Guidelines of the eCl@ss e.V., Cologne

For

Development of eCl@ss Language Versions

Contents

A. Intention and Scope of These Guidelines

A 1.   eCl@ss is an internationally fast growing standard for classifying and identifying tradable products or services in order to simplify and support e-business processes.

A 2.   The standard owner eCl@ss e.V. is aware that global use of its Standard eCl@ss requires certified multilingual properties of the standard, e.g. for unambiguous data interpretation by man and machine.

A 3.   These guidelines therefore provide guiding principles to instruct the further development of language versions of the Standard eCl@ss.

A 4.   Updates of the principles described in these guidelines are under control of the eCl@ss head office (function 'Competence Center Languages' [CCL]) which is in charge to develop and to maintain high quality language versions of the Standard eCl@ss.

A 5.   For terms in brackets ['...'] used in these guidelines further explanation is given in an enclosed List of Definitions (ref. to Annex 2).

A 6.   These guidelines concern the Standard eCl@ss only; other language related issues of the eCl@ss e.V., e.g. appearance of the international eCl@ss web-site, are out of scope of this document.

B. Support for Language Versions of the eCl@ss Standard in General

B 1.   Regarding quality, extent and actuality of translation of its Standard eCl@ss e.V. distinguishes between 'reference language', 'main language' and 'other languages'.

B 2.   The 'reference language' is English (US): eCl@ss e.V. will always maintain all 'structural elements' [SE] of its standard in this mandatory language updated and in best quality achievable.

B 3.   Translation of the standard to any other language should be done for congruence with and on basis of the 'reference language' of eCl@ss e.V. only.

B 4.   'Main languages' of the Standard eCl@ss are language versions that are permanently supported & financed by eCl@ss e.V. to publish & document authorised structural information.

B 5.   For a 'main language' eCl@ss e.V. prepares an updated & complete translation of the reference language with high quality. - Current 'main language' of eCl@ss e.V. is German (D).

Russian and French - as they are official languages of the supreme international standard organization ISO – shall be considered as next options to obtain a status as 'main language' of the eCl@ss e.V. .

B 6. Renowned business languages may obtain a status as 'other languages' of eCl@ss. For such languages eCl@ss e.V. is limited to collect third party translations - also fragments - of its standard. eCl@ss e.V. therefore will not warrant for translation quality, relevance or completeness. - Currently eCl@ss e.V. provides support for up to 14 'other languages'.

C. Organization of Language Development at eCl@ss e.V.

C 1. All language development and translation work has to be executed in accordance with superior guidelines or sets of rules of the eCl@ss e.V.
These are in particular:

a. "Guiding Principles of eCl@ss e.V., Cologne, for the development of the eCl@ss Classification Standard and its property structures (Version 1.0)",

b. "Data Model of the Standard eCl@ss as to Release 7" (in preparation).

c. "eCl@ss ServicePortal 2.0: Administration & User Manual" (in preparation).

C 2. Beside own guidelines or sets of rules for language development and translation work eCl@ss agents will take notice of existing translations rules - e.g. for properties, definitions, schemes or pictographic information – provided publicly by important standard organizations (e.g.: by ISO, IEC, DIN, AFNOR, GOST-R).

C 3. With respect to Change Requests [CR] via eCl@ss ServicePortal in the 'reference language' or in a 'main language' of eCl@ss e.V. the Head office (function 'Centre Release Management' [CRM]) will screen completeness and general language quality of any CR before passing it through to an eCl@ss expert group [EG].

If a CR does not correspond to minimal conditions of 'language quality mark' "10" (→ for 'language quality marks' ref. to D 3. and Annex 2) CRM will reject the CR - and inform the proposer - or correct by itself the CR to a language quality level of at least mark "10".

C 4. If a CR is submitted by a National Standards Organization, the SE coming with this CR shall be marked with a language quality level of "40".

C 5. Responsibility for language quality maintenance of 'structural elements' in the 'reference language' and 'main languages' of a discrete eCl@ss segment is always in hands of the expert group joint to this segment of the Standard eCl@ss.

Responsibility not only extends to verification of new SE coming with Change Requests but also for existing SE of the segment.

Therefore eCl@ss e.V. should only admit such persons as members of an expert group [EG] which show satisfying familiarity with the 'reference language' of eCl@ss, e.g.

for technical terms of products, ability to dispute technical information in correspondence.

C 6.   Members of eCl@ss expert groups - if no other personal language qualification status is assigned by the function CCL - are allowed to verify translation purposes up to 'language quality mark' "20".

C 7.   The overall responsibility for Language Development at eCl@ss e.V. is executed by the eCl@ss head office (function 'Competence Center Languages' [CCL]). The 'Competence Center Languages' reviews, accredits & certifies language abilities of any person in charge of translation at eCl@ss e.V. CCL for this provides & maintains in an updated state different information lists:

a. about language skills of all experts working actively in eCl@ss bodies;

b. about eCl@ss e.V. external experts for high quality translation (so-called professional translators);

c. about language quality status (summary-like for all SE) of each language version provided by eCl@ss e.V. with the support of the eCl@ss ServicePortal.

C 8.   Sometimes eCl@ss e.V. will need translation support by (external) professional translators. Translators accredited by the function CCL are allowed to mark their translation on SE or to verify translation proposals up to 'language quality mark' "30".

C 9.   If eCl@ss e.V. operates foreign offices in countries with native speakers of a national language supported by eCl@ss e.V. single persons of these foreign offices may obtain an accredited status (by CCL) as professional translator.

Such persons who have to be familiar with the Standard eCl@ss are allowed to verify translation proposals up to quality mark "30".

C 10.   Only members of the eCl@ss function 'Centre Quality Control' [CQC] do have authorisation to verify translation proposals for SE as being in complete conformity with national or international standardised terms (i.e. put language quality mark "40" in the Standard eCl@ss data base).

Due to complexity and technical challenge of this task members of the function CQC may ask for special assistance from eCl@ss expert groups or from eCl@ss foreign offices to get sufficient information with respect to national or international standards.

C 11.   For all language versions of the Standard eCl@ss translation especially for classes and properties should be evaluated by comparing requirements, expressions and quality rules of standardisation bodies - e.g. from DIN, AFNOR, ISO, CEN - for identical terms.

If several standardisation bodies offer different translation or definition content on the same term the translation & content fixed by a supreme standardisation organization, e.g. by ISO, should be taken by all eCl@ss experts as translation reference.

C 12. The general translation priority for SE of the Standard eCl@ss in all languages is:

1. classes,
2. properties & values,
3. keywords & synonyms
(annot.: keywords and synonyms normally cannot be translated as a 1:1-relation, but only added in each language version).

D. Quality Rules for Languages of eCl@ss e.V.

D 1. Point of convergence for all translation work on SE in any language version - e.g. on classes or properties - of the Standard eCl@ss is a discrete & singular 'eCl@ss identifier' in the reference language' of eCl@ss e.V. according to IRDI rule.

Part of the IRDI-'eCl@ss identifier' is a version identifier which allows to control modifications on any SE of the standard eCl@ss.

D 2. Other language version related rules with respect to possible change of identifiers:

(*The eCl@ss function CCL will define further & detailed language quality rules* [1.] *with respect to basic work & data base requirements as soon as other rule sets which are in preparation have been published. These rules will be based on some main change management rules defined by the eCl@ss function CRD* [2.])

D 3. In all language versions of the Standard eCl@ss each 'structural element' [SE] gets labelled in the standard data base with a 'language quality mark'.

D 4. Analogue to other international systems eCl@ss e.V. uses up to four different quality marks to calibrate, document and control the language quality of the standard eCl@ss.

The highest 'language quality mark' is always present in a given 'structural element' (SE) of the Standard eCl@ss in the 'reference language'.

D 5. The responsible of the eCl@ss function 'Centre Release Management' [CRM] will only allow publishing a new release of the Standard eCl@ss in the 'reference language' with 'structural elements' which have a language quality at least of mark "20".

For a 'main language' of the Standard eCl@ss the minimal quality level for a new release is of mark "20".

D 6. 'Language quality marks' are kept only in the eCl@ss ServicePortal data base. They will not be shown in the eCl@ss DownloadPortal, i.e. in downloadable language version files of the standard eCl@ss.

D 7. When a proposer describes new structural elements in one or more languages via the Change Request process in the eCl@ss ServicePortal these entries will automatically get a quality mark of "10".

D 8.   In any language version of the Standard eCl@ss the name of an application class or classification class (as preferred name) should be clearly understandable (i.e. it will be accessible to a general education level).

In case that a name of a class seems to be ambiguous or could have different meanings the translation should refer to or provide pictographic information for better understanding.

D 9.   Members of the eCl@ss function CQC should support the development of eCl@ss languages by being aware that so-called "join"-, "split-" or "move"-action for classes might affect translation quality of the Standard eCl@ss.

Therefore these members will always check especially for application classes and classification classes if - and how - their action may affect the language quality status of SE, e.g. of properties, in 'main languages' and - if possible - in 'other languages' of the Standard eCl@ss. If so, they will advice the responsible of CRM & CCL of eCl@ss Head office.

[1.)] *[these language quality rules will explain especially:*
a. How translation coming with new CR might result in change of translation quality labels of existing SE, e.g. for classes or properties,
b. How to proceed if an existing SE in the 'reference language' of eCl@ss has to be replaced by a similar one with a new 'eCl@ss identifier' (target: minimal loss of translation),
c. How to proceed in general with revision numbers of eCl@ss e.V. if a new "bulk translation" is done for a language version as a whole (versionising rules)].

[2.)] *[Other rule sets to be taken into account:*
a. "Data model of the Standard eCl@ss as to Release 7" (to prepare);
b. "Description of Technology of the eCl@ss ServicePortal" (to prepare);
c. "Description of CR process execution via eCl@ss ServicePortal" (to prepare);
d. "Richtlinien und Arbeitsanweisungen für die Entwicklung von eCl@ss-Änderungsvorschlägen (Guideline and Standard Operating Procedures (SOP); year 2003)"]

E.   Required Skills for Translators

In general:

E 1.   According to the most important language quality rule of the eCl@ss e.V. - i.e. label-ling of any SE with a secured language quality mark - all translation skills requested to work on language versions of the Standard eCl@ss have to meet the conditions of the different language quality marks, e.g. for orthography, for familiarity with: classification systems, technical description, knowledge of standards.

E 2.   While translation of single 'structural elements' is in progress any translator should be aware of the relationship between a class and the properties joint to this class.

Therefore a well working translator should be familiar with denotations and characteristics of most eCl@ss data model terms, e.g. application class, scope, aspect, attribute.

E 3.   The eCl@ss function 'Competence Center Languages' (CCL) will check periodically the skills of all eCl@ss agents involved in translation work of the Standard eCl@ss.

In case of skill deficiencies observed CCL will supply or organize training and sufficient basic information to such persons in concern.

By category of persons:

E 4.   Proposers (persons performing Change Requests via eCl@ss ServicePortal): Any proposer for Change Requests via eCl@ss ServicePortal has to give his proposal completely at least in the 'reference language' of eCl@ss e.V. .

E 5.   Members of function 'Centre Release Management' [CRM]: Beside general technical & organizational experience & expertise for product classification in the Standard eCl@ss members of the function CRM are able to verify new Change Requests with respect to completeness and translation quality in the 'reference language' of eCl@ss e.V.

Therefore these members should have a proven language competence for the 'reference language' comparable to B1 level of 'The European Language Certificates, (TELC)'.

E 6.   Members of eCl@ss Expert Groups [EG]: Beside special technical experience & expertise for product classification in a single segment expert group members are able to verify translation proposals in the 'reference language'.

Therefore all members of expert groups should have language competence for the 'reference language' comparable to A2 level of 'The European Language Certificates, (TELC)'.

E 7.   Members of function 'Centre Quality Control' [CQC]: Beside long term proven experience & expertise for product classification in several eCl@ss segments CQC

members are able to verify translation recommendations (of EG) in the 'reference language' and the 'main languages' of eCl@ss.

Therefore all members of the function should have a proven language competence for the 'reference language' comparable to B1 level of 'The European Language Certificates, (TELC)'.

E 8.   Responsible of function 'Competence Center Languages' (CCL): Members in charge of the CCL function are able to organise any translation task for languages of eCl@ss e.V.

Therefore these members should have a proven language competence for the 'reference language' comparable to B2 level of 'The European Language Certificates, (TELC)'.

F.   Contributions to and Financing of Languages of eCl@ss e.V.

F 1.   Beside membership fees and public grant-aided projects eCl@ss e.V. finances all of its activities by selling definite versions of the standard eCl@ss. Therefore sales of all language versions of the Standard eCl@ss via the eCl@ss DownloadPortal play an important role to cover the development costs of the Standard eCl@ss.

F 2.   For all customer categories the eCl@ss DownloadPortal always provides updated price lists of language and content versions of the Standard eCl@ss.

F 3.   Customers of eCl@ss e.V. which want to download the Standard eCl@ss in 'other languages' will get detailed information about relevance, completeness and translation quality of the language version requested before download starts.

F 4.   For any requested language version of the Standard eCl@ss which was until then not supported by eCl@ss e.V. (i.e. a new language) the requestor is to be put in charge of providing the eCl@ss e.V. with a first translation of the Standard eCl@ss in reasonable extent – at least one complete segment with all SE joint to - and quality on own expense.

F 5.   Beside for translation work into the 'reference language' or 'main languages' eCl@ss e.V. will only give active order for translation if external initiative and financing are ensured.

If a national or international standard organization accepts to translate the Standard eCl@ss eCl@ss e.V. should appoint the conditions of translation in line with these guidelines and in advance with such organizations.

F 6.   In order to promote world-wide spread and application of the Standard eCl@ss eCl@ss e.V. is always interested to get funding for better and more language versions from public, national or international institutions, e.g. from EU institutions.

If national authorities, e.g. governments, are interested to vest nation-wide use of the standard eCl@ss– e.g. to all companies or institutions under national law – eCl@ss e.V. may negotiate special terms of funding of the Standard eCl@ss with such authorities.

Active promotion to cover these intentions of eCl@ss e.V. is in hands of the eCl@ss head office.

G. Requirements for Preparation of Future Tools Supporting the Development of eCl@ss Languages

G 1.   To generally support the language development eCl@ss e.V. will provide as soon as possible a ServicePortal based bundle of analytical functionalities to sort and select about language quality, e.g. about language quality marks for classes and properties.

These analytical functions - as a "language workflow" analogue to the so-called Change Request process - will steer the needs of the eCl@ss function 'Centre Release Management' (CRM) and will be necessary for translation rectification in existing parts of the Standard eCl@ss.

G 2.   To avoid loss of prior translation work (e.g. validated translations of SE in former releases of the Standard eCl@ss) the ServicePortal database should permanently keep all information of former releases (with 'eCl@ss identifier', name, and definition) and their language versions (incl. Rel.-no., 'language quality mark') on hand.

Doing so eCl@ss e.V. will be able to provide to authorised translators a permanently increasing retrieval data base to support current translation needs, e.g. for orthographical or understanding purposes.

G 3.   In order to facilitate translation an application functionality, e.g. simultaneous view on classes with their properties joint in the 'reference language', - with on-line representation of content of the ServicePortal data base - will be provided to authorised translators.

G 4.   In order to facilitate translation of properties an application functionality, e.g. simultaneous view on properties in the 'reference language' with their classes joint in the same segment - with on-line representation of content of the ServicePortal data base - will be provided to authorised translators.

G 5.   To support and ease translation of the Standard eCl@ss eCl@ss e.V. will - according to the eCl@ss data model - implement as soon as possible pictorial information about structural elements (SE), e.g. generic images which represent products compiled in a definite class, in the eCl@ss ServicePortal data base.

The ability to supply pictorial information is most important for classes or properties which are difficult to explain or to define by words and which might be ambiguous, e.g. property "tension".

Especially graphical/pictorial elements from recognized industry standards (e.g. from ISO, ANSI, GOST) should be included in the development of pictorial elements in the standard eCl@ss and its language versions.

G 6. For the long term eCl@ss e.V. intends to implement a standardised multilingual on-line dictionary in the eCl@ss ServicePortal "language workflow".

By this translation mistakes might be reduced and verification of translation proposals for SE be eased.

G 7. For "bulk" translation purposes, e.g. in a quality control project about a single segment of a discrete language version of the Standard eCl@ss, the eCl@ss ServicePortal will provide an ability to export & re-import files with "bulk" translation information (so-called translation work packages).

In order to avoid treatment conflicts during work on a translation work package the ServicePortal technology will provide tagging on the extracted information (content of the work package) until complete re-import of information will have been taken place.

G 8. To avoid simultaneous or parallel translation work on identical SE (e.g. on name or definition of classes or properties) the ServicePortal software should be enriched with an intelligent algorithm to identify & mark such cases immediately.

By this "language conflict management" of the function CCL will be eased.

Annex 1:   Abbreviations used in these Guidelines

(In alphabetical order)

abbreviation	stands for
AFNOR	Association Française de Normalisation (Saint Denis La Plaine)
CCL	Competence Center Languages (of eCl@ss e.V.)
CEN	European Committee for Standardization (Brussels)
CQC	Centre Quality Control (of eCl@ss e.V.)
CR	Change request
CRM	Centre Release Management (of eCl@ss e.V.)
D	Germany
DIN	Deutsches Institut für Normung (e.V., Berlin)
EG	Expert group (of eCl@ss e.V.)
EU	European Union
GOST-R	Certificate of conformity of imported products with norms and standards in Russia; GOST = «государственный»; and R = Russia
IRDI	International Registration Data Identifier (acc. ISO/IEC 11179, Part 3)
ISO	International Organization for Standardization (Geneva)
SE	Structural element (of the eCl@ss standard)
TELC	The European Language Certificates
US	United States (of America)

Annex 2: List of Definitions

(In alphabetical order)

term	definition / explication
Centre Quality Control [CQC]	Central and permanently working function of the eCl@ss association to verify and control the content quality of structural elements [SE] of the standard eCl@ss. CQC is operational part of the eCl@ss head office and responsible for content quality of all SE in the updated release of the Standard eCl@ss and for final content verification in the change request process of eCl@ss e.V.
Centre Release Management [CRM]	Central and permanently working function of the eCl@ss association to guide, organise, monitor, control and steer the development of content of the updated release of the Standard eCl@ss via change request process. CRM is operational part of the eCl@ss head office. Special responsibility of CRM is the operational organization & control of running activities of the eCl@ss expert groups.
Competence Center Languages [CCL]	Central function of the eCl@ss association to guide, monitor, control, organise & steer all language related development of the Standard eCl@ss. CCL is operational part of the eCl@ss head office and responsible for the guidelines "Development of eCl@ss language versions".
eCl@ss coded name	Within a major release the unique and unambiguous 8-digit eCl@ss classification code to classify classification classes. The hierarchical level can be interpreted by counting the number of zeros at the end, i.e. a) less than two zeros is level 4, b) less than 4 zeros is level 3, c) less than 6 zeros is level 2 and at least 6 zeros is level 1. Published in any release of the Standard eCl@ss as field "coded name".
eCl@ss identifier	Unique and unambiguous identifier for every single eCl@ss structural element (SE) labelled according to IRDI rule. The IRDI (international registry data identifier) consists of the source (i.e. 0173-1 for eCl@ss), the SE type (e.g. 01 for class), the 6-digit identifier for the SE (e.g. AAA123) and the version number of this SE (e.g. 001), which is only changed in a release.

term	definition / explication
language quality mark	"eCl@ss e.V. uses up to four different quality marks to calibrate, document and control the translation quality for any structural element (SE) of the Standard eCl@ss: - mark 10: is the lowest language quality level; understanding: "complete translation proposal, not validated or approved"; this mark is automatically given to any new structural element, e.g. coming with a change request; - mark 20: understanding: "translation checked & approved by responsible member of an eCl@ss expert group" - mark 30: understanding: "translation and orthography checked (versus reference language) & recommended by a professional translator" or by native language speaker with sufficient technical background" - mark 40: understanding: "translation and its related definition do have complete conformity (incl. orthography) with the same denotation authorised by at least one national or international official organization"; e.g. by UN, EU, DIN, IEC and ISO.
language version (of eCl@ss e.V.)	translation of the Standard eCl@ss in the 'reference language' as 'main language' or 'other language'. Every translation is always tagged with a release number, e.g. rel. 5.1.1, to show the correspondence with and actuality of the standard in the 'reference language'. For a 'main language' translation completeness of the Standard eCl@ss is always 100%.
main language (of eCl@ss e.V.)	By eCl@ss board decision authorised & permanently supported language to publish structural, documentation & marketing information of the eCl@ss association. Related to structural information the eCl@ss association will always and on own expense prepare & maintain an actual, complete, high quality translation of the reference language in this language. Actual main language is German (D).

term	definition / explication
other language (of eCl@ss e.V.)	Renowned business language. The eCl@ss association permanently collects for these language translations of structural information content of the reference language. Support of this language by the eCl@ss association is without any responsibility for the translation quality, actuality or completeness. On demand or for translation purposes eCl@ss association will provide available structural information in this language to interested parties or customers without any guaranty.
reference language (of eCl@ss e.V.)	Leading & mandatory language to describe, publish & communicate any available structural, documentation & marketing information of the eCl@ss association. Always and on own expense the eCl@ss association will prepare & maintain all proprietary information in this language actual, complete and of high (technical) standardisation quality. The reference language is English (US).
structural element (SE) of eCl@ss	SE of the Standard eCl@ss corresponding to the eCl@ss data model are: Classification Class (CC); Application Class (AC); Aspect (AS); Property (PR); Global Domain (GD); Value (VA); Characterization Class (CH); Scope (SC); Constraint (CO); Keywords (KW); Synonym (SY); Unit (UN); Exceptions (EX); Currency (CU) together with their joint attributes.
The European Language Certificates (TELC)	As a leading provider of language testing procedures, TELC is a recognised authority in most European countries. TELC represents the most comprehensive system of language tests in Europe, offering communication-based examinations in the major European languages including English, French, Italian, Czech, Portuguese, Russian, Spanish and German. - TELC actually offers over forty different language examinations for "Basic users (A1, A2)", "Independent users (B1, B2)" and "Proficient users (C1, C2)" (ref. to www.telc.net). TELC follows to the recommendation of The Committee of Minister of the Council of Europe on the use of the Common European Framework of Reference for Languages and the promotion of plurilingualism [CM/Rec(2008) 7E]. Web-based - free-of-charge - language tests according TELC (level A1 - B2) may be found e.g. at http://sprachtest.cornelsen.de/html/en_startseite.html.

Authors of these Guidelines

These guidelines "Development of eCl@ss Language Versions" were prepared during April to November 2009 by:

name	company / institution	eCl@ss function
Felix Hettig	IW Consult GmbH	Head office, CRM
Thomas Holzapfel	RWE Service GmbH	member of board
Matthias Kenter	IW Consult GmbH	service provider
Claude Pichot	AFIM	member of board
Reinhard Pohn	Paradine GmbH	member
Peter Reusch	University of Applied Sciences Dortmund	member of Scientific Advisory Board

Enactment

By decision of the board of eCl@ss on December 16th, 2009 these guidelines are put into effect as to date.

Cologne, December 16th, 2009

On behalf of the Board of Directors of eCl@ss e.V.:

Friedhelm Hausmann
(Chairman of Board of eCl@ss e.V.)

Peter Rost
(Vice Chairman of Board of eCl@ss e.V.)