

ISO Central Secretariat ITTF

Guidance to the Preparation of Standards Documents on SEDRIS Technology

1 Introduction

This document completes WG8 action Item 14-13 and records guidance received from ISO Central Secretariat ITTF obtained through email exchange, and through discussion and documents provided at a 3 April meeting at ISO CS in Geneva, Switzerland

The following ISO ITTF present and former staff have provided input into these guidelines:

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2 General Guidance for the Preparation of Documents:

- a. **Original Source Material:** Whenever material is copied or adapted from another source, written permission from the owner of the material shall be sought to use it unless modified by the following examples.

Other International Standards: Blanket permission is given to use any material from other ISO and IEC standards as we wish. No explicit permission is necessary, but the reference it came from shall be properly cited.

Specifications of other International Organizations: Permission shall be obtained to use any material, specifically from the:

International Hydrographic Office (IHO)

International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA)

World Meteorological Organization (WMO)

International Civil Aviation Organization (ICAO)

United Nations (UN) (including United Nations Economic Commission for Europe (UNECE))

International Telecommunications Union (ITU)

International Conference of Building Officials (ICBO)

North Atlantic Treaty Organization (NATO)

Petrotechnical Open Software Corporation (POSC)

Specifications of National Organizations: Permission shall be obtained to use any material, specifically from the:

American Meteorological Society (AMS)

American Petroleum Institute (API)

US National Imagery and Mapping Agency (NIMA)

Federation of American Scientists (FAS)

US Department of Agriculture (DoA)
US Department of Commerce (DoC)
US Department of Defense (DoD)
US Department of the Interior (DoI)
US Department of Transportation (DoT)
US National Aeronautics and Space Administration (NASA)
US Naval Observatory (USNO)
US Nuclear Regulatory Commission (NRC)

Precedence of Standards: If there are specific aspects addressed by a national standard that are not covered by the ISO standard, the national standard can be referenced in addition to the ISO standard, as long as the reference is limited to those specific aspects. If there is no existing ISO standard on the subject, the national standard can serve as the normative reference. Specific examples:

1. EA VERTICAL_OBSTRUCTION_IDENTIFIER allows use of US Federal Information Processing Standard (FIPS) country codes as part of a string.
2. EE COUNTRY_ID_VALUE_SET allows multiple ways of specifying a country name.

In example 1, the style that allows US and other codes/names sets as alternatives is allowable so long as ISO codes/names were also an alternative in the same set. In example 2 where US FIPS country codes are used to specify part of a string is not allowed. as part of a string. This is not allowable and only the two character ISO codes should be used in this case. If there are countries in the FIPS codes that are not in the ISO codes (and the two character codes did not conflict with an ISO 2 character code) those two characters could be used as additional allowable contents for that part of the string, but shall not over-ride or change any of the ISO Codes.

(Note: ITTF is still doing research in this area)

b. Normative References:

If a document is referenced for acknowledgement as a source but the user of the standard does not actually have to consult it, it is not normative.

The ISO Directives, Part 2 shall not be listed as a normative reference.

The following statement shall be used: “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.”

No RER is required for normatively reference documents from the following list of organizations.

ITU (International Telecommunications Union)
IHO/IHB (International Hydrographic Organization/International Hydrographic Bureau)
IALA (International Association of Marine Aids to Navigation and Lighthouse Authorities)

WMO (World Meteorological Organization)
 ICAO (International Civil Aviation Organization)
 UN (United Nations, including the United Nations Economic Commission for Europe (UNECE))
 IAU (International Astronomical Union)
 IERS (International Earth Rotation Service)
 IEEE (Institute of Electrical and Electronics Engineers)

c. Reference Styles:

The following examples are acceptable.

ROOF_STYLE	HIP	[NSOED, "hip-roof"]
ROOF_FRAMING_TYPE	METAL_TRUSS	[NSOED, "truss", 3.b]
ROUTE_CONSTRUCTION_TYPE	BUILDING_PASSAGE	[FACC, Annex B, CCA:4]
RADIO_STATION_TYPE	DIRECTIONAL_BEACON	[S57A, Attribute, CATROS:2]

The system of dividing references into AR, PR, IR, DR is acceptable.

Format of Citations: The status of the reference in the main text should be clear from its wording and context; in principle it shouldn't be necessary to state explicitly whether it is normative or bibliographic. Note that the usual reference style is to give the full document i.d. number (with year of publication if the reference is dated), e.g. "ISO/IEC 8632-1". If it is felt that a more abbreviated form, such as [I8632-1] is necessary, you can do so but it should be explained somewhere, for example in a note in the normative references clause.

References to Multipart Standards: For tags for the various parts of ISO 31, use [I31-5], [I31-12], etc., rather than [I315], [I3112], etc, in order to avoid any confusion with ISO 315 and ISO 3112, etc.

Reference format: Use the form: "ISO 31-6:1992, 6-25.a" (when citing a specific element of text, the year of publication of the standard must be included in the reference). But if a shorthand reference is provided that has a hyperlink to the full reference in the tables (but not in the main text!) that is OK.

ISBN format: Use no dashes or spaces in ISBN numbers.

Public availability of references: Normative references must be publicly available (as clearly stated in the Directives); the only exception to this rule is for references to draft standards (e.g. WD or CD) for which there is the assurance of the responsible TC or SC that the draft will reach DIS stage (i.e. be publicly available) within a reasonable length of time. Documents that will never become publicly available shall not be cited as normative references.

d. Bibliographic References: Put any PRs whose text was already incorporated into the Bibliography instead of the normative references.

- e. **Order of Items in Reference and Bibliography:** List ISO and IEC standards first and then list the other documents. Intermix ISO and IEC and ISO/IEC standards based on standard number.
- f. **Hyperlinks to ISO Standards:** The safest way is to give just the hyperlink to the main ISO web page <http://www.iso.org/> (note change of domain; iso.ch is still valid but iso.org is now preferred).

Direct hyperlinks to the online catalogue listings are long, not very user friendly (for example: <http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=31537&ICS1=35&ICS2=40&ICS3=>) and potentially subject to change.

URLs at Page Bottom: The URLs will be in the style of this EDCS example:
http://www.iso.ch/iso/en/ittf/PubliclyAvailableStandards/ISO_IEC_18025_Ed1.html

URLs at the bottom of pages shall only be to ISO sites.

- g. **Number Notation:** Do not include any note about the use of a comma as a radix symbol, since use of the comma as the decimal sign is a basic rule in the drafting of international standards; other basic rules include the use of SI units and their symbols as specified in ISO 31, the use of "shall" to express requirements, etc. None of these rules are explained in the standards themselves; they are however given in the ISO/IEC Directives, which are available to the public on the ITTF and ISO websites.

For the example typical case where a comma as a separator and a radix symbol might be confused use (1,5, 2,6, 2,0), that is, use two spaces after a comma as a list separator.

- h. **Font Style in Equations:** The rule is that symbols representing variables shall be in italic type, while numbers, symbols representing constant values (e.g. pi), unit symbols and mathematical signs and symbols shall all be upright (see ISO 31). This rule applies to both equations and to symbols appearing in the text of the standard. In general variables shall be italicized, constants not italicized.
- i. **Presentation Style for Examples:** The usual ISO style for examples is to list in a separate paragraph with EXAMPLE(S) in full caps, do not use colon but rather set off with two spaces as follows:.

EXAMPLES: Runways, taxiways, primary roads, parking lots, city squares.

Such a list of examples is normally understood to be non-exhaustive; therefore it is not necessary to indicate this explicitly.

The use of "etc." is discouraged, but not forbidden. If there are instances where "etc." is the only suitable option then it is OK to use it.

- j. **Annexes:** According to the current rules, annexes shall appear at the end of the document in the order that they are cited in the main text of the standard. All annexes shall be cited in the main text, and the status (normative or informative) of each annex shall be made clear by the way in which it's referred to in the main text.

- k. **HTML Versions:** Can use both 4.01 transitional and version 4.1 as needed. A major issue is whether browsers other than IE, and especially the browsers for non-PC platforms as well as the various freely distributed browsers adequately support the format. Add a disclaimer to the front of a document published in HTML listing the version and the minimum level of popular browsers that are required to properly view the document. ISO needs this data for the CD_ROM “cover”.
- l. **Numbering:** Tables and figures shall be sequentially numbered throughout the document starting at 1 in the SRM. It is permissible (although strongly discouraged) to number these on a per-clause basis in the EDCS.

List numbering shall be re-started with the first number (a) for each sub-list. This applies throughout the document as well as to all SC 24 standards

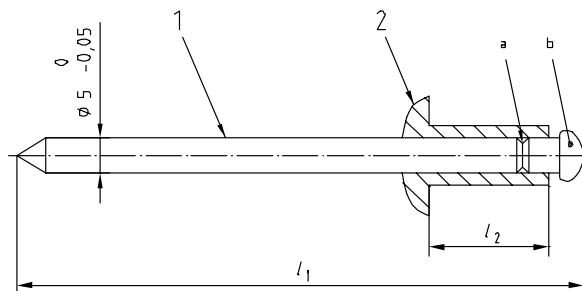
- m. **Using CBE and other non-ISO Style Guides:** "Scientific Style and Format, The CBE Manual for Authors, Editors, and Publishers", can be followed for editorial aspects not covered by the ISO/IEC Directives or other ISO standards, which specify layout and presentation rules (e.g. ISO 690 for bibliographic references). For aspects such as document layout, headings, references, figure layout, etc., obviously ISO rules apply rather than those given in the document cited.

n. The style for Figures:

1. The figure designation and title shall be separated by an Em dash.
2. Must have explanatory keys for all figures. The Key in Part 2 6.6.5.5 (Choice of letter symbols, style of lettering, and labelling) is the example to be followed in providing a “legend” for a figure.

EXAMPLE

Dimensions in millimetres



l_1	l_2
50	10,5
70	15
90	19

Key

- 1 mandrel shank
- 2 blind rivet head

The mandrel shall be designed such that the blind rivet end deforms during installation, and the shank may expand.

NOTE This figure illustrates a type A rivet head.

- ^a The break area shall be milled.
- ^b The mandrel head is commonly chromium plated.

Figure # — Blind rivet

3. The "n" in Rⁿ should be in times new roman italics.

n. Index:

The index shall be generated automatically and not composed manually.

Header logos and separator bars shall not be used.

- o. Table of Contents:** The levels shown in the table of contents is effectively a question of judgment - the longer the document the more detailed the table of contents becomes. Two or three levels are the most common. Annexes are listed in the table of contents but Tables and Figures are not.
- p. Text Justification:** The text shall be fully justified.
- q. Style Differences in American and International Grammar:** International (and following that British) spelling and grammar shall be used. The book "Scientific Style and Format, The CBE Manual for Authors, Editors, and Publishers" has a whole chapter on differences between US and UK spelling and grammar, which may be used as a guide.
- r. Spell Checking:** ITTF uses the British English MS Word dictionary and override certain corrections, such as words ending "-ize" and "-ization", for which the "z" is kept, but the British spell-checker wants to change to "s".
- s. Variant Spellings:** Use the main NSOED spellings and not the variant ones even though the variants may be in the NSOED. For example, use "colour" and not "color." A "variant" spelling can be used if it corresponds to the commonly accepted spelling for the field of application.
- t. Botanical Names (and other Scientific Names):** Follow the guidance in "Scientific Style and Format, The CBE Manual for Authors, Editors, and Publishers".
- v. Country Specific Alternate Names:** Use the ISO 3166 codes to identify country-specific terms or concepts. In the case of national variants of defined terms, as in a vocabulary standard, the rule is to identify the national variants by putting the country code after the term, e.g.:

lift GB
elevator US
<definition>

When this data is embedded within a sentence, the form shown in the following example is acceptable

COUNTY_HALL: A <BUILDING> that houses the main offices of a county government; a county hall or court-house (US).

- w. **Scope Statements:** Scope statement shall be narrow and precise, claiming applicability only areas where the standard has actually been proven to apply. If there is a possibility that the standard “may” apply to other areas also, these can be listed, but the wording shall clearly indicate “ aspects of this International Standard could apply to ... “. If any area listed in a scope statement falls within the area of responsibility of another ISO or IEC committee or any other international organization that defines standards or specifications, establish liaison with that organization and invite them to comment on the draft standard.
- x. **Use of Dashes rather than Commas:** There is no policy or rule on using dashes rather than commas in ISO standards to set off phrases, dashes are allowed.
- y. **Use of “if...then...”.** Part 2 of the directives themselves use "if ... then ..." in several places. The use is permissible but it seems to be a programming language and a spoken form of English that is not often used in formal writing.
- z. **Style of Presentation or Verbal Form:** Some constructs in Part 2 of the directives, especially how examples are cited, are not the correct style for an IS. Part 2 is not an IS itself and upon close review it can be seen to contain many mistakes.
- aa. **Clause 3 Definitions:** The form of a definition shall be such that it can replace the term in context.
- bb. **Foreword:** The following language and style shall be used

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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

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

[Delete if patent rights are identified in the Introduction (see ISO/IEC Directives, Part 2, 2001, Annex H)]
 Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC was prepared jointly by Joint Technical Committee ISO/IEC JTC 1, *Information technology*,
[include here the subcommittee, if appropriate]

Subcommittee SC,

Where a project is developed jointly (i.e. with the aid of more than one committee and/or an external organization), include the information here, as appropriate.

and ISO/TC,

in collaboration with
[identify here the collaborating external organization(s) — not liaison organizations]

in collaboration with ITU-T. The identical text is published as ITU-T Rec.

[Delete/fill in as applicable] This International Standard/part of ISO/IEC is technically aligned with ITU-T Rec. but is not published as identical text.

[Delete/fill in as applicable] This edition cancels and replaces the edition (ISO/IEC), of which has/have been technically revised.

[Delete/fill in as applicable] ISO/IEC consists of the following parts, under the general title

- Part 1:
- Part 2:
- Part 3:
- Part 4:
- Part 5:

— Part 6:
— Part 7:
— Part 8:
— Part 9:
— Part 10:

Note also that by the current Directives, Part 2, “forewords no longer contain a statement specifying which annexes are normative and which are informative.”

3. ISO/IEC 18025 EDCS Guidance:

- a. **Concept Definitions and References:** Definitions and references should be based on and refer to other ISO and IEC standards where possible. In particular, there are ISO standards for terminology within the building industries The definitions from these standards shall be used and these standards shall be referenced providing the concepts are the same and it is feasible to do so.

Concept definitions and text in general shall not use “or” unless “exclusive or” is intended. Even then, language should be found that makes it clear that only one item from the list is allowed, such as “one of:” or “either A or B”. Note the problem with ambiguous language on translation because “or” translates to “exclusive or” in French, so “both” would not be allowed. The term “and/or” may be used to express “inclusive or”.

The word “see” shall not be used to introduce a cross-reference to a term defined in the Terms and definitions clause. Instead, just the term number shall be given in parenthesis. Example, “(see 3.2.19)” shall be changed to “(3.2.19)”. The forms "see Clause 3" and "see 6.2.3" can be used, and a special exception has been granted to EDCS to use both a subclause number and the title of the subclause to provide a long enough target for the user to select a hyperlink.

Table Header: In order to avoid conflict with ISO rules for terms and definitions, change the EDCS table header to be “Concept Definition”.

Structure and “and/or”: It is OK to use "and/or" in a definition; using just "or" in this context is normally taken to mean "one or the other, not both".

NSOED Terms: EDCS use had “modified” many NSOED definitions sufficiently to repeat them in full in our standard. However, permission must be sought from the publishers of the NSOED (Oxford University Press) to use the “derivative” definitions in the EDCS.

- b. **Databases and Spreadsheets:** A database and spreadsheet can be included on the CD. Submit them to ITTF along with the final HTML file of the standard for FDIS ballot. In the accompanying correspondence, provide an explanation of the content and purpose of these files, so that a) an explanation of the various files can be included on the cover of the CD and b) determination can be made on whether this additional material merits a change of price category for the sale of the standard.

4. ISO IEC 18026 SRM Guidance:

- a. Publishing in MathML:** ISO has no experience in MathML. Documents of this size and complexity are best left on MS Word.
- bb. Use of in-line GIFs:** For special symbols that run along in sentences with the rest of the text. Steve Carson needs to add based on Guidance from Franck Perrad.
- cc. MathType:** ISO has used MathType version 4 for a long time but does not use Version 5. It is routine to produce PDFs from equations in MathType. There are no known problems with this process.
- dd. Master Document Files:** Each clause should be a separate MS Word file. Master documents should not be used.