



ISO/TC 184/SC 4/QC "Quality committee"
Convenorship: AFNOR
Convenor: Dubillot Véronique Mme



ISO/TC 184/SC 4/QC N 619 Figuring out your figures, report

Document type	Related content	Document date	Expected action
Meeting / Presentation	Meeting: VIRTUAL 8 Nov 2021	2021-11-11	INFO



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ISO/TC 184/SC 4 Industrial Data

Quality Committee

Véronique Dubillot / Melissa Harvey / Changsoo Lee

Figuring out your figures!

2021-11-09



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Objective

Today's objective is to review the rules around the usages of figures. This overview will span from the creation to the drafting of a document.



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Agenda

- **ISO Code of Conduct**
- Drafting Standards material
- Figuring out your figures!
- Quiz



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ISO code of conduct

Respect others	Uphold consensus and governance
Behave ethically	Agree to a clear purpose and scope
Escalate and resolve disputes	Participate actively and manage effective representation
Work for the net benefit of the international community	

Respect others	<p>We are committed to:</p> <ul style="list-style-type: none"> ▶ Respecting others and the professional culture of international standardization within ISO ▶ Conducting ourselves in a professional manner ▶ Respecting others and the diversity of professional opinions – scientific, technical, or otherwise ▶ Embracing the concepts of compromise and consensus-building in the development of ISO standards ▶ Accepting and respecting consensus decisions of the committee or working group and of the ISO/TMB ▶ Making the effort to hear and understand the views of all, regardless of the diversity of acceptable accents and levels of command of the language of the meeting
Behave ethically	<p>We will:</p> <ul style="list-style-type: none"> ▶ Act in good faith and with due care and diligence ▶ Avoid collusive or anticompetitive behavior ▶ Promote a culture of fair and ethical behavior, without prejudice against any ISO actor based on any human differences ▶ Refrain from debate and discussion that is disrespectful, threatening (mental or physical), or otherwise unprofessional in tone or which is offensive to other participants and damaging to ISO and the overall process of achieving consensus ▶ Treat all persons with respect and fairness and not offer or appear to offer preferential treatment to any person or group ▶ Refrain from disseminating false or misleading information or from withholding information necessary to a full, fair, and complete consideration of the issues ▶ Not harass, threaten or coerce any participant in an effort to persuade or sway votes. This does not preclude professional, respectful debate and exchange of views that contain information and/or present perspectives intended to persuade other participants to lend their support or opposition to issues, proposals, etc. in order to ultimately achieve consensus ▶ However, efforts to persuade support or opposition during the development of ISO deliverables shall not be done by committee chairs, managers, WG convenors or project leaders who must be neutral international facilitators of the work
Escalate and resolve disputes	<p>We will identify and escalate disputes in a timely manner to ensure rapid resolution.</p> <p>We will uphold the agreed dispute resolution processes.</p>

Work for the net benefit of the international community	We recognize that the development of International Standards is for the net benefit of the international community, over and above the interests of any individual or organization. We are committed to advancing International Standards within their agreed scope and we will not hinder their development.
Uphold consensus and governance	We will uphold the key principles of international standardization: consensus, transparency, openness, impartiality, effectiveness, relevance, coherence and the development dimension.
Agree to a clear purpose and scope	We are committed to having a clear purpose, scope, objectives and plan to ensure the timely development of International Standards.
Participate actively and manage effective representation	<p>We agree to actively participate in standards development projects.</p> <p>We will make our contributions to the work through the official procedures in accordance with the ISO/IEC Directives.</p>

<https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100397.pdf>



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Drafting Standards material

ISO

ISO/IEC Directives, Part 2 ★

Principles to structure and draft documents intended to become International Standards, Technical Specifications or Publicly Available Specifications.

ISO House Style ★

Guidelines on the language, formatting and presentation of ISO documents.

ISO Simple template

Rice model ⚠

This is a model document of an International Standard demonstrating a simple application of the ISO/IEC Directives, Part 2, with accompanying explanations and information about the content.

ISO Drafting Made Efficient

How to draft ISO documents efficiently, making them easier to read and implement.

Best practices for vocabularies and terminologies

Tips for preparing your draft.

Guidelines for the submission of text and graphics to ISO/CS ★

Tips for submitting documents that contain tables, graphics and mathematical formulae.

Guidance on legal statements in ISO standards

Tips for preparing your draft.

DRG Directives ★

Guidelines for the production of drawing files.

NISO STS 1.0 IEC/ISO Coding Guidelines

These Guidelines describe the XML schema as used by IEC and ISO for the XML versions of published standards.

ISO/TC 184/SC 4

SC 4 Supplementary directives — Rules for the structure and drafting of SC 4 standards for industrial data

SC 4 boilerplate
(including ISO boilerplate)



The documents tagged with a red star are useful for our topic

ISO/TC 184/ SC 4/ QC Workshop Arguing the case for figures!



Warning, the detailed wording is not up to date. ISO requires editors always to use boilerplate wording from the latest version of the ISO Simple template



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Purpose or rationale ISO/IEC Directives, Part 2, Clause 28

Figures are a **graphical means of representation** used when they are the most efficient means of presenting information in an **easily comprehensible form**.

Photographs and other media may be used if it is not possible to represent the concept as a line drawing.



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Requirements and guidelines for the submission of drafts to ISO/CS

The figures shall be submitted as **revisable graphics** files for all the deliverables and from DIS to publication stages. (See [Guidelines for the submission of text and graphics to ISO/CS](#)).



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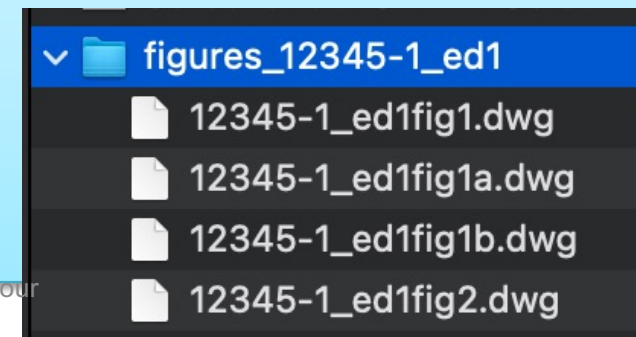
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Requirements and guidelines for the submission of drafts to ISO/CS

We recommend that you follow the [DRG working instructions and directives](#) when creating your graphics. Figure file **name** should follow the convention listed in **3.2 File names**.

See also the 3.3 File names – symbols.

A best practice can be to create a folder when drawing the first figure.





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What the Directives say 1/2

ISO/IEC Directives, Part 2, 2021, Clause 28

- It is recommended to provide a concise figure title.
- 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.

ISO/IEC Directives, Part 2, 2021, Clause 28

- In annexes, the figure numbering restarts and the number is preceded by the annex letter (e.g. Figure A.1, Figure A.2, ...).
- When a figure is continued over several pages, it can be useful to repeat the figure designation, followed by the title (optional) and by “(1 of #)”, where # is the total number of pages on which the figure appears.

New





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What the Directives say 2/2

ISO/IEC Directives, Part 2, 2021,
Clause 28

Subfigures

- In general, the use of subfigures should be avoided whenever possible since it complicates document layout and management.
- Only one level of subdivision of a figure is permitted. Subfigures shall be identified by a lowercase letter [e.g. Figure 1 may comprise subfigures a), b), c), ...]. Other forms of identification of the subfigures such as 1.1, 1.2, ... and 1-1, 1-2, ... shall not be used.
- Separate keys, notes and footnotes for subfigures are not permitted.

ISO/IEC Directives, Part 2, 2021,
Clause 28

Referencing

- Each figure shall be explicitly referred to within the text.
- Use, for example, the following forms for references to figures and subfigures:
 - “Figure 3 illustrates...”;
 - “See Figure 6 b)”.





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What the Directives say 3/3

ISO/IEC Directives, Part 2, 2021,
Clause 28

Specific principles and rules

- Standards used in the creation of graphical content, listed in Table 9 provide information regarding the creation of graphical content.
- Choice of letter symbols, style of lettering
- Key and labels to figures
- Notes to figures
- Footnotes to figures

ISO/IEC Directives, Part 2, 2021,
Clause 28

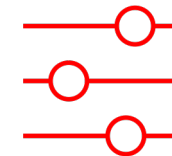
Types of figure

- Mechanical engineering drawings: do not present the different views, details and sections as subfigures.
- Graphical symbols
- Circuit diagrams and connection diagrams
- Flowcharts



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Is it recommended to use subfigures?

No

ISO/IEC Directives, Part 2,
2021, 28.3.2

Figures should not be referred to in the text. Is this true?

No

ISO/IEC Directives, Part 2,
2021, 28.4

The subfigures are identified using numeric characters followed by a parenthesis, i.e. 1), 2), etc.

No

ISO/IEC Directives, Part 2,
2021, 28.3.2

A normative references shall be dated if reference is made to a specific figure?

Yes

Rice model

Submitted graphic files (e.g. diagrams, technical drawings) need to be revisable?

Yes

Requirements and
guidelines for the
submission of drafts to
ISO/CS

09/11/2021

ISO/TC 184/ SC 4/ QC Workshop Figuring out your
figures!



Thank you for your participation

Let's keep in touch!

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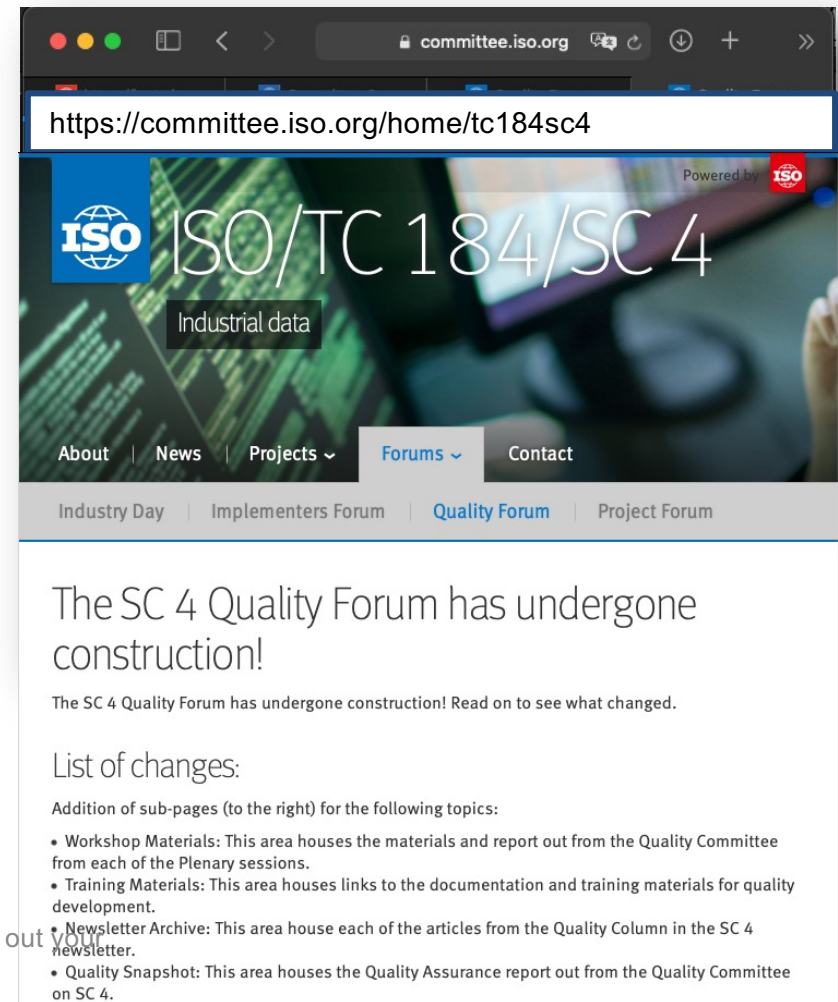
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