

Significant changes to ISO/IEC Directives Part 2 (2021 edition)

Brian Stanton, ISO
Alisdair Menzies, IEC
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Overview

- List of main changes
- Review of main changes
- Timelines

List of main changes compared with 2018 edition

- **3.1.8:** Addition of a new note to entry clarifying the permitted content of Technical Reports
- **6.5:** Introduction of the notion of supplementary content (files or data accessible via URL)
- **6.6:** Introduction of the notion of subdivision of the subject matter into profiles
- **7.1:** Clarification - expression of provisions shall be limited to the verbal forms defined in Table 3 to Table 7
- **7.4:** Clarification - negative permissions are no longer permitted
- **8.6:** Addition of a new subclause on inclusive terminology
- **Clause 9:** General review and reorganization of the content
- **9.2:** Permission of an alternative representation of numbers, symbols for variable quantities and numerical values for programming languages, pseudo-code and mark-up languages
- **27.3, 28.3.1 and 29.3:** Permission of an alternative system of numbering for formulae, figures and tables
- **Clause 31:** Admission of the inclusion of trademarks or trade names for reasons of public interest or public safety

3.1.8 Addition of a new note to entry clarifying the permitted content of Technical Reports

3.1.8

Technical Report

TR

document (3.1.1) published by ISO or IEC containing collected data of a different kind from that normally published as an *International Standard* (3.1.4) or *Technical Specification* (3.1.5)

Note 1 to entry: Such data may include, for example, data obtained from a survey carried out among the national bodies, data on work in other international organizations or data on the *state of the art* (3.4) in relation to standards of national bodies on a particular subject.

Note 2 to entry: Prior to mid-1999, Technical Reports were designated as Technical Reports of type 3.

Note 3 to entry: The content of a Technical Report is not permitted to include *requirements* (3.3.3), *recommendations* (3.3.4) or *permissions* (3.3.5).

6.5 Introduction of the notion of supplementary content (files or data accessible via URL)

6.5 Supplementary content

Certain documents contain supplementary material that is best provided in electronic formats, which differs from that of the main content.

EXAMPLE 1 Data sets, code components, test forms.

This supplementary material can be provided as an attached file or a hyperlink (URN or URL).

Supplementary content shall only be provided in this way if it cannot reasonably be included in the main body of the text.

Each item of supplementary content shall be explicitly referred to within the text in order to explain its context and use.

EXAMPLE 2

"The conformance bitstreams are provided at:

<http://standards.iso.org/iso-iec/23008/-8/ed-2/en>"

EXAMPLE 3

"The supplementary files associated with this document are located at:

<https://www.iec.ch/tc82/supportingdocuments>"

This is not a new rule – it formalises an existing practice at ISO and IEC:

- at ISO, supplementary content is referred to as URNs or electronic inserts (see relevant Wiki pages)
- at IEC, supplementary content is provided either as a *software supplement* (see AC/40/2009) or as a *supporting document* (see AC/30/2018)

6.6 Introduction of the notion of subdivision of the subject matter into profiles

6.6 Subdivision of the subject matter into profiles

One of the primary objectives of standardization is to minimize variation and encourage single common standards for worldwide use. However, in some cases, it is necessary to choose sets and subsets of characteristics from a common defined framework for specific applications.

EXAMPLE 1	Application-specific variants of a standard or set of standards.
EXAMPLE 2	User profiles, which are a defined subset that is valid for a specific type of user.
EXAMPLE 3	A subset of characteristics designed for one specific function.

In such cases, subject matter may be subdivided and organized using profiles.

The number of profiles shall be limited, and profiles defined only when essential to meet technical, regional, or application needs.

Profiles shall be specified in accordance with a defined scheme.

Each profile defined by the scheme shall be identified with a unique designator to allow products conforming to differing profiles to be clearly distinguished. The designator should be constructed using a system conforming to Annex C.

Potential incompatibilities and non-interoperability of profiles should be addressed.

3.5 Terminological entry for "profile"

3.5

profile

named combination of options, chosen according to a specified framework, that are necessary to accomplish a particular function

Note 1 to entry: The options can be chosen from one or several documents or subdivisions of documents.

7.1 Clarification: expression of provisions shall be limited to the verbal forms defined in Table 3 to Table 7

7. Verbal forms for expressions of provisions

7.1 General

The user of the document shall be able to identify the requirements he/she is obliged to satisfy in order to claim conformance to a document. The user shall also be able to distinguish these requirements from other types of provision (recommendations, permissions, possibilities and capabilities).

It is essential to follow rules for the use of verbal forms so that a clear distinction can be made between requirements, recommendations, permissions, possibilities and capabilities. **To avoid risk of misinterpretation, verbal forms that are not defined in Table 3 to Table 7 shall not be used for the expression of provisions.**

The first column in Table 3 to Table 7 shows the preferred verbal form to be used to express each type of provision. The equivalent expressions given in the second column shall be used only in certain cases when the form given in the first column cannot be used for linguistic reasons.

Only singular forms are shown in Table 3 to Table 7.

7.4 Clarification: negative permissions are no longer permitted

Preferred verbal form	Equivalent phrases or expressions for use in certain cases
may	is permitted is allowed is permissible
(→)	(←)
<p>EXAMPLE 1</p> <p>IEC 60512-26-100 may be used as an alternative to IEC 60512-27-100 for connecting hardware that has been previously qualified to IEC 60603-7-3:2010.</p> <p>EXAMPLE 2</p> <p>Within an EPB document, if the quantity is not passed to other EPB documents, one or more of the subscripts may be omitted provided that the meaning is clear from the context.</p>	
<p>Do not use "possible" or "impossible" in this context.</p> <p>Do not use "can" instead of "may" in this context.</p> <p>Do not use "might" instead of "may" in this context.</p> <p>"May" signifies permission expressed by the document, whereas "can" refers to the ability of a user of the document or to a possibility open to him/her.</p> <p>The French verb "pouvoir" can indicate both a permission and a possibility. If there is a risk of misunderstanding, the use of other expressions is advisable.</p> <p>Negative permissions are ambiguous and should not be used. Rather than using negative permissions, either rewrite the sentence to state what is permitted, or rewrite as a requirement/recommendation not to do something.</p>	

8.6 Addition of a new subclause on inclusive terminology

8.6 Inclusive terminology

Whenever possible, inclusive terminology shall be used to describe technical capabilities and relationships. Insensitive, archaic and non-inclusive terms shall be avoided. For the purposes of this principle, "inclusive terminology" means terminology perceived or likely to be perceived as welcoming by everyone, regardless of their sex, gender, race, colour, religion, etc.

New documents shall be developed using inclusive terminology. As feasible, existing and legacy documents shall be updated to identify and replace non-inclusive terms with alternatives that are more descriptive and tailored to the technical capability or relationship.

Clause 9 General review and reorganization of the content

9 Numbers, quantities, units and values

9.1 Representation of numbers and numerical values

9.2 Representation of numbers, symbols for variable quantities and numerical values for programming languages, pseudo-code and mark-up languages

9.3 Quantities, units, symbols and signs

9.3.1 Quantities

9.3.2 Units

9.4 Values, intervals and tolerances

9.4.1 General

9.4.2 Limiting values

9.4.3 Selected values

9.2 Permission of an alternative representation of numbers, symbols for variable quantities and numerical values for programming languages, pseudo-code and mark-up languages

9.2 Representation of numbers, symbols for variable quantities and numerical values for programming languages, pseudo-code and mark-up languages

Where the document defines, describes, refers to or contains programming language, pseudo-code or mark-up language text, the representation of the numbers, symbols for variable quantities and numerical values shall follow the syntax of the appropriate programming language, pseudo-code or mark-up language.

27.3 Permission of an alternative system of numbering for formulae

27.3 Numbering and subdivision

Mathematical formulae can be numbered in a document, for example for cross-referencing purposes. Arabic numbers in parentheses shall be used, starting with 1.

[...]

By default, the numbering shall be continuous and independent of the numbering of clauses, tables and figures. However, mathematical formulae may be numbered with a prefix and a number, where the prefix denotes the clause number, and the second number denotes the sequence of the formulae in the clause. The numbering system chosen shall be consistent within any given series. Subdivision of mathematical formulae [e.g. (2a), (2b), ...] is not permitted.

When mathematical formulae in annexes are numbered, the numbering restarts and is preceded by the annex letter.

28.3.1 Permission of an alternative system of numbering for figures

28.3.1 Figure designation

Figures shall be designated "Figure" and numbered. By default, figures are numbered with Arabic numerals, beginning with 1, and the numbering shall be continuous and independent of the numbering of the clauses and of any tables. A single figure shall be designated "Figure 1". However, figures may be numbered with a prefix, where the prefix denotes the clause number, and the second number denotes the sequence of figures in the clause. The numbering system chosen shall be consistent within any given series.

In annexes, the figure numbering restarts and the number is preceded by the annex letter (e.g. Figure A.1, Figure A.2, ...).

29.3 Permission of an alternative system of numbering for tables

29.3 Numbering and subdivision

Tables shall be designated "Table" and numbered. [By default, tables are numbered with Arabic numerals, beginning with 1, and the numbering shall be continuous and independent of the numbering of the clauses and of any figures.](#) A single table shall be designated "Table 1". [However, tables may be numbered with a prefix where the prefix denotes the clause number, and the second number denotes the sequence of tables in the clause. The numbering system chosen shall be consistent within any given series.](#)

Further subdivision [e.g. Table 1 a)] is not permitted. A table within a table is not permitted. Subdivision of a table into subsidiary sections with new column headings is not permitted.

It is often better to create several tables rather than trying to consolidate too much information into one table. The simpler the presentation, the better. [Complex graphical representations within tables should be avoided.](#)

If a very complex table is necessary, it can be better to include it as a software supplement to the document.

In annexes, the table numbering restarts and the number is preceded by the annex letter (e.g. Table A.1).

Clause 31 Admission of the inclusion of trademarks or trade names for reasons of public interest or public safety

31 Use of trade names and trademarks

[...]

If it is considered essential for reasons of public interest or public safety to refer to commercially available products, trade names or trademarks may be provided, with a footnote as shown in Example 4.

EXAMPLE 4

This (these) [trade name(s) or trademark(s)] is (are) provided for reasons of public interest or public safety. This information is given for the convenience of users of this document and does not constitute an endorsement by ... [ISO or IEC].

Timelines

- Publication of ninth edition: May 2021
- New rules applicable to all enquiry drafts and to all final drafts registered after October 2021

Thank you!

Brian Stanton, ISO
Alisdair Menzies, IEC

