
83.	<FreeTopic> ::= <generalQualifiers> FreeTopicType <CoreComponentContent>
84.	<FullForm> ::= <generalQualifiers> [FullFormType] <CoreComponentContent>
85.	<Headword> ::= <generalQualifiers> [HeadwordType] <CoreComponentContent>
86.	<Inflection> ::= <generalQualifiers> [InflectionType] <CoreComponentContent>
87.	<MultiWordUnit> ::= <generalQualifiers> (<MultiWordUnitType> <CoreComponentContent>
88.	<SearchForm> ::= <generalQualifiers> [SearchFormType] <CoreComponentContent>
89.	<Synonym> ::= <generalQualifiers> [SynonymType] <CoreComponentContent>
90.	<Translation> ::= <generalQualifiers> (<TranslationType> | [targetLanguage] <CoreComponentContent>
91.	<Variant> ::= <generalQualifiers> [VariantType] <CoreComponentContent>

4.2.6 Formal grammar for comments

92.	<Attestation> ::= <generalQualifiers> <CoreComponentContent>
93.	<Case> ::= <generalQualifiers> <CaseValue>
94.	<CompanySpecificUsage> ::= <generalQualifiers> <CoreComponentContent>
95.	<Definition> ::= <generalQualifiers> [DefinitionType] <CoreComponentContent>
96.	<Display> ::= <generalQualifiers> <CoreComponentContent>
97.	<Etymology> ::= <generalQualifiers> <CoreComponentContent>
98.	<Formation> ::= <generalQualifiers> <CoreComponentContent>
99.	<Formula> ::= <generalQualifiers> <CoreComponentContent>
100.	<FreeComment> ::= <generalQualifiers> FreeCommentType <CoreComponentContent>
101.	<Frequency> ::= <generalQualifiers> <FrequencyValue>
102.	<GeographicalUsage> ::= <generalQualifiers> (<GeographicalUsageType> <CoreComponentContent>
103.	<GuidePhrase> ::= <generalQualifiers> <CoreComponentContent>
104.	<GrammaticalGender> ::= <generalQualifiers> <GrammaticalGenderValue>
105.	<GrammaticalNumber> ::= <generalQualifiers> <GrammaticalNumberValue>
106.	<GrammaticalPattern> ::= <generalQualifiers> <CoreComponentContent>

107.	<Insert> ::= <generalQualifiers> [InsertType] <CoreComponentContent>
108.	<Mood> ::= <generalQualifiers> <MoodValue>
109.	<NormativeStatus> ::= <generalQualifiers> <NormativeStatusValue>
110.	<Note> ::= <generalQualifiers> <CoreComponentContent>
111.	<PartOfSpeech> ::= <generalQualifiers> <PartOfSpeechValue>
112.	<Person> ::= <generalQualifiers> <PersonValue>
113.	<Pronunciation> ::= <generalQualifiers> [scheme] <CoreComponentContent>
114.	<ProprietaryRestriction> ::= <generalQualifiers> <ProprietaryRestrictionValue>
115.	<Register> ::= <generalQualifiers> <RegisterValue>
116.	<RangeOfApplication> ::= <generalQualifiers> [RangeOfApplicationType] <CoreComponentContent>
117.	<See> ::= <generalQualifiers> <CoreComponentContent>
118.	<SeeAlso> ::= <generalQualifiers> <CoreComponentContent>
119.	<SenseIndicator> ::= <generalQualifiers> <CoreComponentContent>
120.	<SenseQualifier> ::= <generalQualifiers> <CoreComponentContent>
121.	<Source> ::= <generalQualifiers> <CoreComponentContent>
122.	<Subcategorisation> ::= <generalQualifiers> <CoreComponentContent>
123.	<SubjectField> ::= <generalQualifiers> [scheme] <CoreComponentContent>
124.	<Syllabification> ::= <generalQualifiers> <CoreComponentContent>
125.	<Symbol> ::= <generalQualifiers> <CoreComponentContent>
126.	<Tense> ::= <generalQualifiers> <TenseValue>
127.	<TypicalComplement> ::= [typicalComplementType]<generalQualifiers> <CoreComponentContent>
128.	<UsageNote> ::= <generalQualifiers> [UsageNoteType] <CoreComponentContent>
129.	<Voice> ::= <generalQualifiers> <VoiceValue>

4.3 Content models

4.3.1 Content elements

The content of a data element is a mixture of

— plain text,

— “embedded elements” (see 4.3.2) which are either data elements that can appear within a content (<Example> for instance) or are specific to content elements (<HiddenEntry> for instance),

— “basic elements” (see 4.3.3) of general usage, like <Unit> or <Quantity>,

— presentational elements coming from XHTML: `b`, `br`, `div`, `h1`, `h2`, `h3`, `h4`, `h5`, `h6`, `i`, `img`, `ol`, `p`, `span`, `sub`, `sup`, `table`, `ul`,

— pointers (see 4.3.4).

4.3.2 Embedded elements

Table 18 — List of embedded elements

Name	Generic identifier	Explanation	See: Annex Example Line
addendum	Addendum	Text added to a locution (a quotation, a saying, etc.) in order to make it more explicit.	
alternative	Alternative	Component of a headword indicating a possibility of choice between two or more components. Contains two or more <Choice>s.	C 9 2
collocator	Collocator	A complementary component to the headword with which a CompositionalPhrase is built.	C 12 2
entailed term	EntailedTerm	A lexical unit that is defined in another entry.	C 27 3
foreign text	ForeignText	A word, phrase, or extended text belonging to some language other than that of the surrounding text. [Adapted from ISO 12620:1999, A.10.8.]	C 5 6
fragment	Fragment	Short segment of a lexical unit embedded within a meta discourse.	C 1 5
free content	FreeContent	A free element used in the content of a data element.	
gloss	Gloss	Any comment.	C 4 13
hidden entry	HiddenEntry	A contextual (non lemmatic) subaddress within a descriptive element.	C 18 13
homograph number	HomographNumber	A number associated with a unit of description of a homograph.	C 30 3
optional	Optional	Optional part of a lexical unit.	C 1 15
prefix	Prefix	An affix attached to the front of a word to produce a derivative word or an inflected form.	C 8 3
repeat symbol	RepeatSymbol	A substitutive element used in place of the last lexical unit in an entry.	C 12 2
sense number	SenseNumber	A number given to a unit of description of a meaning.	C 30 4
stem	Stem	The main part of a word to which affixes are added.	

Table 18 — List of embedded elements *(continued)*

Name	Generic identifier	Explanation	See: Annex Example Line
suffix	Suffix	An affix added to the end of a word, serving to form a new word or functioning as an inflectional ending.	C 8 3
URI	URI	Uniform Resource Identifiers (URIs, also known as URLs) are short strings that identify resources in the web: documents, images, downloadable files, services, electronic mailboxes and other resources. (http://www.w3.org/Addressing)	
url	Url	Physical address of an object which is retrievable using protocols already deployed on the net. [RFC 2396] (http://rfc.net/rfc2396.html)	

4.3.3 Basic elements

Basic elements correspond to conventional bits of information like quantities or units which are of general usage and can appear anywhere within a text or within an embedded element.

Table 19 — List of basic elements

Name	Generic identifier	Explanation	See: Annex Example Line
hyphen	Hyphen	[An element] used to separate the parts of some compound words, and to link the words of a phrase, and to be found between syllables of a word split between two consecutive lines of writing or printing. [CED]	C 4 4
quantity	Quantity	Attribute of a phenomenon, body or substance that may be distinguished quantitatively and determined quantitatively. [VIM:1993, definition 1.1]	C 33 4
range	Range	The relationship between a set of limits within which a quantity is measured, as expressed by stating the lower and upper range values. [ISO 12620:1999, A.5.7]	C 29 1
stress	Stress	[An element used to indicate] emphasis placed upon a syllable by pronouncing it more loudly than those that surround it. [CED]	C 4 4
unit	Unit	Particular quantity, defined and adopted by convention, with which other quantities of the same kind are compared in order to express their magnitudes relative to that quantity. [VIM:1993, definition 1.7]	
word	Word	Autonomous graphical unit part of a lexical unit.	

Table 20 — List of embedded and basic containers

Name	Generic identifier	Explanation	See: Annex Example Line
hidden entry container	HiddenEntryCtn	A container for refining a <HiddenEntry>	C 13 4
word container	WordCtn	A container for refining a <Word>	

4.3.4 Pointer

A pointer is an element used for establishing a link between two locations within a dictionary. It needs at least two parts (or bits) of information: 1) the prompt that will be displayed to the user; and 2) the address of the designated target location which is being pointed to.

Table 21 — Pointer

Name	Generic identifier	Explanation	See: Annex Example Line
pointer	Ptr	A field or record used in a data collection to direct the user to another related location, e.g., another record. [Adapted from ISO 12620:1999, A.10.18] Qualifiers: all XLINK specification according to http://www.w3.org/TR/xlink/ and IETF RFC 2396	C 3 5

Table 22 — Example of cross reference (from Annex C — Example 3)

```
1. <DictionaryEntry id ='LEX_ex.9-1'>
2.     <Headword>aerating root</Headword>
3.     <See>
4.       <Ptr xlink:href = 'LEX_ex.9-4'> pneumatophore
<SenseNumber>2</SenseNumber>
5.       </Ptr>
6.    </See>
7. </DictionaryEntry>
8.
9. <DictionaryEntry identifier ='LEX_ex.9-4'>
10.     <Headword>pneumatophore</Headword>
11.     <SenseGroup targetLanguage = 'de' identifier = 'pneumatophoreSense1'>
```

The first entry ("LEX ex.9-1") points to another entry ("LEX ex.9-4") by means of a <Ptr>

4.3.5 Formal grammar for embedded containers

130.	<HiddenEntryCtn> ::= <generalQualifiers> {<CoreComments>| <RelatedTopics>}
131.	<WordCtn> ::= <generalQualifiers> {<CoreComments>| <RelatedTopics>}

4.3.6 Formal grammar for data category content

132.	<CoreComponentContent> ::= <inline>|<flow>

133.	<inline> ::=
	{
	text|
	Ptr|
	<embeddedElement>|
	<basicElement> |
	<presentationalInlineElement>|
	a
	}

134.	<Ptr> ::= <xlinkAttributes> <Prompt>
135.	<xlinkAttributes> ::= type href [role] [arcrole] [title] [show]

136.	<Prompt> ::=
	{
	text|
	<embeddedElement>|
	<basicElement> |
	<presentationalInlineElement>
	}

137.	<flow> ::=
	{
	<inline> |
	<presentationalBlockElement>
	}

138.	<basicElement> ::= Hyphen| Quantity| Range |Stress| Unit | Word| WordCtn
139.	<embeddedElement>::= AbbreviatedForm| AlternativeScripting| Case| CitationCtn| CompanySpecificUsage| Example| Formula| Frequency| FullForm| GeographicalUsage| GrammaticalGender| GrammaticalNumber| GrammaticalPattern| Inflection|InternationalScientificTerm| Mood| NormativeStatusCtn| PartOfSpeech| Person| Pronunciation| PronunciationCtn| ProprietaryRestriction| RangeOfApplication| Register| SeeAlso| SenseNumber| Symbol| SymbolCtn| TemporalRestriction| TemporalUsage| Tense| UsageNote| Voice|
140.	<EntailedTermCtn> :: EntailedTerm {SenseNumber}
141.	<HiddenEntryCtn> ::= HiddenEntry { <LinguisticComment>| <SemanticComment>| <CrossReference>}
142.	<WordCtn> ::= Word { <LinguisticComment>| <SemanticComment>| <CrossReference>}
143.	<presentationalBlockElement> ::= ol| p| table| ul
144.	<presentationalInlineElement>::= a| img | span

145.	<embeddedElementContent> ::=
	{
	text |
	<presentationalInlineElement>|
	<basicElement>
	}

146.	<basicElementContent> ::=
	{
	text|
	<basicElement>|
	<presentationalInlineElement>
	}

4.4 General qualifiers

All the elements of the structure, data elements and floating elements have general qualifiers coming from XHTML (class, style, xml:lang), the documentSize qualifier for indicating to which size of dictionary the element belongs to (compact, medium, large, etc.) and the display attribute used for controlling the display of elements in conjonction with the element Display.

5 Means of presentation

5.1 Layout aids

5.1.1 General

Depending on the medium, one or more layout aids are used. Text formatting (see Table 23) and typographical conventions can be used for all media to differentiate entry elements (see 5.1.2). The tabular form is especially recommended for dictionaries with more than two languages (see 5.1.2.3). For electronic media, data bank templates can be used as a specific form of presentation.

5.1.2 Layout aids for dictionaries

5.1.2.1 Text formatting

Table 23 — Text formatting

Formatting characteristic	Examples of formatting options
Type family	differentiation by using different type families (e.g. serif typefaces and sans-serif typefaces)
Point size	different point sizes for different entry elements
Typeface	light Roman type, light italic, semibold Roman type, semibold italic
Colour	entry elements set off by colour (e.g. entry terms in colour)
Style	small caps, upper case, subscript, superscript

5.1.2.2 Typographical signs

Note that the typographical signs listed in Table 24 describe the function of the sign but do not describe the glyph of the sign.

Different scripts have different glyphs for the typographical signs. For example, within the Latin script the glyph ";" represents the typographical sign "semicolon", but within the Greek script, it represents the typographical sign "question mark". In other words, within the Latin script the typographical sign "semicolon" has to be printed as ";", within the Greek script the typographical sign semicolon has to be printed as "·".

Table 24 — Typographical signs

Typographical sign	Typographical characteristic
Comma	separation of entry elements
Semicolon	separation of entry elements
Colon	connection of entry elements
Slash	connection of entry elements indication of alternative options
Numbering	classification of larger sections, Arabic, Roman, Hellenic, alphabetical, etc. (see Annex A)
Parentheses and brackets	labelling of entry elements (round, square, angle, curly)
Symbols	labelling of entry elements
Exponents (superscript numbers)	differentiation of identical entry elements

5.1.2.3 Tabular presentation

Different entry elements can be structured by arranging them in a table (e.g. for dictionaries with more than two languages: different languages in different columns). The column headings shall be visible in each presentation (e.g. in a book format, the column headings should appear on every page).

If different entry elements are listed within the tabular cells, they shall be designated by means of other presentation options as set forth in 5.1.2.1 and 5.1.2.2.

5.2 Compacting mechanisms

5.2.1 General abbreviations

If general abbreviations are used, they shall be clearly recognizable and explained (e.g. in user instructions). Abbreviations shall be transparent and easily understood, if possible without looking them up in the user instructions.

If abbreviations are defined in a standard, the standardized abbreviations should be used

— if they are precise enough for the respective scope of the dictionary, and

— if they correspond to the level of education and the reading habits of the target group.

5.2.2 Abbreviated headword repetitions

Headword repetitions may be abbreviated in printed dictionaries to save space. In data bank systems, abbreviated headword repetitions shall be avoided in data categories that are used for searching and sorting.

Headword abbreviations can stand for an element of a multi-word term or for a part of a word. In the latter case, the word component shall be clearly delimited, e.g. by a vertical line. Ambiguities, especially confusion with general abbreviations, shall not arise.

5.2.3 Repeat symbols (Tilde or Dash)

The repeat symbols tilde (swung dash) [~] or dash [–] may be used in printed dictionaries to save space. In the case of data bank systems, repeat symbols shall be avoided in data categories which are used for searching and sorting.

Repeat symbols can stand for an element of a multi-word term or for a part of a word. In the latter case, the word component shall be clearly delimited, e.g. by a vertical line. Ambiguities shall not arise. Series of repeat symbols to replace several elements of a term are not permitted.

A special form of the tilde, the tilde with a circle [≊], indicates the switch between upper-case and lower-case spelling of the first character.

5.2.4 Nesting

To save space in printed dictionaries, nests can be built: several entries can be grouped into a single paragraph. Thus, headwords are not necessarily printed at the beginning of a new line but can also appear within a paragraph.

Nesting shall be avoided when using electronic modes of presentation.

Annex A
(informative)

Arabic, Roman and Hellenic numbering system

Table A.1 — Arabic, Roman and Hellenic numbering system

Number name (English)	Arabic system sign	Roman system sign	Hellenic system sign [a]
One	1	I	α′
Two	2	II	β′
Three	3	III	γ′
Four	4	IV	δ′
Five	5	V	ε′
Six	6	VI	στ′
Seven	7	VII	ζ′
Eight	8	VIII	η′
Nine	9	IX	θ′
Ten	10	X	ι′
Eleven	11	XI	ια′
Twelve	12	XII	ιβ′
Thirteen	13	XIII	ιγ′
Fourteen	14	XIV	ιδ′
Fifteen	15	XV	ιε′
Sixteen	16	XVI	ιστ′
Seventeen	17	XVII	ιζ′
Eighteen	18	XVIII	ιη′
Nineteen	19	XIX	ιθ′
Twenty	20	XX	κ′
Twenty-one	21	XXI	κα′
Twenty-two	22	XXII	κβ′
Thirty	30	XXX	λ′
Forty	40	XL	μ′
Fifty	50	L	ν′
Sixty	60	LX	ξ′
Seventy	70	LXX	ο′
Eighty	80	LXXX	Π′
Ninety	90	XC	ϟ′ (koppa)
One hundred	100	C	ρ′
One hundred and one	101	CI	ρα′

Table A.1 — Arabic, Roman and Hellenic numbering system *(continued)*

Number name (English)	Arabic system sign	Roman system sign	Hellenic system sign [a]
Two hundred	200	CC	σ΄
Three hundred	300	CCC	τ΄
Four hundred	400	CD	υ΄
Five hundred	500	D	φ΄
Six hundred	600	DC	χ΄
Seven hundred	700	DCC	ψ΄
Eight hundred	800	DCCC	ω΄
Nine hundred	900	CM	ϡ (sampi)
One thousand	1000	M	͵α

[a] The accent on the letter is usually omitted.

Annex B
(informative)

Tables of functions of lexicographical symbols

The initials DE, EL, FR, JP, LT and PL used in this Annex represent the country code (ISO 3166-1:1997, *Codes for the representation of names of countries and their subdivisions — Part 1: Country codes*) where the lexicographical symbols are used (DE = Germany; EL = Greece; FR = France; JP = Japan; LT = Lithuania; PL = Poland).

NOTE 1 The list is not aimed to be exhaustive. The symbols given here were taken from selected mono- and bilingual dictionaries which are representative of each country.

NOTE 2 Notes for symbols used in Japan:

— The symbols given here were taken from 4 monolingual modern Japanese dictionaries with more than 200 000 entries. Other kind of dictionaries including bilingual ones were left out of consideration.

— Japanese texts are traditionally written vertically from top to bottom, lines from the right to the left side of a page, as is in the dictionaries examined. All the Japanese symbols in this Annex are therefore shown to fit in the vertical writing system.

B.1 Pragmatic and grammatical information on an entry or on a component of an entry

Table B.1 — Pragmatic and grammatical functions

Function	Symbol	Name	Position	Specific usage
It has become obsolete or was superseded	†	Dagger	preceding; superscript	
It is a deprecated word (a barbarism, hybrid, loan translation)	×	Multiplication sign	preceding	LT
It only occurs in classical literature	♦	Diamond sign	preceding	DE
It is newly coined	*	Asterisk	preceding	
It also represents a trademark	®	Registered sign	postpositive; superscript	DE
	™	Trademark sign	postpositive; superscript	
It has been coined by means of translation	!	Exclamation mark	preceding	
It is an internationally harmonized scientific-technical term	°	Degree sign	preceding	
	△	Triangle	preceding	PL
The examples are from folklore or they are figurative expressions	^	Roof	preceding	LT
It is a vulgar word	!	Exclamation mark	preceding	EL
It is legally protected (or otherwise regulated)	§	Section sign	preceding	

Table B.1 — Pragmatic and grammatical functions *(continued)*

Function	Symbol	Name	Position	Specific usage
It is an idiomatic expression	*	Asterisk	preceding	DE
	◊	Lozenge	preceding	LT, PL
	♦	Diamond sign	preceding	LT
It is a phrasal verb	♦	Diamond sign	preceding	DE
	▭	Rectangle	preceding	LT
	□	Square	preceding	LT
It is basic vocabulary	•	Bullet	preceding	DE
It is a derivative of the headword	◊	Lozenge	preceding	PL
It is a proverb	□	Square	preceding	PL
It is the imperfective form of a perfective verb respectively the perfective form of an imperfective verb	- -		preceding	PL
It is a complex term or a complex name, which is defined	△	Triangle	preceding	LT
	^	Roof	preceding	LT
It is an approximate equivalent	≅	Approximate equal sign	preceding	LT
The main entry represents a geographic name	◈	White diamond containing black small square	postpositive	JP
The main entry represents a personal name	◉	White circle containing black small circle	postpositive	JP
The main entry is an ancient word	古語		postpositive	JP
The main entry is a pillow-word (poetic epithet)	枕		postpositive	JP
The marked *kanji*-character is not included in the *Jōyō-Kanji* list (list of *kanji*-characters in common use)	▼	Black down-pointing small triangle	upper right	JP
the marked *kanji*-character is included in the *Jōyō-Kanji* list, but its specific reading is not on the list	▽	White down-pointing small triangle	upper right	JP

B.2 Etymological information on an entry or on a component of an entry

Table B.2 — Etymological information on an entry or on a component function

Function	Symbol	Name	Position	Specific usage
It has never been found in written literature, is taken as hypothetical	*	Asterisk	preceding	EL, LT, PL
It has an Indo-European etymon, it is taken as hypothetical	*	Asterisk	preceding	EL, PL
The form/word before the symbol comes from the form/word following the symbol	<	Less-than sign		DE, EL, LT
The form/word following the symbol comes from the form/word preceding the symbol	>	Greater-than sign		EL, LT

B.3 Saving space

Table B.3 — Saving space functions

Function	Symbol	Name	Position	Specific usage
Replacing an element of a lexical unit throughout an entry or part of an entry	~	Tilde	preceding or in the middle of a term or at the end of part of a term	DE, LT, PL
Replacing the headword throughout the entry, if standing alone	~	Tilde		DE, PL
Replacing the preposition *with*	+	Plus sign	following	FR, LT
Leaving out some words or a part of a word	…	Ellipsis		DE
Replacing the main entry of a main heading in a subheading	|	Vertical line		JP
Replacing the main entry in an example	|	Vertical line		JP
Replacing the *kana* part of the main entry in the *kanji-kana* writing section (in case of a compound word of foreign and Japanese/Chinese origins)	|	Vertical line		JP
Replacing the same kana characters of a main entry in the historical kana writing section	： |	Two dots (vertical) Vertical line		JP JP
Replacing a foreign word given in the etymological section throughout the rest of the entry	〳	Wave (vertical)		JP
Leaving out some words from an example	⋮	Ellipsis (vertical)		JP

B.4 Semantic specification

Table B.4 — Semantic specification functions — Indications

Function	Symbol	Name	Position	Specific usage
A designation represents the same concept	=	Equal sign	preceding	PL
An equivalent or synonym to a headword represents a similar concept	≈	Almost equal to	preceding	PL
The concept represented by this designation is slightly broader than the concept described in the entry	>	Greater-than sign	preceding	
The concept represented by this designation is slightly narrower than the concept described in the entry	<	Less-than sign	preceding	
The concept represented by the designation overlaps with the concept described in the entry	×	Multiplication sign	preceding	
A designation is a homograph to the headword and represents a different concept	≠	Not equal to	preceding	
The designation does not represent the concept described in the entry	≠	Not equal to	preceding	
One meaning of a designation is quite different from the rest of its meanings	•	Bullet	preceding	EL
A synonym has a more general or a more narrow meaning	↑↓	Up and down arrows	following	EL
It has a metaphorical meaning	▶	Black right-pointing triangle	preceding	PL
The following word is a synonym to the main entry (which can be synonymously used in all the cases)	⏸	Equal sign (vertical)	preceding	JP
The following word is an antonym to the main entry	↕ 対義	Two-headed arrow (vertical)	preceding preceding	JP JP
The following word is a quasi-synonym to the main entry	類似		preceding	JP

Table B.4 — Semantic specification functions — Indications *(continued)*

Function	Symbol	Name	Position	Specific usage
A comparison between the main entry and the following word or phrase will contribute to a better understanding of the main entry	比較		preceding	JP
The understanding of the following word or phrase will contribute to a better understanding of the main entry	参照		preceding	JP
The following word or phrase is derived from the main entry	派生		preceding	JP
	▼	Black down-pointing triangle	preceding	JP

B.5 Cross-references of entries

Table B.5 — Cross-reference functions

Function	Symbol	Name	Position	Specific usage
Indicating cross-reference	↑	Vertical arrow	preceding	DE, LT
	→	Horizontal arrow	preceding	EL, FR, LT
	↗	Slanting arrow	preceding	LT
	=	Equal sign	preceding	LT
Indicating cross-reference to the word immediately following the symbol	*	Asterisk	preceding	FR
Referring to the following entry	↓	Downwards arrow	preceding	JP
As for the explanation, referring to the following entry	⇓	Downwards double-line arrow	preceding	JP
	⇩	Downwards white arrow	preceding	JP

B.6 Connecting components of an entry

Table B.6 — Connecting components functions

Function	Symbol	Name	Position	Specific usage
Connecting the headword with its variants in the head of an entry	&	Ampersand		EL
Connecting an example with its source in the example part of a dictionary entry	/	Slash		JP
Indicating what a word is coined of/related to	→	Horizontal arrow		LT
Indicating deprecated words, forms or collocations to preferred ones	=	Equal sign	postpositive	LT

B.7 Giving information on the division, word-building, accent, etc.

Table B.7 — Division, word-building, accent, etc., functions

Function	Symbol	Name	Position	Specific usage
Showing the way the word can be divided	|	Bar		DE
Indicating stressed short vowel	(.)	Dot under vowel		DE
Indicating stressed long vowel	(_)	Underline under vowel		DE
Indicating truncated phonetic transcription	–	Dash		DE, FR
Indicating truncated plural form	–	Dash		FR
Representing the sequence of the separate components of a compound word	+	Plus sign		EL, LT, PL
Indicating the way the phrase is constructed	+	Plus sign	inside parentheses containing grammatical information	FR
Separating segments of a word, such as bases from endings, prefixes, affixes, etc.	–	Dash		EL, LT
Separating bases/roots from case-endings in etymological information	–	Dash		FR
Indicating in French that the liaison is forbidden	*	Asterisk	preceding the letter “h”	FR
Indicating palatalized consonant	'	Hyphen (vertical)	postpositive	LT

Table B.7 — Division, word-building, accent, etc., functions *(continued)*

Function	Symbol	Name	Position	Specific usage
Indicating stressed vowel or diphthong (when word accent isn't clear)	•	Dot after vowel or diphthong	postpositive	LT
Separating common part of a word	‖	Vertical parallels		LT
Enclosing an optional letter or an optional component of a term or word	( ) [ ]	Parentheses Square brackets		LT DE
Indicating how a word is composed of components (main entry)	'	Hyphen (vertical) Space	between components between components	JP JP
Indicating the division between the word stem and the ending of an inflectional word (main entry)	•	*Katakana* middle dot	between word stem and ending	JP
Indicating the last "si" of the word stem of a classical *siku*-adjective (main entry)	○	White bullet	before the last "si"	JP
Indicating the beginning of an inflectional word for a compound word or a phrase (main entry)	○	White bullet	before the conjugational word	JP
Indicating how a compound loanword is built (description)	'	Hyphen (vertical)	between components	JP
Indicating the division between the given and the family names of a foreigner (description)	ꟾ	Small equal sign (vertical)		JP
Indicating that the immediately preceding vowel sound is held for an additional mora	｜	Vertical *katakana-hiragana* prolonged sound mark		JP
Indicating that the marked syllable (vowel) can be articulated or the immediately preceding vowel sound can be held for an additional mora instead	△	White up-pointing small triangle	lower right	JP
Indicating that the marked "ウ" can be pronounced as [u] or [m]	x	Small x	lower right	JP
Combined with "カ", "キ", "ク", "ケ" or "コ", indicating the nasal sound [ŋ-]	○	*Katakana-hiragana* semi voiced sound mark	upper right	JP
Combined with a digit, indicating where the accent fall is (after what number mora the pitch changes from high to low)	▢	Enclosing white square with rounded corners		JP

Table B.7 — Division, word-building, accent, etc., functions *(continued)*

Function	Symbol	Name	Position	Specific usage
Combined with a syllable, indicating where the accent fall is (after which syllable the pitch changes from high to low)	□	Enclosing white square		JP
Combined with a syllable, indicating which syllable has a high pitch	○	Enclosing white circle		JP
Indicating there is no accent fall	〇	Digit zero in a white square with rounded corners		JP
	⓪	Digit zero in a white circle		JP
Indicating a high pitch mora	●	Black circle		JP
Indicating a low pitch mora	O	White circle		JP
Indicating a mora with a high to low pitch	◓	Circle with upper half black		JP
Indicating a mora with a low to high pitch	◒	Circle with lower half black		JP
Enclosing *kana* character(s) which can be omitted from the *kana*-ending ("*okurigana*") of a written word	⏜	Parentheses (vertical)		JP
	( )	Parentheses (horizontal)		JP
Enclosing *kana* character(s) which can be added to the *kana*-ending ("*okurigana*") of a written word	⏜	Parentheses (vertical)		JP
Indicating the potential form of the main entry	可能		preceding	JP

B.8 Enclosing metalinguistic information

Table B.8 — Enclosing metalinguistic functions

Function	Symbol	Name	Position	Specific usage
Enclosing phonological transcription	//	Slashes		EL,PL
	[ ]	Square brackets		DE, FR, LT, PL
Enclosing translations of foreign words	‘’	Inverted commas		EL
Enclosing etymological information	[ ]	Square brackets		DE, LT
	〈 〉	Angle brackets		PL
	( )	Parentheses		FR, LT
Enclosing a number referring to a verb conjugation table/to verb conjugation tables	[ ]	Square brackets		FR
Enclosing labels (style, usage, regional, subject-field)	( )	Parentheses		DE, LT
Enclosing glosses	( )	Parentheses		DE, LT
Enclosing notes	( )	Parentheses		FR
Enclosing grammatical information	〈 〉	Angle brackets		DE
	( )	Parentheses		FR
Enclosing plural forms	( )	Parentheses		FR
Enclosing certain types of cross-references	( )	Parentheses		FR
Enclosing certain types of examples	( )	Parentheses		FR
Enclosing certain linguistic information (accentuation paradigm number, etc.)	( )	Parentheses		LT
Enclosing author and/or source from which an example is quoted	( )	Parentheses		DE
Enclosing alternative words or collocations in phrases	[ ]	Square brackets		LT
	( )	Parentheses		LT
Enclosing additional information in the examples	[ ]	Square brackets		LT
Enclosing additional information relating to the headword	( )	Parentheses		FR
Enclosing reproduced segments (endings, syllables) of the unclear short forms	[ ]	Square brackets		LT

Table B.8 — Enclosing metalinguistic functions *(continued)*

Function	Symbol	Name	Position	Specific usage
Enclosing meanings	“ ”	Lithuanian quotation marks		LT
Enclosing labels for region and era of accent	﹇ ﹈	Angle brackets (vertical)		JP
Enclosing common way(s) of writing with *kanji* and *kana* scripts	【 】	Lenticular brackets (vertical)		JP
	﹇ ﹈	White square brackets (vertical)		JP
Enclosing part of speech and inflectional pattern	﹇ ﹈	White tortoise shell brackets (vertical)		JP
	( )	Parentheses (vertical)		JP
Enclosing etymon in original or romanized form, its language or country	( )	Parentheses (vertical)		JP
	[ ]	Square brackets (vertical)		JP
	【 】	Lenticular brackets (vertical)		JP
	﹇ ﹈	White lenticular brackets (vertical)		JP
	﹇ ﹈	Tortoise shell brackets (vertical)		JP
Enclosing subject field of a term	﹇ ﹈	White square brackets (vertical)		JP
	﹇ ﹈	Tortoise shell brackets (vertical)		JP
Enclosing season of a season word	ﹽ ﹾ	Double angle brackets (vertical)		JP
Enclosing examples	﹇ ﹈	Angle brackets (vertical)		JP
Enclosing author of a work from which an example is quoted	﹁ ﹂	Corner brackets (vertical)		JP
Enclosing *kanji* for that meaning in the explanations (when several *kanjis* are used for a word depending on the meaning)	ﹽ ﹾ	Double angle brackets (vertical)		JP

Table B.8 — Enclosing metalinguistic functions *(continued)*

Function	Symbol	Name	Position	Specific usage
Enclosing word(s) or phrase(s) to be emphasized in the definitions and the explanations	﹁ ﹂	Corner brackets (vertical)		JP
Enclosing title of a work in the definitions and the explanations	﹃ ﹄	Corner brackets (vertical)		JP
Enclosing paraphrase, synonym or reading of an expression in the definitions, the explanations and the examples	( )	Parentheses (vertical)		JP
Enclosing notes of different types	( )	Parentheses (vertical)		JP
	(( ))	Double parentheses (vertical)		JP
	〔 〕	Tortoise shell brackets (vertical)		JP
Enclosing authority or source of expression, definition, explanation, writing, reading, etc.	( )	Parentheses (vertical)		JP
	[ ]	Square brackets (vertical)		JP
	〔 〕	Tortoise shell brackets (vertical)		JP
	〈 〉	Angle brackets (vertical)		JP
Enclosing year or period	( )	Parentheses (vertical)		JP

B.9 Structuring of entries

Table B.9 — Structuring of entries functions

Function	Symbol	Name	Position	Specific usage
Separating etymologies of different words	·	Greek semicolon symbol		EL
Separating components of an entry	;	Semicolon		DE, FR
Separating alternative forms, words, collocations, etc.	/	Slash		DE, EL, LT
Separating two definitions when the second one introduces a shift in meaning; in this case it usually follows a label (field label, register label, etc.)	-	Hyphen		FR
Separating an accessory meaning	‖	Vertical parallels		LT
Separating a word with a distant meaning from the other words presented in the same entry	‖	Vertical parallels		LT
Separating a transferred meaning from the other meanings	|	Bar		LT
	‖	Vertical parallels		LT
Separating translations treated as different shades of meaning of the headword	;	Semicolon		LT
Separating the phrases	-	Hyphen	preceding the second phrase in a block of phrases	FR
Marking the beginning of the semantic part of a dictionary entry	:	Colon		DE, EL
Marking the beginning of the definition of a phrase	:	Colon		FR
Introducing a certain type of note which relates to the entry as a whole	-	Hyphen		FR
Separating two short encyclopaedic texts	-	Hyphen		FR
Denoting that a sub-entry — with or without a sub-headword — follows	♦	Diamond sign		FR
Denoting that an embedded lemma follows	-	Hyphen		EL
Denoting that a hidden entry follows	□	Square box		EL
Denoting that the title of an illustration follows (in proper nouns)	□	Square box		FR

Table B.9 — Structuring of entries functions *(continued)*

Function	Symbol	Name	Position	Specific usage
Denoting that a group of composita which are not ordered alphabetically follows	◊	Lozenge		DE
Denoting the start of a set of phrases	◊	Lozenge		FR
Denoting that encyclopaedic information follows	■	Square black box		FR
Denoting that a note follows	►	Black right-pointing triangle		FR
Separating a reflexive word	|	Bar	preceding	LT
	‖	Vertical parallels	preceding	LT
Separating the low accessory meaning	|	Bar		LT
Separating the specific word usage case	|	Bar		LT
Marking the beginning of the literary form of a main entry	文			JP
Marking the beginning of the example part	用例			JP
	*	Fullwidth asterisk		JP
Marking the beginning of the notes of different types	参考			JP
	補注			JP
	▽	White down-pointing triangle		JP
	◇	White diamond		JP
Marking the beginning of the seasonal usage note part	季			JP
Marking the beginning of the part of counter suffixes and measures for countable nouns	数え方			JP
Marking the beginning of the pronunciation part of a dictionary entry	発音			JP
Marking the beginning of the dictionary part (in classical dictionaries where the entry is found)	辞書			JP
Marking the beginning of the alternative writing part (how the entry was written in classical dictionaries)	表記			JP

Table B.9 — Structuring of entries functions *(continued)*

Function	Symbol	Name	Position	Specific usage
Marking the beginning of the alternative writing part (how the entry was written in classical dictionaries)	語言説			JP
Combined with consecutive numbers or syllables, separating and structuring alternative definitions and meanings of an entry	▢	White square with rounded corners		JP
	▯	White rectangle with rounded corners		JP
	■	Black square with rounded corners		JP
	◯	Enclosing white circle		JP
	O	Enclosing black circle		JP
Separating alternative written forms	・	*Katakana* middle dot		JP
Separating dialects of the same origin	◇	White diamond		JP

Annex C
(informative)

Examples of XML encoding

Real dictionary entries used as examples in this International Standard only illustrate the principles of XML representation of lexicographical data and their associated presentations. They do not engage the publishers' responsibility. The Definition Type Document (XmLex_V00.dtd) used here is one of the possible implementations of the formal model given in part 4, and is purely informative. More information about the DTD and the test file is available at
http://www.genetrix.org/common/XmLex/readme.html

The first six full entries show examples of monolingual-bilingual-general-technical entries conforming to XmLex_V00.dtd. Each example begins with a "reader's view" of the entry (green background), and is followed by the XmLex encoding (yellow background).

C.1 Full entries

Example 1 — General bilingual dictionary entry

dam [d$ph40;m], (past tense & past participle **dammed**, continuous form **damming**)
dam noun
* [barrier] barrage *m* (de retenue)
* [reservoir] réservoir *m*
* [animal] mère *f*

dam transitive verb
construire un barrage sur

dam up
separable transitive verb
* *literal* construire un barrage sur
* *figurative* [feelings] refouler, ravaler;
[words] endiguer

Encoding

```
1. <Dictionary sourceLanguage='en' targetLanguage='fr'>
2. <DictionaryEntry identifier='LEX_ex.1'>
3.   <HeadwordCtn>
4.     <Headword>dam</Headword>
5.     <GrammaticalNote> past tense &amp;amp; past participle <Fragment>dammed</Fragment>, continuous
form <Fragment>damming</Fragment></GrammaticalNote>
6.     <PronunciationCtn>
7.       <Pronunciation> d$ph40;m</Pronunciation>
8.     </PronunciationCtn>
9.   </HeadwordCtn>
10.   <HomographGroup>
11.     <PartOfSpeech value='noun'/>
12.     <SenseGroup>
13.      <TranslationCtn>
```

```
14.       <SenseIndicator>barrier</SenseIndicator>
15.       <Translation>barrage <GrammaticalGender value='masculine'/><Optional>de
retenue</Optional></Translation>
16.       <SearchForm>barrage</SearchForm>
17.       <SearchForm>barrage de retenue</SearchForm>
18.     </TranslationCtn>
19.   </SenseGroup>
20.   <SenseGroup>
21.     <TranslationCtn>
22.       <SenseIndicator>reservoir</SenseIndicator>
23.       <Translation>réservoir<GrammaticalGender value='masculine'/></Translation>
24.     </TranslationCtn>
25.   </SenseGroup>
26.   <SenseGroup>
27.     <TranslationCtn>
28.       <SenseIndicator>animal</SenseIndicator>
29.       <Translation>mère<GrammaticalGender value='feminine'/></Translation>
30.     </TranslationCtn>
31.   </SenseGroup>
32. </HomographGroup>
33. <HomographGroup>
34.   <PartOfSpeech freeValue='transitive verb'/>
35.   <SenseGroup targetLanguage='fr'>
36.     <TranslationCtn>
37.       <Translation>construire un barrage sur</Translation>
38.     </TranslationCtn>
39.   </SenseGroup>
40. </HomographGroup>
41. <MultiWordUnitCtn>
42.   <MultiWordUnit>dam up</MultiWordUnit>
43.   <PartOfSpeech freeValue='separable verb'/>
44.   <SenseGroup>
45.     <SenseQualifier>figurative</SenseQualifier>
46.     <TranslationBlock>
47.       <RangeOfApplication>feeling</RangeOfApplication>
48.       <Translation>refouler</Translation>
49.       <Translation>ravaler</Translation>
50.     </TranslationBlock>
51.     <TranslationCtn>
52.       <RangeOfApplication>words</RangeOfApplication>
53.       <Translation>endiguer</Translation>
54.     </TranslationCtn>
55.   </SenseGroup>
56. </MultiWordUnitCtn>
57. </DictionaryEntry>
58. </Dictionary>
```

Example 2 — General bilingual dictionary entry

jumper ['dZÃmp«*] noun
a (garment)
(Brit) pull(over) *m*
(US: dress) robe-chasuble *f*
b (one who jumps: person, animal) sauteur *m*, -euse *f*
jumper cables (US Aut)
câbles *mpl* de démarrage *(pour batterie)*
c (Comput) cavalier *m*

Encoding

```
1. <DictionaryEntry identifier='i6' sourceLanguage='en' targetLanguage='fr'>
2.   <HeadwordCtn>
3.     <Headword>jumper</Headword>
4.     <PartOfSpeech value='noun'/>
5.     <PronunciationCtn>
6.       <Pronunciation>'dZÃmp"*</Pronunciation>
7.     </PronunciationCtn>
8.   </HeadwordCtn>
9.   <HomographGroup>
10.     <SenseGroup targetLanguage='fr'>
11.       <SubjectField>garment</SubjectField>
12.       <SenseGroup>
13.         <TranslationCtn>
14.           <GeographicalUsage>Brit</GeographicalUsage>
15.           <Translation>pull(over)</Translation>
16.           <GrammaticalGender value='masculine'/>
17.           <SearchForm>pull</SearchForm>
18.           <SearchForm>pullover</SearchForm>
19.         </TranslationCtn>
20.       </SenseGroup>
21.       <SenseGroup>
22.         <SubjectField>dress</SubjectField>
23.         <TranslationCtn>
24.           <GeographicalUsage>US</GeographicalUsage>
25.           <Translation>robe-chasuble</Translation>
26.           <GrammaticalGender value='feminine'/>
27.         </TranslationCtn>
28.       </SenseGroup>
29.     </SenseGroup>
30.     <SenseGroup>
31.       <TranslationCtn>
32.         <Translation>sauteur</Translation>
33.         <Display>sauteur
34.           <GrammaticalGender value='masculine'/>,
35.             -euse<GrammaticalGender value='feminine'/></Display>
36.         <InflectionCtn>
37.           <Inflection>sauteuse</Inflection>
38.         </InflectionCtn>
39.         <Explanation>one who jumps- person, animal</Explanation>
40.       </TranslationCtn>
41.       <MultiWordUnitCtn>
42.         <MultiWordUnit>jumper cables</MultiWordUnit>
43.         <GeographicalUsage>US</GeographicalUsage>
```

```
44.       <SubjectField>Aut</SubjectField>
45.       <SenseGroup>
46.         <TranslationCtn>
47.           <Translation>câbles <GrammaticalGender value='masculine'/>
48.             <GrammaticalNumber value='plural'/>de démarrage
49.           </Translation>
50.           <GuidePhrase>pour batterie</GuidePhrase>
51.         </TranslationCtn>
52.       </SenseGroup>
53.     </MultiWordUnitCtn>
54.   </SenseGroup>
55.   <SenseGroup>
56.     <TranslationCtn>
57.       <Translation>cavalier</Translation>
58.       <GrammaticalGender value='masculine'/>
59.       <RangeOfApplication>Comput</RangeOfApplication>
60.     </TranslationCtn>
61.   </SenseGroup>
62.  </HomographGroup>
63. </DictionaryEntry>
```

Example 3 — Scientific bilingual dictionary entry

aerating root ↑pneumatophore 1.
aerophore ↑pneumatophore 1.
pneumatocyst 1. *(Bot)* Pneumatozyste *f*, Luftkammer *f (in einem Pneumatophor)*; 2. ↑pneumatophore [2].
pneumatophore 1. *(Bot)* Pneumatophor *n*, Atemwurzel *f*; 2. *(Zoo)* Pneumatophor *n*, Schwimmglocke *f*, Gasflasche *f (der Siphonophoren)*

Encoding

```
1. <DictionaryEntry identifier='LEX_ex.9-1' sourceLanguage='en'>
2.   <Headword>aerating root</Headword>
3.   <SenseGroup>
4.     <SeeCtn>
5.       <See><Ptr xlink-href='LEX_ex.9-4'> pneumatophore</Ptr></See>
6.     </SeeCtn>
7.   </SenseGroup>
8. </DictionaryEntry>
9.
10. <DictionaryEntry identifier='LEX_ex.9-2' sourceLanguage='en'>
11.   <Headword>aerophore</Headword>
12.   <SenseGroup>
13.     <SeeCtn>
14.       <See><Ptr xlink-href='LEX_ex.9-4'> pneumatophore</Ptr></See>
15.     </SeeCtn>
16.   </SenseGroup>
17. </DictionaryEntry>
18.
19. <DictionaryEntry identifier='LEX_ex.9-3' sourceLanguage='en' targetLanguage='de'>
20.   <Headword>pneumatocyst</Headword>
21.   <SenseGroup targetLanguage='de' identifier='LEX_ex.9-3-s1'>
22.     <SubjectField>Bot</SubjectField>
23.     <TranslationBlock>
24.       <Note>in einem Pneumatophor</Note>
```

```
25.      <TranslationCtn>
26.        <Translation>Pneumatozyste</Translation>
27.        <GrammaticalGender value='feminine'/>
28.      </TranslationCtn>
29.    </TranslationBlock>
30.    <TranslationBlock>
31.      <TranslationCtn>
32.        <Translation>Luftkammer</Translation>
33.        <GrammaticalGender value='feminine'/>
34.      </TranslationCtn>
35.    </TranslationBlock>
36.  </SenseGroup>
37.  <SenseGroup identifier='LEX_ex.9-3-s2'>
38.    <SeeCtn>
39.      <See><Ptr xlink-href='LEX_ex.9-4'> pneumatophore
40.        <SenseNumber>2</SenseNumber></Ptr></See>
41.    </SeeCtn>
42.  </SenseGroup>
43. </DictionaryEntry>
44.
45. <DictionaryEntry identifier='LEX_ex.9-4' sourceLanguage='en' targetLanguage='de'>
46.  <Headword>pneumatophore</Headword>
47.  <SenseGroup targetLanguage='de' identifier='pneumatophoreSense1'>
48.    <SubjectField>Bot</SubjectField>
49.    <TranslationCtn>
50.      <Translation>Pneumatophor</Translation>
51.      <PartOfSpeech value='noun'/>
52.    </TranslationCtn>
53.    <TranslationCtn>
54.      <Translation>Atemwurzel</Translation>
55.      <GrammaticalGender value='feminine'/>
56.    </TranslationCtn>
57.  </SenseGroup>
58.  <SenseGroup identifier='pneumatophoreSense2'>
59.    <SubjectField>Zoo</SubjectField>
60.    <TranslationBlock>
61.      <Note>der Siphonophoren</Note>
62.      <TranslationCtn>
63.        <Translation>Pneumatophor</Translation>
64.        <PartOfSpeech value='noun'/>
65.      </TranslationCtn>
66.      <TranslationCtn>
67.        <Translation>Schwimmglocke</Translation>
68.        <GrammaticalGender value='feminine'/>
69.      </TranslationCtn>
70.      <TranslationCtn>
71.        <Translation>Gasflasche</Translation>
72.        <GrammaticalGender value='feminine'/>
73.      </TranslationCtn>
74.    </TranslationBlock>
75.  </SenseGroup>
76. </DictionaryEntry>
```

Example 4 — General monolingual dictionary entry

Fl|ie|ge, die; -, -n [1: mhd. vliege, ahd. fliege, eigtl. = die Fliegende; 3: für frz. mouche]: **1.** *(in zahlreichen Arten vorkommendes) gedrungenes, kleines Insekt mit zwei Flügeln u. kurzen Fühlern:* eine dicke, zudringliche, lästige F.; die –n summen, schwirren, setzen sich auf das Fleisch; eine F. fangen, verjagen, totschlagen; mit der [künstlichen] F. *(einer Nachbildung der Fliege)* angeln; ***zwei –n mit einer Klappe schlagen** (ugs.; *einen doppelten Zweck auf einmal erreichen*); **eine, die F. machen** (salopp; *[schnell] wegggehen;* nach dem raschen Davonfliegen der Fliegen): Da wird ... ein Hochschullehrer in jeder Vorlesung oder Übung ... unter Druck gesetzt und „madig“ gemacht – „bis er ... an der Uni □ne F. macht“ (Spiegel 43, 1977, 226); **sich über die F. an der Wand ärgern** *(sich über jede Kleinigkeit ärgern);* **jmdn. stört die F. an der Wand** *(jmdn. stört jede Kleinigkeit);* **umfallen wie die –n** (ugs.; *in großer Zahl sterben*); **matt sein wie eine F.** (ugs.; *sehr erschöpft sein*); **keiner F. etw. zuleide tun [können]** (ugs.; *sehr gutmütig sein u. niemandem etwas zuleide tun [können]*). **2.** *als Querschleife gebundene Krawatte:* er trägt gern karierte od. gestreifte –n; eine F. umbinden. **3.** *schmales, gestutztes Bärtchen auf der Oberlippe od. zwischen Unterlippe u. Kinn.* **4.** (Schneiderei) *gesticktes Dreieck zur Befestigung von Falten, Nähten od. Tascheneinschnitten.*

Encoding

```
1. <DictionaryEntry identifier='A050672' sourceLanguage='de'>
2.   <HeadwordCtn>
3.     <Headword>Fliege</Headword>
4.     <Display>Fl<Stress type='long'>ie</Stress><Hyphen/>ge</Display>
5.     <GrammaticalNote>die; -, -n </GrammaticalNote>
6.     <Etymology>1- mhd. vliege, ahd. fliege, eigtl. = die Fliegende; 3- für frz. mouche</Etymology>
7.   </HeadwordCtn>
8.   <SenseGroup identifier='A050672-s1'>
9.     <Definition><Optional>in zahlreichen Arten vorkommendes</Optional> gedrungenes, kleines Insekt mit
zwei Flügeln u. kurzen Fühlern.</Definition>
10.     <Example>eine<span documentSize='5'> dicke, zudringliche,</span> lästige F.; </Example>
11.     <Example>die <Inflection type='plural'><RepeatSymbol></RepeatSymbol>n</Inflection>
summen<span documentSize='5'>, schwirren, setzen sich auf das Fleisch;</span></Example>
12.     <Example>eine F. fangen<span documentSize='5'>, verjagen, totschlagen;</span></Example>
13.     <Example>mit der [künstlichen]F. <Gloss>einer Nachbildung der Fliege)</Gloss> angeln</Example>
14.     <CompositionalPhraseCtn>
15.       <CompositionalPhrase><Inflection type='plural'>zwei
<RepeatSymbol></RepeatSymbol>n</Inflection> mit einer Klappe schlagen</CompositionalPhrase>
16.       <Register freeValue='ugs.'/>
17.       <Definition>einen doppelten Zweck auf einmal erreichen</Definition>
18.     </CompositionalPhraseCtn>
19.     <CompositionalPhraseCtn>
20.       <CompositionalPhrase>eine, die F. machen </CompositionalPhrase>
21.       <Etymology>nach dem raschen Davonfliegen der Fliegen</Etymology>
22.       <Register freeValue='salopp'/>
23.       <Definition>[schnell]weggehen;</Definition>
24.       <CitationCtn>
25.         <Citation>Da wird&amp;#160;... ein Hochschullehrer in jeder Vorlesung oder Übung&amp;#160;... unter
Druck gesetzt und 'madig' gemacht&amp;#160;- 'bis er&amp;#160;... an der Uni 'ne F. macht'</Citation>
26.         <title>Spiegel</title>
27.         <LocationWithinHost>43, 226</LocationWithinHost>
28.         <date>1977</date>
29.       </CitationCtn>
30.     </CompositionalPhraseCtn>
31.     <CompositionalPhraseCtn>
32.       <CompositionalPhrase>sich über die F. an der Wand ärgern</CompositionalPhrase>
33.       <Definition>(sich über jede Kleinigkeit ärgern);</Definition>
```

```
34.    </CompositionalPhraseCtn>
35.    <CompositionalPhraseCtn>
36.      <CompositionalPhrase>jmdn. stört die F. an der Wand</CompositionalPhrase>
37.      <Definition>(jmdn. stört jede Kleinigkeit);</Definition>
38.    </CompositionalPhraseCtn>
39.    <CompositionalPhraseCtn>
40.      <CompositionalPhrase>umfallen wie die -n</CompositionalPhrase>
41.      <Register freeValue='ugs.'/>
42.      <Definition>in grosser Zahl sterben;</Definition>
43.    </CompositionalPhraseCtn>
44.    <CompositionalPhraseCtn>
45.      <CompositionalPhrase>matt sein wie eine F. </CompositionalPhrase>
46.      <Register freeValue='ugs.'/>
47.      <Definition>sehr erschöpft sein</Definition>
48.    </CompositionalPhraseCtn>
49.    <CompositionalPhraseCtn>
50.      <CompositionalPhrase>keiner F. etw. zuleide tun [kön-nen]</CompositionalPhrase>
51.      <Register freeValue='ugs.'/>
52.      <Definition>sehr gutmütig sein u. niemandem etwas zuleide tun [kön-nen]</Definition>
53.    </CompositionalPhraseCtn>
54.  </SenseGroup>
55.  <SenseGroup identifier='A050672-s2'>
56.    <Definition>als Querschleife gebundene Krawatte- </Definition>
57.    <Example documentSize='5'>er trägt gern karierte od. gestreifte -n;</Example>
58.    <Example>eine F. umbinden.</Example>
59.  </SenseGroup>
60.  <SenseGroup identifier='A050672-s3'>
61.    <Definition>schmales, gestutztes Bärtchen auf der Oberlippe od. zwis-chen Unterlippe u.
Kinn.</Definition>
62.  </SenseGroup>
63.  <SenseGroup identifier='A050672-s4' documentSize='5'>
64.    <Register freeValue='Schneiderei'/>
65.    <Definition>gesticktes Dreieck zur Befestigung von Falten, Nähten od.
Tascheneinschnitten.</Definition>
66.  </SenseGroup>
67. </DictionaryEntry>
```

Example 5 — General monolingual dictionary entry

plausible (plô’zə-bəl) adj. **1**. Seemingly or apparently valid, likely, or acceptable; credible: a *plausible excuse.* **2.** Giving a deceptive impression of truth, acceptability, or reliability; specious: *the plausible talk of a crafty salesperson.* [Latin plausibilis, deserving applause, from plausus, past participle of plaudere, to applaud.]

– **plau’si.bil’i.ty, plau’si.ble.ness** n. ˜ **plau’si.bly** *adv*

SYNONYMS. plausible, believable, colorable, credible. The central meaning shared by these adjectives is "appearing to merit belief or acceptance": a *plausible pretext,- a believable excuse; a* colorable explanation,- a *credible assertion.*

ANTONYM: implausible.

Encoding

```
1. <DictionaryEntry identifier='i27' sourceLanguage='en'>
2.   <HeadwordCtn>
3.     <Headword>plausible</Headword>
4.     <PartOfSpeech value='adjective'/>
5.     <Pronunciation>plô'z(-b(l</Pronunciation>
6.     <Etymology>Latin <ForeignText xml-lang='la'>plausibilis</ForeignText>, deserving applause, from
plausus, past participle of plaudere, to applaud</Etymology>
7.     <DerivationBlock>
8.       <PartOfSpeech value='noun'/>
9.       <Derivation>
10.        plau<Stress></Stress>si<Hyphen/>bil<Stress></Stress>i
11.        <Hyphen/>ty</Derivation>
12.      <Derivation>plau<Stress></Stress>si<Hyphen/>ble<Stress>
13.        </Stress>ness</Derivation>
14.    </DerivationBlock>
15.    <DerivationCtn>
16.      <Derivation>plau<Stress></Stress>si<Hyphen/>ble<Stress>
17.        </Stress>ness</Derivation>
18.      <PartOfSpeech value='adverb'/>
19.    </DerivationCtn>
20.  </HeadwordCtn>
21.  <SenseGroup>
22.    <Definition>Seemingly or apparently valid, likely, or acceptable;
23.      credible</Definition>
24.    <Example>a plausible excuse</Example>
25.    <SynonymBlock>
26.      <SynonymCtn>
27.        <Synonym>plausible</Synonym>
28.        <Example>a plausible pretext</Example
29.      </SynonymCtn>
30.      <SynonymCtn>
31.        <Synonym>believable</Synonym>
32.        <Example>a believable excuse</Example>
33.      </SynonymCtn>
34.      <SynonymCtn>
35.        <Synonym>colorable</Synonym>
36.        <<Example>a colorable explanation</Example>
37.      </SynonymCtn>
38.      <SynonymCtn>
39.        <Synonym>credible</Synonym>
40.        <Example>a credible assertion</Example>
41.      </SynonymCtn>
42.      <Note>The central meaning shared by these adjectives is
43.        'appearing to merit belief or acceptance'</Note>
44.    </SynonymBlock>
45.    <Antonym>implausible</Antonym>
46.  </SenseGroup>
47.  <SenseGroup>
48.    <Definition>Giving a deceptive impression of truth, acceptability,
49.      or reliability; specious</Definition>
50.      <Example>the plausible talk of a crafty salesperson </Example>
51.  </SenseGroup>
52. </DictionaryEntry>
```

Example 6 — Technical monolingual dictionary entry

address1
n. **1.** A number specifying a location in memory where data is stored. *See also* absolute address, address space, physical address, virtual address. **2.** A name or token specifying a particular site on the Internet or other network. **3.** A code used to specify an e-mail destination.

address2
vb. To reference a particular storage location. *See also* absolute address, address space, physical address, virtual address.

address mask
n. A number that, when compared by the computer with a network address number, will block out all but the necessary information. For example, in a network that uses XXX.XXX.XXX.YYY and where all computers within the network use the same first address numbers, the mask will block out XXX.XXX.XXX and use only the significant numbers in the address, YYY. *See also* address1 (definition 2).

Encoding

```
1. <DictionaryEntry identifier='i22' sourceLanguage='en'>
2.   <Headword>address</Headword>
3.   <HomographGroup>
4.     <PartOfSpeech value='noun'/>
5.     <SenseGroup>
6.       <Definition>A number specifying a location in memory where data is stored. See also absolute
address, address space, physical address, virtual address.</Definition>
7.     </SenseGroup>
8.     <SenseGroup>
9.       <Definition>A name or token specifying a particular site on the Internet or other network.</Definition>
10.    </SenseGroup>
11.    <SenseGroup>
12.      <Definition>A code used to specify an e-mail destination.</Definition>
13.    </SenseGroup>
14.  </HomographGroup>
15.  <HomographGroup identifier='address1-2'>
16.    <PartOfSpeech value='verb'/>
17.    <SenseGroup>
18.      <Definition>To reference a particular storage location.</Definition>
19.      <SeeAlso>absolute address</SeeAlso>
20.      <SeeAlso>address space</SeeAlso>
21.      <SeeAlso>physical address</SeeAlso>
22.      <SeeAlso>virtual address</SeeAlso>
23.    </SenseGroup>
24.  </HomographGroup>
25. </DictionaryEntry>
26.
27. <DictionaryEntry identifier='i22bis' sourceLanguage='en'>
28.  <HeadwordCtn>
29.    <Headword>address mask</Headword>
30.    <PartOfSpeech value='noun'/>
31.  </HeadwordCtn>
32.    <SenseGroup>
33.      <Definition>A number that, when compared by the computer with a network address number, will
block out all but the necessary information. For example, in a network that uses XXX.XXX.XXX.YYY and
where all computers within the network use the same first address numbers, the mask will Block out
XXX.XXX.XXX and use only the significant numbers in the address, YYY.</Definition>
34.      <SeeAlso><Ptr xlink-href='address1-2'>address</Ptr></SeeAlso>
```

```
35.     </SenseGroup>
36. </DictionaryEntry>
```

C.2 Excerpts for illustration of specific elements

Example 7 — Abbreviated form

Japan Midi Standards Committee (JMSC) <edp.mus> • Japan Midi Standards Committee *n* (JMSC)

Encoding

```
1.   <HeadwordCtn>
2.     <Headword>Japan Midi Standards Committee</Headword>
3.     <AbbreviatedForm>JMSC</AbbreviatedForm>
4.   </HeadwordCtn>
```

Example 8 — Affixes

```
1. <DictionaryEntry identifier = 'affixes' sourceLanguage = 'en'>
2.   <Headword>
3.     <Prefix>un</Prefix><Stem>believe</Stem><Suffix>able</Suffix>
4.    </Headword>
5. </DictionaryEntry>
```

Example 9 — Alternative

Brake
verb [I]
When it's icy brake gently. [I]
He would zoom up to junctions and brake fiercely/hard/sharply at the last minute. [I]

Encoding

```
1. <ExampleCtn>
2.  <Example>He would zoom up to junctions and brake
<Alternative><Choice>fiercely</Choice><Choice>hard</Choice><Choice>sharply</Choice></Alternative> at
the last minute.</Example>
3.   <GrammaticalNote>I</GrammaticalNote>
4. </ExampleCtn>
```

Example 10 — Analogy

```
1. <DictionaryEntry identifier = 'analogy'>
2.   <Headword>kill</Headword>
3.   <SenseGroup>
4.    <Analogy>eradicate</Analogy>
5.    <Analogy>erase</Analogy>
6.    <Analogy>exterminate</Analogy>
7.    <Analogy>extinguish</Analogy>
8.    <Analogy>extirpate</Analogy>
9.    <Analogy>liquidate</Analogy>
10.   </SenseGroup>
11. </DictionaryEntry>
```

Example 11 — Attestation

in.fi.nite
Pronunciation: 'in-f&-n&t
Function: adjective
Etymology: Middle English infinit, from Middle French or Latin; Middle French, from Latin infinitus, from in- + finitus finite
Date: 14th century
1: extending indefinitely: ENDLESS
2: immeasurably or inconceivably great or extensive : INEXHAUSTIBLE
3: subject to no limitation or external determination
4 a: extending beyond, lying beyond, or being greater than any preassigned finite value however large **b:** extending to infinity **c:** characterized by an infinite number of elements or terms
- **in.fi.nite.ly** adverb
- **in.fi.nite.ness** noun

Encoding

```
1. <HeadwordCtn>
2.   <Headword>in<Hyphen/>fi<Hyphen/>nite</Headword>
3.   <Pronunciation>
4.     <Stress/>in<Hyphen/>f&amp;<Hyphen/>n&amp;t<Hyphen/>
5.   </Pronunciation>
6.   <PartOfSpeech value = 'adjective'/>
7.   <Etymology>Middle English, from Middle French or Latin, from Latin <ForeignText xml-lang =
'la'>infinitus</ForeignText>, from in- + finitus finite</Etymology>
8.   <Attestation>14th century</Attestation>
9.   <DerivationCtn>
10.     <Derivation>in<Hyphen/>fi<Hyphen/>nite<Hyphen/>ly
11.     </Derivation>
12.     <PartOfSpeech value = 'adverb'/>
13.   </DerivationCtn>
14.   <DerivationCtn>
15.     <Derivation>in<Hyphen/>fi<Hyphen/>nite<Hyphen/>ness
16.     </Derivation>
17.     <PartOfSpeech value = 'noun'/>
18.   </DerivationCtn>
19. </HeadwordCtn>
```

Example 12 — Collocator

(to) **answer** ['a:nse°] <v.> **0.1 rispondere** →*ribattere* **0.2 pagare lo scotto** → *pagare di persona* **0.3 rispondere a uno scopo** → *esser utile, servire* ♦ **1.1** to ~the bell, the door, a letter, the phone *rispondere al campanello, alla porta, a una lettera, al telefono*; to ~ a blow with a blow *ribattere colpo su colpo*; to ~ (to) the helm *ubbidire al timone, sentire al timone*; this ship wouldn't ~ her rudder *la nave non rispondeva al timone*; answering machine *segreteria telephonica* **1.3** to ~a purpose *rispondere a uno scopo*; this instrument does not ~ my purpose *questo strumento non rispondere al mio scopo* **1.¶** to ~ (to) one's hopes, a description *rispondere, corrispondere alle proprie speranze, a una descrizione* **5.1** to ~ back *rispondere (in modo impertinente e sgarbato), ribattere, rimbeccare* **5.3** that won't ~ at all *ciò non servirà affatto* **6.1** to **~ to** *rispondere a, reagire a*; to ~ to the name of *rispondere al nome di, chiamarsi* **6.2** to **~ for** *rispondere di, essere responsabile di, farsi garante di*; the guilt was mine and I answered **for** it *la colpa fu mia e pagai lo scotto*

Encoding

```
1. <CompositionalPhraseCtn>
2.   <CompositionalPhrase> to <RepeatSymbol>answer</RepeatSymbol> <Collocator>to</Collocator>
</CompositionalPhrase>
3.   <SenseGroup>
4.     <Translation> rispondere a </Translation>
5.     <Translation> reagire a </Translation>
6.     <ExampleCtn>
7.       <Example> to <RepeatSymbol>answer</RepeatSymbol> to the name of
8.       </Example>
9.       <SenseGroup>
10.        <Translation> rispondere al nome di </Translation>
11.      </SenseGroup>
12.    </ExampleCtn>
13.    <Translation>chiamarsi</Translation>
14.  </SenseGroup>
15. </CompositionalPhraseCtn>
```

Example 13 — HiddenEntry, GuidePhrase

flood /fled/ also **floods** *pl.- n* **1** the covering with water of a place that is usu. dry; a great overflow of water: *The town was destroyed by the floods after the storm.* | *The water rose to flood level.* | *The river was* **in flood**. (=overflowing) **2** a large quantity or flow: *there was a flood of complaints about the bad language after the show.* | *She was in floods of tears.* **3 before the Flood** *infml* a very long time ago

Encoding

```
1.   <SenseGroup>
2.     <Definition>the covering with water of a place that is usu. dry; a great overflow of water</Definition>
3.       <Example>The town was destroyed by the floods after the storm</Example>
4.       <Example>The river was <HiddenEntryCtn><HiddenEntry>in flood</HiddenEntry>
<GuidePhrase>=overflowing</GuidePhrase> </HiddenEntryCtn>
```

Example 14 — Explanation

flood /fled/ also floods pl.- *n* **1** the covering with water of a place that is usu. dry; a great overflow of water: *The town was destroyed by the floods after the storm.* | *The water rose to flood level.* | *The river was* **in flood**. (=overflowing) **2** a large quantity or flow: *there was a flood of complaints about the bad language after the show.* | *She was in floods of tears.* **3 before the Flood** *infml* a very long time ago

Encoding

```
1. <SenseGroup>
2.   <MultiWordUnitCtn>
3.     <MultiWordUnit>before the flood</MultiWordUnit>
4.     <Explanation>a very long time ago</Explanation>
5.   </MultiWordUnitCtn>
6. </SenseGroup>
```

Example 15 — False friend

```
1.<DictionaryEntry identifier = 'falseFriend' sourceLanguage = 'en' targetLanguage = 'fr'>
2.     <Headword>library</Headword>
3.     <SenseGroup>
4.       <TranslationCtn>
5.         <Translation>bibliothèque</Translation>
6.         <FalseFriend>librairie</FalseFriend>
7.       </TranslationCtn>
8.     </SenseGroup>
9.</DictionaryEntry>
```

Example 16 — Formula

carbon dioxide (CO_2) <chem> *(colorless, odorless, non-toxic gas)* ●Kohlendioxid *n* (CO_2)

Encoding

```
1. <HeadwordCtn>
2.   <Headword>carbon dioxide</Headword>
3.     <Formula>CO<span class = 'sub'>2</span></Formula>
4.     <SubjectField>CHEM</SubjectField>
5. </HeadwordCtn>
```

Example 17 — FreeComment

VÉSANIE [vezani] n.f. – 1795; h. 1480 ; lat *vesania*, de *vesanus* « insensé » -> 1.sain* (encadré)♦LITTÉR. Aliénation, folie (au sens large). « *La guerre, cette monstrueuse vésanie* » (Duhamel). – **Adj**. VÉSANIQUE

The "h." means "vésanie" is a hapax, it is followed by its date of attestation.

Encoding

```
<FreeComment type = 'hapax'/>
```

Hapax is not a standardized comment, so a <FreeComment> is used with a type indicating its nature.

Example 18 — Free topic, hidden entry

```
1. <DictionaryEntry identifier = 'slogan'  sourceLanguage = 'en' >
2.   <Headword>diamond</Headword>
3.    <SenseGroup>
4.     <FreeTopicCtn>
5.      <FreeTopic type = 'slogan'>A diamond is for ever
6.      </FreeTopic>
7.      <FreeCommentCtn>
8.       <FreeComment type = 'sloganOriginator'>De Beers
9.        </FreeComment>
10.     </FreeCommentCtn>
11.     <CitationCtn>
12.      <Citation>He gives me a De Beers brochure. '
13.       '<HiddenEntry type = 'slogan'>A diamond is for ever
14.       </HiddenEntry>'
15.       is the greatest advertisement of the 20th century,'
16.        he says. 'It works in every language of the world.'
17.      </Citation>
18.      <dc-source>
19.       <Url>http-//www.findarticles.com/cf_dls/m0FQP/n4312_v125/
20.        19087261p2/article.jhtml?term</Url>
21.      </dc-source>
22.     </CitationCtn>
23.    </FreeTopicCtn>
24.   </SenseGroup>
25. </DictionaryEntry>
```

Example 19 — Frequency

pastures new ◄◄
fresh pastures
If someone moves on to **pastures new**, he leaves his current situation and enters a new one.
This expression is used in British English.
Michael decided he wanted to move on to pastures new for financial reasons.
I found myself packing a suitcase and heading for pastures new.
…I'll be off to pastures new. I want to go to the top.
You can also talk about moving on to new pastures or fresh pastures.
No matter how much we long for new pastures, when we reach them they can seem like a bad idea.

Encoding

```
1. <HeadwordCtn>
2.   <Headword>pastures new</Headword>
3.   <Frequency>2</Frequency>
4. </HeadwordCtn
```

Example 20 — Full form

Abk. *abr (Abkürzung)* abrév. (abréviation)

Encoding

```
1. <HeadwordCtn>
2.    <Headword>Abk.</Headword>
3.    <FullForm>Abkürzung</FullForm>
4.  </HeadwordCtn>
```

Example 21 — Geographical Usage

baden I *v/i* **1**. have (od take) a bath **2**. swim: ~ gehen **a)** go swimming, **b)** ‹ *fig* come a cropper, Sache: go phut **II** *v/t* **3**. bath, Am bathe **III v/refl** sich ~ **4**. ˜1 **5**. *fig* bask (in Dat in)

Encoding

```
1. <HomographGroup identifier ='baden6'>
2.   <PartOfSpeechCtn>
3.    <PartOfSpeech value = 'verb'/>
4.    <Subcategorisation>t</Subcategorisation>
5.   </PartOfSpeechCtn>
6.   <SenseGroup identifier ='baden7'>
7.    <Translation>bath</Translation>
8.    <TranslationCtn>
9.      <Translation>bathe</Translation>
10.       <GeographicalUsage>Am</GeographicalUsage>
11.   </TranslationCtn>
12.  </SenseGroup>
13. </HomographGroup>
```

Example 22 — Inflection

flood /fled/ also **floods** *pl.*- *n* **1** the covering with water of a place that is usu. dry; a great overflow of water: *The town was destroyed by the floods after the storm.* | *The water rose to flood level.* | *The river was* **in flood**. (=overflowing) **2** a large quantity or flow: *there was a flood of complaints about the bad language after the show.* | *She was in floods of tears.* **3 before the Flood** *infml* a very long time ago

Encoding

```
1.  <HeadwordCtn>
2.    <Headword>flood</Headword>
3.    <PartOfSpeech value = 'noun'/>
4.    <InflectionCtn>
5.      <Inflection>floods</Inflection>
6.      <GrammaticalNumber value = 'plural'/>
7.    </InflectionCtn>
8.  </HeadwordCtn>
```

Example 23 — InlineFormula, Symbol

F <phys> (*unit of capacity : As/V*) ● Farad *n* (F) DIN 1301

Encoding

```
1. <Definition>unit of capacity : <Formula>As/V</Formula>
2. </Definition>
3. <TranslationCtn>
4.   <Translation>Farad</Translation>
5.   <PartOfSpeech value = ‘noun’/>
6.   <SymbolCtn>
7.     <Symbol>F</Symbol>
8.     <Source>DIN 1301</Source>
9.   </SymbolCtn>
10. </TranslationCtn>
```

Example 24 — Linguistic Note, Case

`abbrechen <*irr, sép*, -ge-> **I** *v/t* <h> **1.** détacher; *Spitze e-s Gegenstandes, Zweiges etc* casser; ***ein Stück von etw ~*** détacher un bout, un morceau de qc; **2.** *Haus etc* démolir; raser; *Gerüst, Zelt, Lager etc* démonter; **3.** *Beziehungen, Verhandlungen* rompre; *Sitzung, Proben, Reise, Spiel etc* arrêter; *Studium* abandonner; *Arbeit, Streik* cesser; *Rede, Unterhaltung* interrompre; **II** *v/i* **4.** <sein> se détacher; *Bleistiftspitze, Zahn etc* se casser; se briser; **5.** <h> *(aufhören) Person, Erzählung etc* cesser; s’arrêter; ***mitten im Satz ~*** s’arrêter au milieu de sa *od* d’une phrase; ***brechen wir hier für heute ab!*** restons-en là, arrêtons-nous ici pour aujourd’hui; **6.** <sein> ***die Verbindung zwischen ihnen brach ab*** ils ont perdu contact; **III** *v/réfl* <h> **7.** ***sich*** *(dat)* ***e-n Fingernagel ~*** se casser un ongle; **8.** *‹* ***sich*** *(dat)* ***e-n ~, um*** (+*inf*) *‹* se décarcasser, se démener pour (+*inf*); ***sich*** *(dat)* ***keinen ~*** *‹* ne pas en faire lourd; *‹* ne pas en ficher une rame

Encoding

```
1.  <HeadwordCtn>
2.      <Headword>`abbrechen</Headword>
3.      <GrammaticalNote>irr, sép, -ge-</GrammaticalNote>
4.  </HeadwordCtn>
5.  <SenseGroup senseNumber = ' 8.'>
6.    <MultiWordUnitCtn>
7.      <MultiWordUnit> sich <Case type = 'dat'/> e-n abbrechen, um
8.      </MultiWordUnit>
9.      <Register value = 'familiar'/>
10.       GrammaticalNote type ='syntacticBehaviour'>+inf
11.     </GrammaticalNote>
12.     <TranslationBlock>
13.      <Translation> se décarcasser</Translation>
14.      <Translation> se démener pour </Translation>
15.      <Register value = 'familiar'/>
16.      <GrammaticalNote type ='syntacticBehaviour'>+inf
17.      </GrammaticalNote>
18.     </TranslationBlock>
19.     </MultiWordUnitCtn>
20.     <CompositionalPhraseCtn>
21.       <CompositionalPhrase> sich <Case freeType = 'dat'/> keinen abbrechen
22.       </CompositionalPhrase>
23.       <TranslationCtn>
24.         <Translation> ne pas en faire lourd</Translation>
25.         <Register value = 'familiar'/>
26.       </TranslationCtn>
27.     </CompositionalPhraseCtn>
28.     <TranslationCtn>
```

```
29.        <Translation>ne pas en ficher une rame</Translation>
30.        <Register value = 'familiar'/>
31.      </TranslationCtn>
32.   </SenseGroup>
```

Example 25 — Mood

be … **were** (*past subj., 2d pers.*), If he were sorry, he'd have apologized by now

Encoding

```
1. <DictionaryEntry identifier = 'mood' sourceLanguage = 'en'>
2. <HeadwordCtn>
3.    <Headword>be</Headword>
4.        <InflectionCtn>
5.        <Inflection>were</Inflection>
6.        <Mood freeType = 'past subjunctive'/>
7.        <Person freeType = 'second person'/>
8.         <Example>If he <EntailedTerm>were</EntailedTerm> sorry, he'd have apologized by now</Example>
9.          </InflectionCtn>
10.     </HeadwordCtn>
11.   </DictionaryEntry>
```

Example 26 — NormativeStatus

galvanic corrosion *ISO 8044* <srfc> ● galvanische Korrosion *f DIN EN ISO 8044*; Kontaktkorrosion *f*

Encoding

```
1. <HeadwordCtn>
2.   <Headword>galvanic corrosion</Headword>
3.   <NormativeStatusCtn>
4.     <NormativeStatus value = 'standardizedTerm'/>
5.     <Source>ISO 8044</Source>
6.   </NormativeStatusCtn>
7.   <SubjectField>srfc</SubjectField>
8. </HeadwordCtn>
```

Example 27 — Note

pastures
greener pastures
If someone seeks **greener pastures**, he tries to leave a situation which he does not like, in order to find a new and better one.
There are drawbacks for nurses seeking greener pastures overseas, and many are put off by the lengthy process involved in going to work in the US.
They moved around for years, sometimes even leaving the state for what they thought would be greener pastures.
Instead of “greener”, you can use an adjective which describes the new situation.
A defeatist might retreat to quieter pastures.</Example>

Encoding

```
1. <CompositionalPhraseCtn>
2.   <CompositionalPhrase>greener pastures</CompositionalPhrase>
3.   <Explanation>If someone seeks <EntailedTerm>greener pastures</EntailedTerm>, he tries to leave a situation which he does not like, in order to find a new and better one.</Explanation>
4.   <Example>There are drawbacks for nurses seeking <EntailedTerm>greener pastures</EntailedTerm> overseas, and many are put off by the lengthy process involved in going to work in the US.</Example>
5.   <ExampleCtn>
6.     <Example>They moved around for years, sometimes even leaving the state for what they thought would be <EntailedTerm>greener pastures</EntailedTerm>.</Example>
7.     <Note>Instead of “greener”, you can use an adjective which describes the new situation.<HiddenEntry>A defeatist might retreat to quieter pastures.</HiddenEntry></Note>
8.   </ExampleCtn>
9. </CompositionalPhraseCtn>
```

Example 28 — Person

```
1. <DictionaryEntry identifier = 'person' sourceLanguage = 'en'>
2. <HeadwordCtn>
3.   <Headword>me</Headword>
4.     <PartOfSpeechCtn>
5.       <PartOfSpeech value = 'pronoun'/>
6.       <Subcategorisation>personal</Subcategorisation>
7.    </PartOfSpeechCtn>
8.     <Person freeType = 'second person'/>
9.     <GrammaticalNumber value = 'singular'/>
10.   <Example>Your mother is just as proud as <EntailedTerm>me</EntailedTerm>.</Example>
11.   </HeadwordCtn>
12. </DictionaryEntry>
```

Example 29 — Range

Jet A-1 <aerospace> ● *(boiling range 180...280˚C)* Jet Fuel A-1 *m* ; Flugturbinenkraftstoff Jet A-1 *m form*; Jet A-1 *m prakt*

Encoding

```
1. <SenseIndicator>boiling <Range min = '180' max = '280' unit = 'Celsius'/></SenseIndicator >
```

Example 30 — SenseNumber, HomographNumber

magstripe
A *n*. A magnetic strip as a medium in which data may be stored, esp. as used on some swipe cards and cinema films; the medium itself. Cf. Stripe *n.*[3] 1e
A proprietary name (with capital initial) in U.S.
[1972 T. MILLER *'Cut! Print ' 99 MagStripe*, the application of magnetic particles to one edge of a strip of film so that a magnetic recording can be made on it.] 1973 *Banking* Feb. 18/1 This 'trigger' is located on a magstripe, a strip of magnetic material on a plastic card. 1982 T. BARR *Acting foe Camera* IV XXVI. 170 The sound, which was recorded on tape in conjunction with the film, is transferred to magstripe, which is nothing more than blank film with a strip of one-quarter inch magnetic tape on it. 1993 M. CRICHTON *Disclosure* i. 84 By design, the passcards were featureless: just the blue DigiCom logo, a stamped serial number, and a magstripe on the back.

B. *adj*. Relating to or containing a magnetic strip; (also) designating electronic devices involved in the encoding or reading of swipe cards with such a strip.
1986 *Today's Computers* 8 Aug. 38/1. It takes only days after the installation of a magstripe system for 'travel hackers' to equip themselves with magnetic update devices. 1990 *Supermarket News* 23 Apr. 85/5. We're a small independent and we do data capture at our registers. It's a magstripe reader that we're running credit cards through.

Encoding

```
1. <SeeAlso>
2.   <Ptr xlink:href= 'Stripe-III-1-e'>Stripe n.
3.     <HomographNumber>3</HomographNumber>
4.     <SenseNumber>1</SenseNumber>
5.   </Ptr>
6. </SeeAlso>
```

Example 31 — Tense

```
1. <DictionaryEntry identifier = 'tense' sourceLanguage = 'en'>
2. <HeadwordCtn>
3.   <Headword>fall</Headword>
4.   <TenseCtn>
5.   <Tense freeType = 'past'>fell</Tense>
6.     <Example>The book <EntailedTerm>fell</EntailedTerm> on the floor</Example>
7.   </TenseCtn>
8.   </HeadwordCtn>
9. </DictionaryEntry>
```

Example 32 — Variant

colour *n.* (US) **color**

Encoding

```
1. <HeadwordCtn>
2.   <Headword>color</Headword>
3.   <PartOfSpeech>noun</PartOfSpeech>
4.   <VariantCtn>
5.     <Variant>colour</Variant>
6.     <<GeographicalUsage>US</GeographicalUsage>
7.   </VariantCtn>
8. </HeadwordCtn>
```

Example 33 — Quantity

FDD <edp> *(e.g.5")* ● Diskettenlaufwerk *n* ;Floppy-Disk-Laufwerk *n* ; Laufwerk für Disketten *n* ; FD-Laufwerk *n*

Encoding

```
1. <HeadwordCtn>
2.   <Headword>FDD</Headword>
3.   <SubjectField>edp</SubjectField>
4.   <Note>e.g.<Quantity value = '5' unit = 'inch'/></Note>
5. </HeadwordCtn>
```

Example 34 — Grammatical pattern

abbreviate (ab-bre-viate) V (v n to n)

Encoding

```
1. <HeadwordCtn>
2.   <Headword>abbreviate</Headword>
3.   <PartOfSpeech value='verb'/>
4.   <Syllabification>ab-bre-viate<Syllabification>
5.   <GrammaticalPattern>V N <Collocator>to</Collocator> N</GrammaticalPattern>
6. </HeadwordCtn>
```

Example 35 — SenseIndicator, TypicalComplement

double *(copie, duplicata) [facture, acte]* copy ; *[timbre]* duplicate, double, swap ; *[personne]* double ; *[objet d'art]* replica, exact copy

Encoding

```
1.  <SenseGroup>
2.   <SenseIndicator>copie</SenseIndicator>
3.   <SenseIndicator>duplicata</SenseIndicator>
4.   <TranslationBlock>
5.     <TypicalComplement>facture</TypicalComplement>
6.     <TypicalComplement>acte</TypicalComplement>
7.     <Translation>copy</Translation>
8.   </TranslationBlock>
9.   <TranslationBlock>
10.     <TypicalComplement>timbre</TypicalComplement>
11.     <Translation>duplicate</Translation>
12.     <Translation>double</Translation>
13.     <Translation>swap</Translation>
14.   </TranslationBlock>
15.   <TranslationBlock>
16.     <TypicalComplement>personne</TypicalComplement>
17.     <Translation>double</Translation>
18.   </TranslationBlock>
19.   <TranslationBlock>
20.     <TypicalComplement>objet d'art</TypicalComplement>
21.       <Translation>replica</Translation>
22.       <Translation>exact copy</Translation>
23.   </TranslationBlock>
24.  </SenseGroup>
```

Example 36 — Full form

PW 1 (Mil.) (US) *prisoner of war* prisonnier *(m.)* de guerre **2** (brit.) *policewoman* see **police**

Encoding

```
1.  HeadwordCtn>
2.   <Headword>PW</Headword>
3.   <PartOfSpeech value='noun'/>
4.  /HeadwordCtn>
5.   <SenseGroup>
6.     <SubjectField>Mil.</SubjectField>
7.     <FullForm>prisoner of war</FullForm>
8.     <SenseQualifier>US</SenseQualifier>
9.     <Translation>prisonnier
10.      <GrammaticalGender value='masculine'/>
11.       de guerre</Translation>
12.  </SenseGroup>
13.  <SenseGroup>
14.    <SeeCtn>
15.      <FullForm>policewoman</FullForm>
16.      <SenseQualifier>Brit<SenseQualifier>
17.      <See>Police</See>
18.    </SeeCtn>
19.  </SenseGroup>
```

Example 37 — Company specific usage

Saugrohr *(motor)* induction pipe, intake pipe *(US)*, inlet pipe *(GB)*, intake runner *(US Chrysler)*

Encoding

```
1. <HeadwordCtn>
2.   <Headword>Saugrohr</Headword>
3. </HeadwordCtn>
4. <SenseGroup>
5.   <SubjectField>motor</SubjectField>
6.   <TranslationCtn>
7.     <Translation>induction pipe</Translation>
8.   </TranslationCtn>
9.   <TranslationCtn>
10.    <Translation>intake pipe</Translation>
11.    <GeographicalUsage>US</GeographicalUsage>
12.  </TranslationCtn>
13.  <TranslationCtn>
14.    <Translation>inlet pipe</Translation>
15.    <GeographicalUsage>GB</GeographicalUsage>
16.  </TranslationCtn>
17.  <TranslationCtn>
18.    <Translation>intake runner</Translation>
19.    <CompanySpecificUsage>US Chrysler</CompanySpecificUsage>
20.  </TranslationCtn>
21. </SenseGroup>
```

Example 38 — Proprietary restriction

Barbie *n.* ~ **doll**® poupée *(f.)* Barbie®

Encoding

```
1. <DictionaryEntry identifier = 'Barbie' sourceLanguage = 'en'>
2.   <HeadwordCtn>
3.     <Headword>Barbie</Headword>
4.     <PartOfSpeech value = 'noun'/>
5.   </HeadwordCtn>
6.   <MultiWordUnitCtn>
7.    <MultiWordUnit><RepeatSymbol/> doll</MultiWordUnit>
8.     <ProprietaryRestriction value = 'registeredMark'/>
9.     <TranslationCtn>
10.      <Translation targetLanguage ='fr'>poupée <GrammaticalGender value =
'feminine'/>Barbie</Translation>
11.       <ProprietaryRestriction value = 'registeredMark'/>
12.    </TranslationCtn>
13.  </MultiWordUnitCtn>
14. </DictionaryEntry>
```

Example 39 — International ScientificTerm

aspirin
Main entry : **as-pi-rin**
Function : *noun*
Inflected Form(s) : *plural* **aspirin** *or* **aspirins**
Eymology : International Scientific Vocabulary, from *a*cetyl + s*pir*aeic acid (former name of salicylic acid, from New Latin *Spiraea* , genus of shrubs – more at SPIREA
1 : a white crystalline derivative $C_9H_8O_4$ of salicylic acid used for relief of pain and fever
2 : a tablet of aspirin

Encoding

```
1. <DictionaryEntry identifier='aspirin' sourceLanguage='en'>
2.   <HeadwordCtn>
3.     <Headword>aspirin</Headword>
4.   <Pronunciation>'as-p(&amp;amp;-)r&amp;amp;n'</Pronunciation>
5.   <PartOfSpeech value = 'noun'/>
6.   <InflectionBlock>
7.     <GrammaticalNumber value = 'plural'/>
8.     <Inflection>aspirin</Inflection>
9.     <Inflection>aspirins</Inflection>
10.  </InflectionBlock>
11.  <Syllabification>as<Hyphen/>pi<Hyphen/>rin</Syllabification>
12.  <Etymology>International Scientific Term Vocabulary, from <i>a</i>cetyl +
<InternationalScientificTerm><i>spir</i>aeic acid</InternationalScientificTerm> (former name of
<InternationalScientificTerm>salicylic acid</InternationalScientificTerm>), from New Latin <ForeignText xml-
lang = 'latin'>Spiraea</ForeignText>, genus of shrubs - more at <Ptr xlink:href =
'SPIREA'>SPIREA</Ptr></Etymology>
13.  </HeadwordCtn>
14.    <SenseGroup>
15.      <Definition>
```

```
16.       a white crystalline derivative C<sub>9</sub>H<sub>2</sub>O<sub>4</sub> of
<InternationalScientificTerm>salicylic acid</InternationalScientificTerm> used for relief of pain and fever
17.       </Definition>
18.     </SenseGroup>
19. </DictionaryEntry>
```

Annex D
(informative)

Assigning layout aids to dictionary components and compacting dictionary entries

Real dictionary entries used as examples in this International Standard only illustrate the principles of XML representation of lexicographical data and their associated presentations. They do not engage the publishers' responsibility.

D.1 Assigning layout aids to dictionary components

For each dictionary component, it has to be assured that its structural meaning can be recognized by the user as far as he needs to distinguish between the components. This can be achieved e.g. by differentiating layout means or by differentiating structural text markers.

The following example shows the presentation of an entry nest of a bilingual dictionary (English-French) by means of an XSL transformation to HTML. Most of the textual structure markers and all the layouts are created by the XSL transformation. Different XSL transformations can produce different presentations of the same entries.

Example 1 — Entry nest of a bilingual dictionary (English-French)

```
1. <?xml version='1.0' encoding='ISO-8859-1'?>
2. <!-- DOCTYPE Dictionary SYSTEM 'XmLexV09.dtd' -->
3.
4.
5. <Dictionary version='XmLex_V00'>
6.
7.
8. <NestEntry identifier='NE1'>
9.
10. <DictionaryEntry identifier='pocketdict-en-fr-administer'>
11.   <HeadwordCtn>
12.   <Headword>administer</Headword>
13.   </HeadwordCtn>
14.   <SenseGroup>
15.   <TranslationCtn>
16.     <Translation>administrer</Translation>
17.     <RangeOfApplication>a country, affairs, a remedy</RangeOfApplication>
18.   </TranslationCtn>
19.   <CompositionalPhraseCtn>
20.     <CompositionalPhrase>administer justice</CompositionalPhrase>
21.     <TranslationCtn>
22.     <Translation>rendre la justice</Translation>
23.     </TranslationCtn>
24.   </CompositionalPhraseCtn>
25.   </SenseGroup>
26. </DictionaryEntry>
27.
28. <DictionaryEntry identifier='pocketdict-en-fr-administration'>
29.   <HeadwordCtn>
```

```
30.   <Headword>administration</Headword>
31.   </HeadwordCtn>
32.   <SenseGroup>
33.   <TranslationCtn>
34.     <Translation>administration<GrammaticalGender value='feminine'/></Translation>
35.   </TranslationCtn>
36.   <TranslationCtn>
37.    <Translation>gestion<GrammaticalGender value='feminine'/></Translation>
38.   </TranslationCtn>
39.   <TranslationCtn>
40.     <Translation>gouvernement<GrammaticalGender value='masculine'/></Translation>
41.     <GeographicalUsage>esp. Am.</GeographicalUsage>
42.   </TranslationCtn>
43.   </SenseGroup>
44. </DictionaryEntry>
45.
46. <DictionaryEntry identifier='pocketdict-en-fr-administrative'>
47.   <HeadwordCtn>
48.   <Headword>administrative</Headword>
49  </HeadwordCtn>
50.   <SenseGroup>
51.   <TranslationCtn>
52.     <Translation>administratif</Translation>
53.   </TranslationCtn>
54.   </SenseGroup>
55. </DictionaryEntry>
56.
57. <DictionaryEntry identifier ='pocketdict-en-fr-administrator'>
58.   <HeadwordCtn>
59.   <Headword>administrator</Headword>
60.   </HeadwordCtn>
61.   <SenseGroup>
62.   <TranslationCtn>
63.     <Translation>administrateur (<Suffix>-trice<GrammaticalGender
value='feminine'/></Suffix>)<GrammaticalGender value='masculine'/></Translation>
64.   </TranslationCtn>
65.   </SenseGroup>
66. </DictionaryEntry>
67.
68. </NestEntry>
69.
70.
71. </Dictionary>
```

Example 2 — XSL-Stylesheet

```
1. <?xml version='1.0' encoding='iso-8859-1'?>
2.
3. <xsl:stylesheet version='1.0' xmlns:xsl='http://www.w3.org/1999/XSL/Transform'>
4.
5.   <xsl:strip-space elements='*' />
6.
7.   <xsl:output method='html'
8.     doctype-system='http://www.w3.org/TR/REC-html40/loose.dtd'
9.     doctype-public='-//W3C//DTD HTML 4.0 Transitional//EN'
10.    indent='no' />
11.
12.
13.   <xsl:template match='/'>
14.    <html>
15.    <head>
16.    <style>
17.    .Arial_b       {font-family:Arial,sans-serif; font-weight:bold; color:black}
18.    .Arial_b_blue     {font-family:Arial,sans-serif; font-weight:bold; color:blue}
19.    .Arial_bo          {font-family:Arial,sans-serif; font-weight:bold; font-style:italic; color:black}
20.   .Times         {font-family:'Times New Roman',serif; font-weight:normal; color:black}
21.    .Times_o          {font-family:'Times New Roman',serif; font-weight:normal; font-style:italic; color:black}
22.    .Times_b          {font-family:'Times New Roman',serif; font-weight:bold; color:black}
23.    .Times_SC {font-family:'Times New Roman',serif; font-weight:normal; font-variant:small-caps;
color:black}
24.    .IPA          {font-family:'Times PhoneticIPA'; font-weight:normal; color:black}
25.    .i               {font-weight:normal; font-style:italic}
26.    .b        {font-weight:normal; font-weight:bold}
27.    </style>
28.    </head>
29.    <body style='color:red; padding-left:0.5cm; padding-right:0.5cm; text-indent:-0.5cm'>
30.      <xsl:apply-templates />
31.    </body>
32.    </html>
33.   </xsl:template>
34.
35.
36.   <xsl:template match='NestEntry'>
37.      <xsl:apply-templates />
38.   </xsl:template>
39.
40.   <xsl:template match='DictionaryEntry'>
41.    <p>
42.    <xsl:apply-templates />
43.    </p>
44.   </xsl:template>
45.
46.
47.   <xsl:template match='SenseGroup'>
48.      <xsl:apply-templates />
49.   </xsl:template>
50.
51.   <xsl:template match='HeadwordCtn'>
52.    <xsl:apply-templates />
53.    <br/>
54.   </xsl:template>
```

```
55.
56.  <xsl:template match='CompositionalPhraseBlock'>
57.    <xsl:apply-templates />
58.  </xsl:template>
59.
60.  <xsl:template match='CompositionalPhraseCtn'>
61.    <xsl:choose>
62.      <xsl:when test = 'position() = 1'>
63.        <span class='Times'><xsl:text> </xsl:text></span>
64.      </xsl:when>
65.      <xsl:otherwise>
66.        <span class='Times'><xsl:text>; </xsl:text></span>
67.      </xsl:otherwise>
68.    </xsl:choose>
69.    <xsl:apply-templates />
70.  </xsl:template>
71.
72.  <xsl:template match='TranslationCtn'>
73.    <xsl:choose>
74.      <xsl:when test = 'preceding-sibling::TranslationCtn'>
75.        <span class='Times'><xsl:text>; </xsl:text></span>
76.      </xsl:when>
77.      <xsl:otherwise>
78.        <span class='Times'><xsl:text> </xsl:text></span>
79.      </xsl:otherwise>
80.    </xsl:choose>
81.    <xsl:choose>
82.      <xsl:when test = 'child::Register'>
83.        <span class='Times_o'>
84.          <xsl:text> </xsl:text>
85.          <xsl:value-of select='Register' />
86.        </span>
87.      </xsl:when>
88.      <xsl:when test = 'child::GeographicalUsage'>
89.        <span class='Times_o'>
90.          <xsl:text> </xsl:text>
91.          <xsl:value-of select='GeographicalUsage' />
92.        </span>
93.      </xsl:when>
94.    </xsl:choose>
95.    <xsl:apply-templates />
96.  </xsl:template>
97.
98.
99.  <xsl:template match='Headword'>
100.   <span class='Arial_b_blue'>
101.     <xsl:apply-templates />
102.   </span>
103.  </xsl:template>
104.
105.  <xsl:template match='CompositionalPhrase'>
106.    <span class='Arial_bo'>
107.      <xsl:apply-templates />
108.    </span>
109.  </xsl:template>
110.
111.  <xsl:template name = 'insertCompositionalPhraseText'>
```

```
112.    <xsl:choose>
113.      <xsl:when test = 'preceding-sibling::CompositionalPhrase'>
114.        <span class='Times'><xsl:text>; </xsl:text></span>
115.      </xsl:when>
116.      <xsl:otherwise>
117.        <span class='Times'><xsl:text> </xsl:text></span>
118.      </xsl:otherwise>
119.    </xsl:choose>
120.    <span class='Arial_bo'>
121.      <xsl:apply-templates />
122.    </span>
123.  </xsl:template>
124.
125.
126.  <xsl:template match='Translation'>
127.    <span class='Times'>
128.      <xsl:text> </xsl:text>
129.      <xsl:apply-templates />
130.    </span>
131.  </xsl:template>
132.
133.  <xsl:template match='GrammaticalGender'>
134.    <span class='Times_o'>
135.      <xsl:text> </xsl:text>
136.      <xsl:choose>
137.        <xsl:when test = '@value='masculine"'>
138.          <xsl:text> m</xsl:text>
139.        </xsl:when>
140.        <xsl:when test = '@value='feminine"'>
141.          <xsl:text> f</xsl:text>
142.        </xsl:when>
143.        <xsl:when test = '@value='neuter"'>
144.          <xsl:text> n</xsl:text>
145.        </xsl:when>
146.      </xsl:choose>
147.    </span>
148.  </xsl:template>
149.
150.  <xsl:template match='Note'>
151.    <span class='Times'><xsl:text> &lt;</xsl:text></span>
152.    <span class='Times_o'>
153.      <xsl:apply-templates />
154.    </span>
155.    <span class='Times'><xsl:text>&gt;</xsl:text></span>
156.  </xsl:template>
157.
158.  <xsl:template match='RangeOfApplication'>
159.    <span class='Times'><xsl:text> (</xsl:text></span>
160.    <span class='Times_o'>
161.      <xsl:apply-templates />
162.    </span>
163.    <span class='Times'><xsl:text>)</xsl:text></span>
164.  </xsl:template>
165.
166.  <xsl:template match='GeographicalUsage'>
167.    <xsl:choose>
168.      <xsl:when test = 'not(parent::TranslationCtn)'>
```

```
169.       <span class='Times_o'>
170.         <xsl:text> (</xsl:text>
171.         <xsl:value-of select='@value' />
172.         <xsl:text>)</xsl:text>
173.       </span>
174.     </xsl:when>
175.   </xsl:choose>
176. </xsl:template>
177.
178. <xsl:template match='Pronunciation'>
179.   <span class='IPA'>
180.     <xsl:text> [</xsl:text>
181.     <xsl:apply-templates />
182.     <xsl:text>]</xsl:text>
183.   </span>
184. </xsl:template>
185.
186. <xsl:template match='Register'>
187.   <xsl:choose>
188.     <xsl:when test = 'not(parent::TranslationCtn)'>
189.       <span class='Times_o'>
190.         <xsl:text> </xsl:text>
191.         <xsl:value-of select='@value' />
192.       </span>
193.     </xsl:when>
194.   </xsl:choose>
195. </xsl:template>
196.
197. <xsl:template match='Definition'>
198.   <xsl:choose>
199.     <xsl:when test = 'parent::CompositionalPhraseCtn'>
200.       <span class='Times'>
201.         <xsl:text> </xsl:text>
202.         <xsl:apply-templates />
203.       </span>
204.     </xsl:when>
205.    <xsl:when test = 'not(parent::CompositionalPhraseCtn)'>
206.       <span class='Times_o'>
207.         <xsl:text> </xsl:text>
208.         <xsl:apply-templates />
209.         <xsl:if test = '(position() = not(last()))'>
210.           <xsl:text>:</xsl:text>
211.         </xsl:if>
212.       </span>
213.     </xsl:when>
214.   </xsl:choose>
215. </xsl:template>
216.
217.
218. <xsl:template match='i'>
219.   <span class='i'><xsl:value-of select='.' /></span>
220. </xsl:template>
221.
222. <xsl:template match='b'>
223.   <span class='b'><xsl:value-of select='.' /></span>
224. </xsl:template>
225.
```

```
226.  <xsl:template match='sup'>
227.    <sup><xsl:value-of select='.' /></sup>
228.  </xsl:template>
229.
230.  <xsl:template match='sub'>
231.    <sub><xsl:value-of select='.' /></sub>
232.  </xsl:template>
233.
234.  <xsl:template match='Stress'>
235.    <xsl:choose>
236.      <xsl:when test = '(@type) and (@type = 'long')'>
237.        <u><xsl:value-of select='.' /></u>
238.      </xsl:when>
239 .   </xsl:choose>
240.  </xsl:template>
241.
242.
243.  <xsl:template match='processing-instruction()' />
244.
245.
246. </xsl:stylesheet>
```

The application of the layout means and textual structure markers defined in the XSL-transformation to the dictionary entries is done by an XSLT-processor, e.g. Xalan.

The command is:

```
java org.apache.xalan.xslt.Process-IN pocketdict-en-fr.xml -XSL XmLex.xsl
-OUT pocketdict-en-fr.html
```

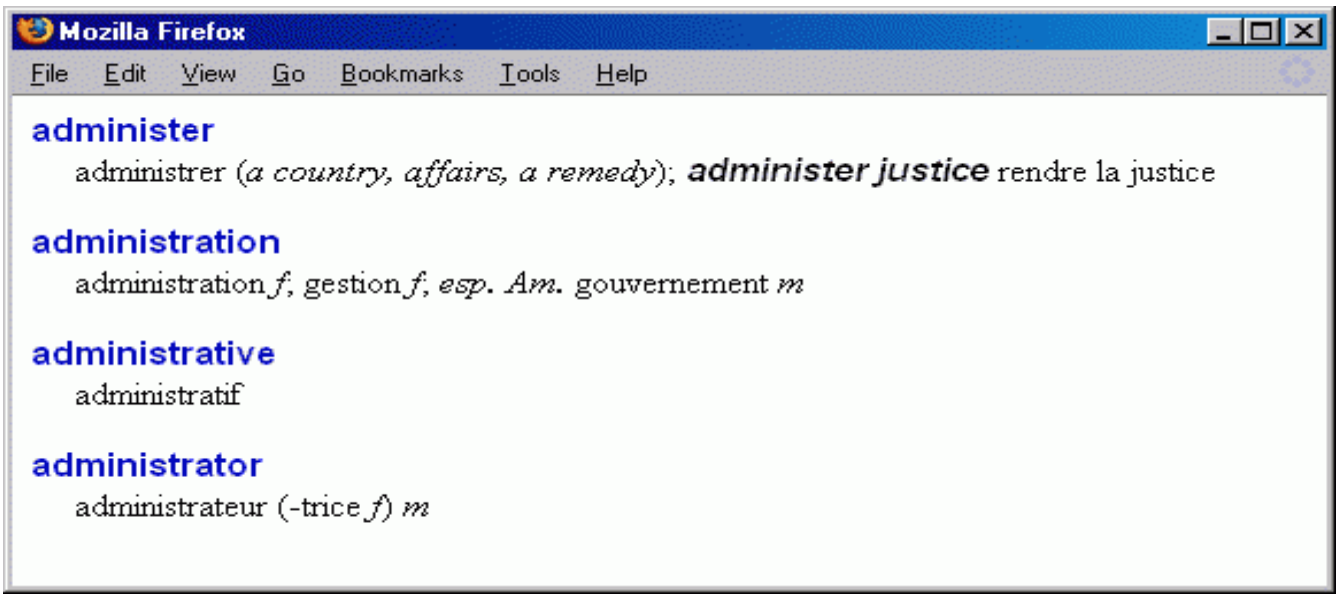


Figure D.1 — The HTML-output of this action

D.2 Examples for compacted dictionary entries

Compacted form	Full form
Access 1. Zugang *m*; 2. *(EDV)* Zugriff *m*; 3. *(Raumf)* Luke *f (spacecraft)*; 4. (*Tele*) Anschluss *m*, Zugang *m* **~ channel** *(Tele)* Zugangskanal *m* **~ circuit** *(Tele)* Zugangsleitung *f* **~ exchange** *(Tele)* Teilnahmevermittlungsstelle	**access** 1. Zugang *m*; 2. *(EDV)* Zugriff *m*; 3. *(Raumf)* Luke *f (spacecraft)*; 4. (*Tele*) Anschluss *m*, Zugang *m* **access channel** *(Tele)* Zugangskanal *m* **access circuit** *(Tele)* Zugangsleitung *f* **access exchange** *(Tele)* Teilnahmevermittlungsstelle
accelerating chamber *(Nukl)* Beschleunigungskammer *f* **~ pump** *(Kfz)* Beschleunigungspumpe *f* **~ voltage** *(El)* Beschleunigungsspannung *f*	**accelerating chamber** *(Nukl)* Beschleunigungskammer *f* **accelerating pump** *(Kfz)* Beschleunigungspumpe *f* **accelerating voltage** *(El)* Beschleunigungsspannung *f*
administ|er administrer (*a country, affairs, a remedy*); ***~ justice*** rendre la justice; **~ration** administration *f*; gestion *f*; *esp. Am.* gouvernement *m*; **~rative** administratif; **~rator** administrateur (-trice *f*) *m*	**administ|er** administrer (*a country, affairs, a remedy*); ***administer justice*** rendre la justice **administration** administration *f*; gestion *f*; *esp. Am.* gouvernement *m* **administrative** administratif **administrator** administrateur (-trice *f*) *m*
abbey *s.* **1.** Abtei *f*: ***the*** *Brit.* die Westminsterabtei; **2.** *Brit.* Herrschaftlicher Wohnsitz (*frühere Abtei*).	**abbey** *s.* **1.** Abtei *f*: ***the Abbey*** *Brit*. die Westminsterabtei; **2.** *Brit.* herrschaftlicher Wohnsitz (*frühere Abtei*).
Fliege *die*; -, -n [1: mhd. vliege, ahd. Fliege, eigtl. = die Fliegende; 3: für frz. mouche] **1.** *(in zahlreichen Arten vorkommendes) gedrungenes, kleines Insekt mit zwei Flügeln u. kurzen Fühlern* eine lästige F.; die -n summen; eine F. fangen; mit der [künstlichen] F. *(einer Nachbildung der Fliege)* angeln; ***zwei -n mit einer Klappe schlagen*** *ugs.* einen doppelten Zweck auf einmal erreichen; ***eine, die F. machen*** *salopp* [schnell] weggehen [nach dem raschen Davonfliegen der Fliegen]: Da wird ... ein Hochschullehrer in jeder Vorlesung oder Übung ... unter Druck gesetzt und „madig" gemacht – „bis er ... an der Uni 'ne F. macht" (Spiegel 43, 1977, 226); ***sich über die F. an der Wand ärgern*** (sich über jede Kleinigkeit ärgern); ***jmdn. stört die F. an der Wand*** (jmdn. stört jede Kleinigkeit); **umfallen wie die -n** *ugs.* in großer Zahl sterben; ***matt sein wie eine F.*** *ugs.* sehr erschöpft sein; ***keiner F. etw. zuleide tun [können]*** *ugs.* sehr gutmütig sein u. niemandem etwas zuleide tun [können]; **2.** *als Querschleife gebundene Krawatte*; eine F. umbinden; **3.** *schmales, gestutztes Bärtchen auf der Oberlippe od. zwischen Unterlippe u. Kinn*	**Fliege** *die*; Fliege, Fliegen [1: mhd. vliege, ahd. Fliege, eigtl. = die Fliegende; 3: für frz. mouche] **1.** *(in zahlreichen Arten vorkommendes) gedrungenes, kleines Insekt mit zwei Flügeln u. kurzen Fühlern* eine lästige Fliege; die Fliegen summen; eine Fliege fangen; mit der [künstlichen] Fliege *(einer Nachbildung der Fliege)* angeln; ***zwei Fliegen mit einer Klappe schlagen*** *ugs.* einen doppelten Zweck auf einmal erreichen; ***eine, die Fliege machen*** *salopp* [schnell] weggehen [nach dem raschen DavonFliegen der Fliegen]: Da wird ... ein Hochschullehrer in jeder Vorlesung oder Übung ... unter Druck gesetzt und „madig" gemacht – „bis er ... an der Uni 'ne Fliege macht" (Spiegel 43, 1977, 226); ***sich über die Fliege an der Wand ärgern*** (sich über jede Kleinigkeit ärgern); ***jmdn. stört die Fliege an der Wand*** (jmdn. stört jede Kleinigkeit); **umfallen wie die Fliegen** *ugs.* in großer Zahl sterben; ***matt sein wie eine Fliege*** *ugs.* sehr erschöpft sein; ***keiner Fliege etw. zuleide tun [können]*** *ugs.* sehr gutmütig sein u. niemandem etwas zuleide tun [können]; **2.** *als Querschleife gebundene Krawatte*; eine Fliege umbinden; **3.** *schmales, gestutztes Bärtchen auf der Oberlippe od. zwischen Unterlippe u. Kinn*

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