ISO/IEC DIR IEC SUP

Edition 16.0 2022-05

ISO/IEC Directives Supplement

Procedures specific to IEC

ISO/IEC DIR IEC SUP:2022-05(en)

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ISO/IEC Directives Part 1

Procedures specific to IEC

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

CONTENTS

FOREWORD

0.1 General

This Supplement to the ISO/IEC Directives comprises modifications and additions to the ISO/IEC Directives that have been approved by the Standardization Management Board for implementation within IEC.

Reference is also made to the list of additional documentation provided on the IEC web site.

Relevant material from this documentation will be regularly included in this Supplement.

Part 1 of the ISO/IEC Directives, together with this Supplement, provides the complete set of procedural rules to be followed by IEC committees.

Generic terminology is used in the common parts of the ISO/IEC Directives and this has been replaced by terminology particular to the IEC in this Supplement (for example, the TMB is called the Standardization Management Board in this Supplement).

Attention is also drawn to the fact that these procedures do not apply to ISO/IEC JTC 1, for which reference should be made to the *ISO/IEC Directives, Procedures for the technical work of ISO/IEC JTC 1 on information technology*.

0.2 The structure of the *IEC Supplement*

The clause structure of the *IEC Supplement* follows that of Part 1 of the *ISO/IEC Directives* to the first subclause level, e.g. to the level of 1.7, 2.1, etc., in order to assist in cross-relating the texts. If there are no comments (see, for example subclause 1.4), it means that there are no IEC-specific requirements or recommendations.

Annexes specific to this Supplement are labelled starting from Annex SA, SB, SC etc.

0.3 Major changes from the previous edition

The following significant changes have been made with respect to the previous edition:

a) To introduce the term "committee" in replacement to "technical committee or subcommittee"

b) To replace the term "Central Office" by "IEC Secretariat"

c) To replace the term "Council" by "IEC Board"

d) To Align the content of Clause 3.2 *Publicly Available Specifications* with the changes introduced in the Directives Part 1 Edition 18 (2022)

e) To Align the content of Annex SB *PAS procedures* with the changes introduced in the Directives Part 1 Edition 18 (2022)

f) To remove Annex SJ from the IEC Supplement and make a reference to the list of IEC forms from the web site by adding a sentence at the end of Clause SI.1 in Annex SI
Note: the numbering of all subsequent annexes is thus updated

g) To Allow for National Committees endorsing the role of Secretariat for Systems Committees

h) To clarify the process for the maintenance of SRDs by using the stability dates and review processes of International Standards to initiate a maintenance project. Then the development process will follow the regular SDR development process

1 Organizational structure and responsibilities for the technical work

1.1 Role of the technical management board

1.2 Advisory groups to the technical management board

1.2.8 Advisory Committee

1.2.9 Strategic Groups

1.2.10 Standardization Evaluation Group (SEG): an open, potentially large group drawn from within and beyond the IEC community, used in the first stage of systems development. Its role is to engage the community of experts, identify the relevant stakeholders, define the general architecture and boundaries of the subject to be addressed and propose a possible programme of work and a relevant roadmap for the implementation of the standardization activities.

1.2.10.1 Standardization Evaluation Groups are established and dissolved by the Standardization Management Board. They have a limited life, normally of 18 to 24 months and shall not have on-going tasks. They are not entitled to develop standards or other IEC deliverables.

A proposal for the establishment of a SEG can be made by

- a National Committee;
- the Standardization Management Board;
- the Chief Executive Officer.

A proposal for the creation of a SEG should include information on as many of the following as relevant:

- Market needs, market relevance and business drivers;
- Regulatory demands or other restrictions in countries or regions;
- Related work or other valuable information from other organizations or Industries;
- List of already identified stakeholders, including IEC technical committees, ISO technical committees and ITU SGs, fora and consortia outside of IEC which should be engaged in the work;
- Recommendation of needed expertise and administrative structure of the SEG;
- Proposal for an appropriate name of the SEG;
- Proposal for a convenor.

1.2.10.2 SEG Membership

The SEG membership should have a strong competence in all the issues within the scope of the SEG. This may require participation of experts outside the normal IEC community.

There shall be an open call for participation of experts from both within and outside IEC, but there is no definitive limitation on numbers.

There is a need for representation from the committees concerned, as well as a representation from interested SMB members and National Committees. Where appropriate, participation from conformity assessment bodies, external organizations, such as ISO, ITU and fora / consortia, is encouraged.

Experts can register through the online portal on the IEC website for the SEG. As part of the open call for SEG experts, the NC of new experts (i.e. experts who are not already registered in the IEC Experts Management Systems), will be notified for information.

It is expected that all interested experts be present and contribute constructively to the work.

A nomination for a Convenor of a SEG should be suggested by the proposer and shall be approved by the SMB. The Secretary is provided by the IEC Secretariat.

1.2.10.3 SEG Tasks

The principal task of a SEG is to evaluate whether there is a need for a new Systems Committee or other technical activity within the IEC. This entails the examination of the following factors:

- market needs, market relevance and business drivers;
- potential participants in the work from inside and outside IEC, including IEC and ISO technical bodies, ITU/SGs, fora, consortia and other groups outside of IEC;
- related work or other valuable information from other organizations or industries;
- environmental, energy and safety conditions considerations for the Systems work;
- regulatory demands or other restrictions in countries or regions;
- a relevant/suitable model or reference architecture;
- an initial set of use cases[1] which can be mapped to the reference architecture or model in order to prove its validity;
- a gap analysis of existing work and activities.

1.2.10.4 SEG Deliverables

- Pamphlet or brochure
- Web page document
- No consensus or voting possible

1.3 Joint technical work

1.4 Role of the Chief Executive Officer

1.5 Establishment of technical committees

1.6 Establishment of subcommittees

1.7 Participation in the work of technical committees and subcommittees

1.8 Chairs of technical committees and subcommittees

1.8.1 Appointment

1.8.1.1 Introduction

Secretariats are strongly encouraged to appoint a Chair from a National committee other than its own. Chairs from the same National committee as the Secretary should only be approved in exceptional circumstances, for example when no other candidate is available.

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[1] **use case:** specification of a set of actions performed by a system, which yields an observable result that is, typically, of value for one or more actors or other stakeholders of the system (definition taken from IEC TC 8).

1.8.1.2 Procedure

Twelve months before the end of the term of office of a committee Chair, IEC Secretariat requests the committee secretariat to indicate whether it wishes to nominate another candidate as Chair or extend the term of office of the current Chair. For the appointment of Chairs, the following procedure is applied:

a) All National Committees are informed of the vacancy and invited to submit nominations to the secretariat within a period of 12 weeks. Nominations shall include a CV and a brief motivation statement.

b) When multiple candidates are nominated, the P-members of the TC or SC shall be asked in a questionnaire (Q document) to rank the candidates in order of their preference. The responses are seen only by IEC CO and the Secretariat is notified of the level of support for each candidate. The secretariat chooses a single candidate from the nominees but is not bound by the results of the questionnaire. However, if a nominee other than the one receiving the most support is nominated, the Secretariat shall provide the rationale for its nomination.

c) When the Secretariat is requesting the extension of the term of office of the current Chair, the nomination is submitted in accordance with d) below.

d) The nomination is submitted, in the case of a TC Chair to the Standardization Management Board and, in the case of a SC Chair to the P-members of the technical committee, for approval within 6 weeks.

e) Any objections to the extension submitted by the SMB members or by the P-members during the voting period shall be distributed immediately to the other members.

f) If the nomination is not supported by either a two-thirds majority of the SMB members voting in the case of a TC or by a two-thirds majority of TC P-members voting in the case of a SC, the procedure shall be repeated.

1.8.2 Vice-Chairs of technical committees and subcommittees

Technical committees and subcommittees can choose to appoint one or more Vice-Chairs at their discretion.

The process for appointing Vice-Chairs shall be the responsibility of the technical committees and subcommittees.

Technical committees and subcommittees are given wide latitude in the scope and portfolio of responsibility of any Vice-Chairs they choose to appoint, however, the following conditions apply:

a) The responsibilities shall be meaningful and not ceremonial

b) The responsibilities shall be clearly stated along with the nomination of candidate(s) for the role.

Vice-Chairs can be appointed for up to three years.

1.9 Secretariats of technical committees and subcommittees

1.9.1

See Clause 1.9.5 in the case of multiple offers.

1.9.2 c) 3)

- Committees, SEGs or other SMB Groups are required as a minimum to publish Decision Lists with Actions within one week after their meetings.

1.9.5 Allocation if multiple offers received

If two or more National Bodies offer to undertake the secretariat of the same committee, a ranked ballot shall be used to identify the preferred candidate for subsequent approval by the technical management board (see 1.9.1).

For new technical committees (see 1.5.7), only those National Bodies proposing to participate as P-members in the new work shall be eligible to vote. For new subcommittees the P-members of the parent technical committee shall be eligible to vote.

For existing committees, the P-members of the corresponding committee shall be eligible to vote.

The technical management board shall conduct the ranked ballot by asking the eligible National Bodies to rank the candidate National Bodies in order of their preference. The National Bodies' individual responses are seen only by the office of the CEO and the ballot result shall be provided to the technical management board.

The allocation of the identified National Body as secretariat of the committee shall be decided by the technical management board.

1.10 Project committees

1.11 Editing committees

1.12 Working groups

Project teams

During the process of approving a new work item (see ISO/IEC Directives Part 1), P-members approving the work item are required to appoint experts able to participate in the development of the project. These experts form a project team (PT) operating under the responsibility of the project leader. Once the project has been finished, the project team shall be disbanded. Each project team should normally have only one project on its work programme. Project teams may either be grouped together into working groups or report directly to the parent committee. In the latter case, project teams shall be designated by the project number assigned to the project concerned.

For other aspects relating to the work of project teams, the procedures for working groups apply (see ISO/IEC Directives Part 1).

1.12.2

The number of participations for a guest is limited to 3 consecutive meetings.

1.13 Groups having advisory functions within a committee

1.14 Ad hoc groups

1.15 Liaison between technical committees and with the IEC Conformity Assessment

1.15.5 With a view to maintaining effectiveness of liaison activities, a Liaison Coordinator (the Chair, the Vice-Chair, the Secretary or a designated expert) may be appointed by a TC or SC to manage and coordinate the liaison activities in the TC or SC as a whole.

The name and contact information of the Liaison Coordinator shall be made available to all National bodies.

A TC or SC may define the roles and responsibilities of the Liaison Coordinator under the following conditions:

a) The Liaison Coordinator should address information requests on emerging technologies in the process of standards development.
b) The Liaison Coordinator should ensure that reports from committee Liaison Officers be submitted to the committee.
c) The Liaison Coordinator, with help of the Technical Officer responsible for the TC or SC concerned, should inform established liaisons of potential new work item proposals (NPs) in order to deal with potential conflicts in earlier stage of standardization.

1.15.6 Committees may establish liaisons with the IEC Conformity Assessment systems when appropriate. These liaisons should be handled in a similar manner to normal internal IEC/TC to IEC/TC liaisons.

1.16 Liaison between ISO and IEC

1.17 Liaison with other organizations

1.17.3 Acceptance (Category A, B and C liaisons)

In IEC Category A or B liaisons are established by the Chief Executive Officer in consultation with the secretariat of the committee concerned. They are centrally recorded and reported to the technical management board.

In IEC Category C liaisons shall be submitted for approval to the technical management board by the committee secretary, with a clear indication of the WG/PT/MT concerned. The submission shall include a rationale for the setting-up of the liaison, as well as an indication of how the organization meets the acceptance criteria given in 1.17.4.2. The committee secretary is responsible for administering C-liaisons.

2 Development of International Standards

2.1 The project approach

2.1.6

The following time limits may be used as guidance when establishing target dates (following approval of the work item):

- availability of working draft (if not supplied with the proposal): 6 months;
- availability of committee draft: 12 months;
- availability of enquiry draft: 24 months;
- availability of approval draft: 33 months;
- availability of published standard: 36 months.

2.2 Preliminary stage

2.3 Proposal stage

2.3.4

In the IEC, the last paragraph of 2.3.4 of ISO/IEC Directives; Part 1 is replaced by the following:

In the case when only an outline is provided with the proposal and where the work is assigned to an existing group, the committee officers, in consultation with the proposer and the Office of

the CEO, may propose a 4 weeks NP vote. This process is intended to be used exceptionally and the default remains the normal 12 weeks vote.

National bodies shall provide a justification statement when voting negatively on an NP. In the absence of such a statement, the negative vote of a National Body will not be registered and considered.

2.3.5

If the required number of nominated experts has not been obtained by the end of the voting period, P-members having approved the work item and having not yet appointed an expert may, within 4 weeks of the release date of the Voting Result, nominate further experts they consider will contribute effectively to the work, without resubmitting the new work item proposal for ballot.

2.4 Preparatory stage

2.5 Committee stage

2.6 Enquiry stage

2.6.1

The stability date shall be noted in the foreword.

2.6.4

When proceeding directly to publication, no changes to the technical content of the enquiry draft shall be made.

2.7 Approval stage

2.7.2

Proposals for the correction of obvious errors associated with a positive vote should be sent directly to the Committee secretary by the end of the voting period.

A National Body may submit comments on positive FDIS votes that are useful solely for the TC/SyC during the next systematic review. These comments are to be noted as “Non-actionable – Comments preserved for historical record only". The Office of the CEO shall electronically archive the “non-actionable” comments.

2.8 Publication stage

2.9 Maintenance of deliverables

2.9.1 Definitions

2.9.1.1
stability period
period over which a publication remains unchanged

2.9.1.2
review
evaluation of the usage of a publication and need for maintenance

2.9.1.3
review date
date when the review of a publication has been completed

2.9.1.4
maintenance (of documents)
keeping existing International Standards (IS), Technical Specifications (TS) and Technical Reports (TR) updated, whilst respecting industries' needs for stable publications

2.9.1.5
maintenance team
MT
group of experts designated to keep a publication or set of publications up to date

2.9.1.6
stability date
end of the stability period, when the committee's decision (withdrawal, confirmation, amendment, revision) has been implemented

2.9.1.7
review report
RR
form, which has the committee's decision after the review of a publication

2.9.2 Review

Each publication shall be reviewed to assess whether it has an acceptable usage prior to evaluating if maintenance is needed.

NOTE A non-exhaustive list of indicators which may be used in the review process is given below:

– adoption or future adoption as a national standard or other publication;
– use by NCs without national adoption or for products manufactured/used based on the publication;
– publication or its national adoption referenced in regulation;
– IEC CO sales statistics.

If the committee concludes that the publication does not have an acceptable usage, then it shall decide to either withdraw it or confirm it for another stability period.

If the committee concludes that the publication has an acceptable usage, then it shall decide if there is a need for maintenance, noting that any minor changes which have no direct consequence for the application of the publication should be saved for future maintenance.

In such cases, when there are insufficient resources for maintenance, the committee shall take the decision to confirm the publication for another stability period. If there are sufficient resources for maintenance, the procedures of 2.9.3.2 apply.

A flow chart for the review process is given in Annex SA.

Alternatively, if there is common acceptance within a working group or maintenance team that maintenance is needed for a given publication, then a recommendation can be submitted to the Committee P-members for decision either at a plenary meeting or by correspondence.

2.9.3 Maintenance

2.9.3.1 Establishment of maintenance team

Each committee should set up one or more maintenance teams, comprised of groups of experts, designated by the P-members of the committee, by correspondence or during a committee meeting and whose task is to keep a publication or a set of publications up to date.

Its members may be the same or different from those who developed the original publication.

The convenor shall be appointed by the committee either by correspondence or at a meeting.

For other requirements relating to maintenance teams, the procedures for working groups apply, see the ISO/IEC Directives, Part 1.

2.9.3.2 Maintenance procedure

The maintenance team shall be activated once the committee has decided that there is a need for maintenance. The maintenance team shall be responsible for, revising or amending publications subject to the maintenance procedure. It shall implement a project plan to enable the maintenance work to be completed by the end of the stability period.

The stability date shall be agreed by the committee. It shall be included in the CDV and also in the FDIS. Upon final publication, this information shall be given on the IEC web site under webstore.iec.ch.

Stability periods should be as long as possible based on an assessment of the maturity of the technology and future, foreseen changes due to development or maintenance of associated publications. Typically stability periods should be between 3 and 12 years.

Individual proposals for changes may be distributed for information only and kept in hand by the committee secretary until the next scheduled review.

If a committee needs to process an amendment or revision before the review date, it may decide to advance the review date and modify the stability date accordingly.

The steps for revision or amendment of a publication are the same as those for preparation of a new publication without the need to pass via the new work item proposal stage (CD (optional for the maintenance procedures), CDV, FDIS, as appropriate) and shall include the establishment of target dates for the completion of the relevant stages.

A new maintenance project may be started at the earliest when the current project is at the enquiry stage (i.e. circulation of the CDV).

Fragmented CDVs (multiple documents with a single vote on each document) may be used where considered appropriate for maintenance projects, however a consolidated document consisting of the approved fragments shall be submitted for the next stage in the project.

2.9.3.3 Review and stability dates

Review and stability dates for a committee’s publications will be available on the IEC website. They shall be included with the Report to the Standardization Management Board for information.

2.10 Corrections and amendments

2.10.3 Amendments

As a general rule, if an amendment constitutes more than 10 pages or 15 % of the base publication, whichever is the smaller, the IEC Secretariat will normally issue a complete new edition and not publish the amendment.

Consolidated versions are prepared by the IEC Secretariat for user convenience consisting of the base edition with the amendment(s) and designated as for example Ed. 1.2 i.e. the first edition consolidated with the first and second amendments.

There are two types of consolidated versions:

a) The old version where changes made to the base edition as a result of the amendment(s) are indicated with a black line in the margin. Sometimes the black line outlines a blank space where content has been removed but with no indication of the previous content;

b) The new version applied to new consolidations that is to say publications consolidated with the first amendment. All the modifications – additions, deletions and replacements – made to the technical content of a publication by its amendment are highlighted in red using the track change functionality of Microsoft® Word.

2.10.4 Interpretation sheets

2.10.4.1 Introduction

Wherever possible, a revision, amendment or corrigendum should be used to clarify errors or ambiguities which may lead to different interpretations in any published normative document. Exceptionally, an interpretation sheet provides a quick formal explanation to an urgent request by a user of a standard (testing laboratory, certification body, manufacturer, etc.). The request may come directly or via an IEC conformity assessment scheme.

It is recognized that it is sometimes difficult to define, what is a “matter of interpretation” for a given standard.

2.10.4.2 Proposal stage

A proposal for an interpretation sheet, including the draft text, may be submitted by

– the secretariat of the Committee which is responsible for the relevant standard,

– a National Committee,

– an IEC committee of Testing Laboratories (e.g. IECEE-CTL),

– any other body of the IEC.

Proposals emanating from the IEC schemes’ technical bodies, e.g. IECEE-CTL or ExTAG, or from “any other body of the IEC” shall be sent via the office of the CEO to the secretary of the Committee which is responsible for the relevant standard.

The Chair and secretary of the committee shall consider whether the subject is really a matter of interpretation within the sense of 2.10.5.1. If this is considered not to be the case, the subject shall be dealt with as a proposal for an amendment of the standard, or if it originated as a “Decision” in a scheme it may remain as a procedural clarification for use in the scheme. The Committee shall inform the secretariat of the scheme of its conclusions, including whether the committee endorses the Decision as being compatible with the standard.

2.10.4.3 Preparatory stage

The secretary of the Committee that is responsible for the relevant standard shall, within 4 weeks, circulate the draft for the interpretation sheet to all National Committees with a request for comments on the draft within a period of one month.

The proposal and the comments received shall be assessed by the Chair and secretary of the Committee and be immediately communicated to the secretariat of the appropriate scheme. If deemed necessary, it may further be discussed at the next meeting of the Committee.

The final wording of the interpretation sheet shall then be agreed upon.

2.10.4.4 Approval process

Interpretation sheets shall be approved by either of the following processes.

2.10.4.4.1 Approval by ballot

The draft shall be distributed in bilingual version to the National Committees for approval with the voting period being 6 weeks. It shall be referenced as a DISH, the title being "Interpretation of Clause x, y, z of IEC: …"

The draft will be considered to have been approved for publication if:

a) two-thirds majority of the votes cast by P-members of the committee are in favour, and

b) not more than one-quarter of the total number of votes cast are negative.

Abstentions are excluded when the votes are counted. In the case where a member body has voted negatively without submitting a justification, the vote will not be counted.

2.10.4.4.2 Approval by panel

Committees may establish an interpretation panel to review and approve Interpretation Sheets on behalf of the committee.

- review panel shall consist of delegates representing a minimum of 4 different P-members (with 1 representative per P-member country) shall be nominated by each interested P-member country and approved by a vote of the committee members. Relevant observers shall be allowed at the discretion of the Chair.
- shall reach a decision to approve an ISH with no less than two-thirds of the panel membership agreeing and no more than one-quarter of the panel members objecting

Abstentions are excluded when the votes are counted. In the case where a review panel delegate has voted negatively without submitting a justification, the vote will not be counted.

2.10.4.5 Publication of interpretation sheets

The draft, when approved, shall be issued by the IEC Secretariat with the heading “Interpretation sheet”.

The interpretation sheet shall be sent to the National Committees and shall be included with the relevant IEC Publication at the time of sale. It shall also be sent to the Secretariats of the appropriate IEC Conformity Assessment Bodies for publication in the CB Bulletin. The issue of interpretation sheets shall be announced by the IEC. The reference numbers of applicable interpretation sheets shall also be given in the IEC catalogue under the publication number.

For a given IEC publication, each interpretation sheet shall be numbered as follows:

TC …/	Publication …/ Date, Edition	I-SH …/

EXAMPLE: TC 61/Publication 60335-2-9(1986) Third edition/I-SH 01.

2.10.4.6 Review

Every 3 years, the committee shall review the interpretation sheets in order to check their applicability.

When an amendment to the publication or a revised publication is issued, the opportunity shall be used to consider the inclusion of the contents of the interpretation sheets in the amendment or the revised text.

Once the contents are included in the amendment or in the revised text, the relevant interpretation sheets shall be withdrawn.

2.11 Maintenance agencies

2.12 Registration authorities

2.13 Copyright

2.14 Reference to patented items (see also Annex I)

3 Development of other deliverables

3.1 Technical Specifications

3.1.1

In the case where a member body has voted negatively without submitting a justification, the vote will not be counted.

3.2 Publicly Available Specifications (PAS)

3.2.2

For the subsequent transformation of a PAS into either a TS or IS, it shall go via the new work item proposal procedure. The immediate transformation of a PAS into another normative document can be made by the parallel circulation of the PAS and a new work item proposal (see Annex SB).

The wording “Pre-standard” may be included on the cover and title pages at the request of the Committee. It shall be in smaller font and situated immediately below “Publicly Available Specification” at the top of the page.

In the case where a member body has voted negatively without submitting a justification, the vote will not be counted.

3.3 Technical Reports

3.3.1

In the case where a member body has voted negatively without submitting a justification, the vote will not be counted.

4 Meetings

4.1 General

4.2 Procedure for calling a meeting

4.3 Languages at meetings

4.4 Cancellation of meetings

4.5 Remote participation at plenary meetings

Remote participation at committee meetings is counted as meeting NC obligation to maintain P-member status at the discretion of committee officers and the IEC CO Technical Officer. Remote participants can vote and comment on any agenda item, where it is emphasized that voting and commenting can be made only by the head of delegation or a delegate designated by the head of delegation. The number of remote participants is not limited.

Remote participation will be conducted on “best effort” basis and remote participants will have no right to require that agenda items be revisited, for example, in case of a faulty connection.

5 Appeals

5.1 General

5.2 Appeal against a subcommittee decision

5.3 Appeal against a technical committee decision

5.4 Appeal against a technical management board decision

5.5 Progress of work during an appeal process

Annex A
(normative)

Guides

A.1.1 Mandatory elements in guides

Guides may contain elements that are considered mandatory. These elements will be identified by using the verb “shall”. When these elements exist in a guide, they are mandatory and shall be followed by all IEC committees developing technical work that falls within the scope of the guide. Any elements of a guide that are not identified by the word “shall” are considered as for guidance and may or may not be followed.

Guides shall no longer contain the designation “Mandatory Guides”.

Guides shall include the following note in the scope of each guide:

Note: The IEC Standardization Management Board (SMB) has decided that Guides such as this one can have mandatory requirements which shall be followed by all IEC committees developing technical work that falls within the scope of the guide, as well as guidance which may or may not be followed. The mandatory requirements in this Guide are identified by the use of “shall”. Statements that are only for guidance are identified by using the verb “should”. (See IEC Directives Supplement Part 1, A1.1)

Annex B
(normative)

ISO/IEC procedures for liaison and work allocation

Annex C
(normative)

Justification of proposals for the establishment of standards

Annex D
(normative)

Resources of secretariats and qualifications of secretaries

Annex E
(normative)

General policy on the use of languages

E.3 International Standards

E.3.1 Preparation of French versions of documents

E.3.1.1 French versions of enquiry drafts (CDVs)

Committee Secretaries shall make available the English version of the CDV(s) they request to be circulated for voting to the relevant Technical Officer in charge of their committee at the IEC Secretariat who will make the CDV text available to any interested National Committee for translation purposes. This shall be followed 6 weeks later by the circulation of the bilingual (English and French) CDV within the committee concerned.

When the French version is submitted within 30 days after the circulation of the English version, it will be circulated separately without changing the deadline for vote.

E.3.1.2 French versions of final draft International Standards (FDISs)

French versions of FDIS will be circulated as received;

Different situations will apply depending on when the French version is received.

If received:

- more than two weeks before the close of the FDIS ballot, it will be circulated for vote together with the English version.
- less than two weeks before the close of the FDIS ballot but before it closes, it will be published with the English version, but with a disclaimer noting that the French version has not been voted on.
- After the close of voting of the FDIS, it will be published when received, but with a disclaimer noting that the French version has not been voted on.

E.3.1.3 French versions of Technical Specifications (TS) and Technical Reports (TR)

Committee secretaries shall make available the English version of the TS(s) and TR(s) they request to be circulated for voting to the relevant Technical Officer in charge of their committee at the IEC Secretariat which will make the TS or TR text(s) available to the French National Committee. The French National Committee will be requested to confirm within one week if a French version of the TS or TR will be provided within the 60 days period. If no response is received after 7 days, a monolingual TS or TR will be circulated.

When the French version is submitted within 30 days after the circulation of the English version, it will be circulated separately without changing the deadline for vote.

When the French version of a TS or TR is received after the 60-day limit and before publication, the IEC Secretariat will consider whether it is possible to publish a bilingual publication without incurring significant delay. If not, the bilingual publication will be published later. If the French text has not been subjected to voting then this will be indicated in the Foreword.

Annex F
(normative)

Options for development of a project

Annex G
(normative)

Maintenance agencies

Annex H
(normative)

Registration authorities

Annex I
(normative)

Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC

Annex J
(normative)

Formulating scopes of committees

Annex K
(normative)

Project committees

K.8 Reallocation of the secretariat

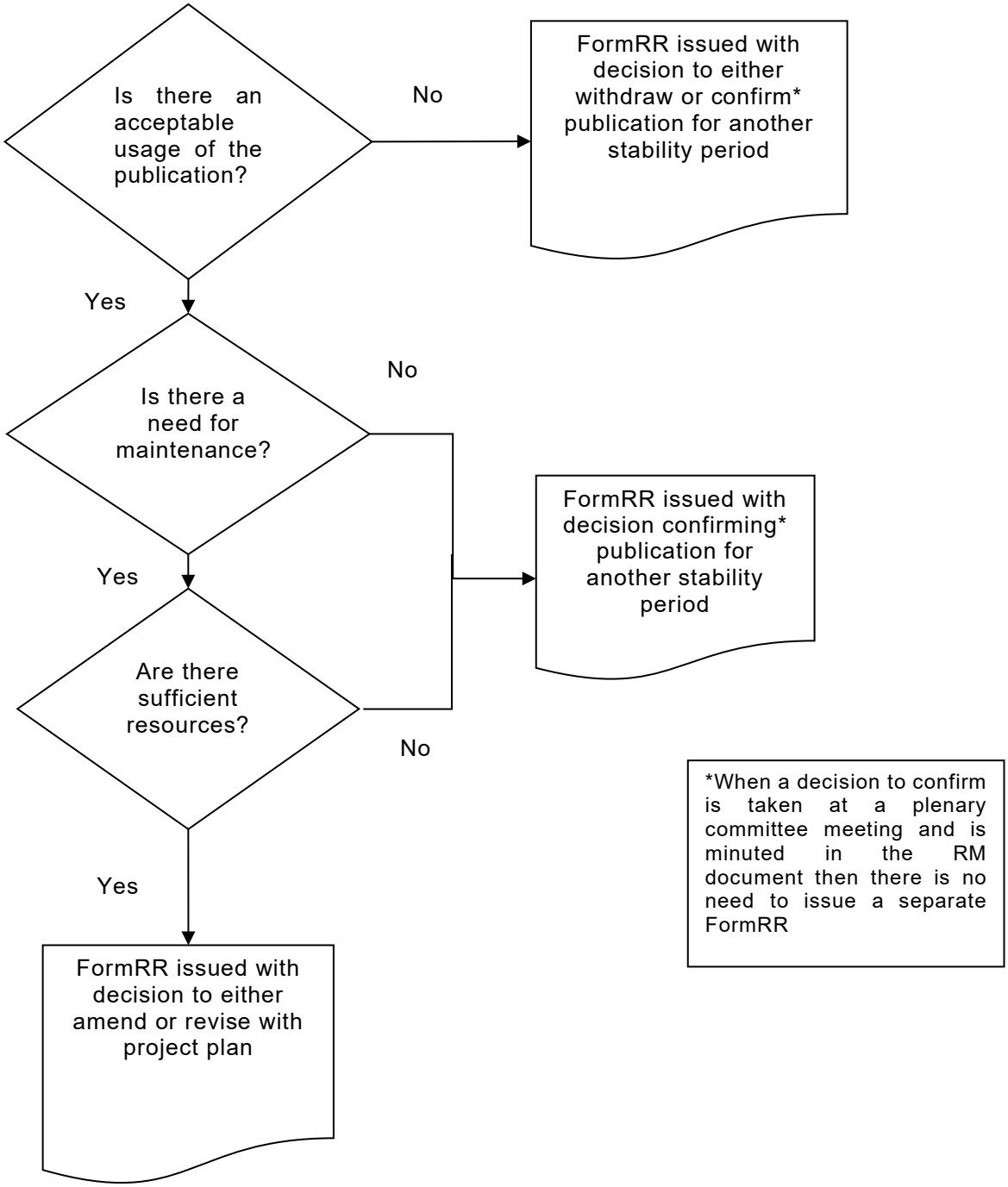
When a National Body relinquishes the secretariat of a project committee the procedures in 1.9 shall be used to allocate the new secretariat.

Annex L
(normative)

Selection criteria for people leading the technical work

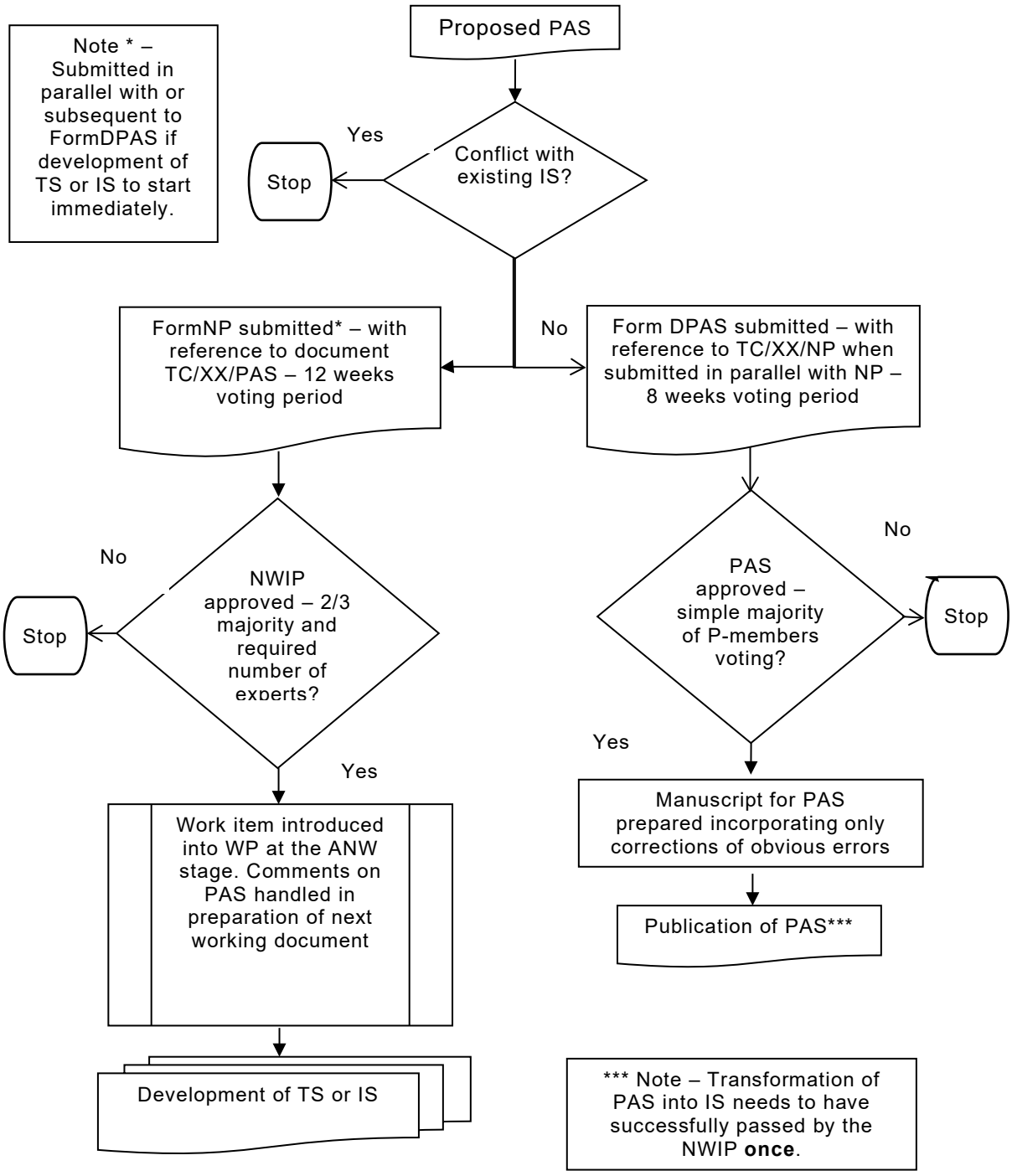
Annex SA
(normative)

Review process – flow chart



Annex SB
(normative)

PAS procedures – flow chart for parallel PAS and IS or TS



Annex SC
(normative)

Inclusion of text concerning particular conditions existing in certain countries (exceptions)

An IEC National Committee may provide a statement to be included in an International Standard, informing the user of the standard of particular conditions existing in its country.

NOTE 1 It is important to note that this statement is purely informative. Any statement of compliance with the standard requires compliance with the normative elements of the standard. The contents of an "in some countries" clause may become normative requirements in a regional/national adoption of the standard in the region/country concerned. Such an adoption is a modified (MOD) version of the IEC standard.

The inclusion of the statement does not need the approval of the relevant committee, or of its Chair or secretary. However, every effort shall be made to find solutions that would make statements regarding particular conditions unnecessary.

NOTE 2 It is preferable that the officers and other members agree to the statement provided by a National Committee. However, in the end it is the National Committee concerned that decides on the statement. If the officers or other members disagree with the statement proposed, there is room for discussion to determine clearly what it is that gives rise to an “in some countries” clause, and possibly make accommodation on both sides, to result in either elimination of the need for the statement, or a document with an acceptable statement. The onus is on the committee officers to identify a situation and make best efforts to resolve it.

Any possible misuse of the clause that cannot be resolved by the Chairs and secretaries of committees should be brought to the attention of the Standardization Management Board for decision.

NOTE 3 If, after serious discussions with the National Committee concerned, the committee officers feel that there is misuse of the clause, they should refer the matter to the Standardization Management Board.

A statement by a National Committee shall be given prior to the circulation of a final Draft International Standard (FDIS) for voting, preferably at a meeting of the relevant committee, or, at least, after consultation with its Chair and secretary.

NOTE 4 The final point at which a National Committee can request the inclusion of an “in some countries” clause is on receipt of the voting report of the CDV. Before the FDIS text is sent to IEC Secretariat, the officers will need to address the statement and, either concur with it, or enter into discussions with the National Committee submitting the statement, referring the matter, if necessary, to the Standardization Management Board.

Two cases of particular conditions are distinguished:

a) *conditions of a permanent nature, such as mains voltages, mains frequencies or climate*: a statement regarding such a situation shall be included in the body of the draft International Standard with reference to the country or group of countries concerned;

b) *differing practices of a less permanent nature*: a statement regarding such a situation shall be included in the foreword or in an informative annex, with a note in the foreword referencing it, of the draft International Standard with reference to the country or group of countries concerned.

It is the prerogative of a National Committee to declare whether a given national situation is case a) or case b).

NOTE 5 It is the submitting National Committee that has final say as to where to place the “in some countries” clause.

When voting on a draft International Standard containing one or more statements regarding particular conditions existing in certain countries, National Committees that are not concerned shall not take the existence of such statements as a reason for a negative vote.

NOTE 6 National Committees are reminded that they cannot vote on such a statement provided by another National Committee. This reinforces the concept of each National Committee having full authority over statements concerning conditions in its country.

Annex SD
(normative)

Criteria for SMB consideration of requests by committees for approval to prepare a separate standard or other document for conformity assessment requirements

In accordance with 33 of the ISO/IEC Directives, Part 2, 2018, product standards, process standards and service standards shall not include elements related to conformity assessment aspects other than testing provisions (and associated sampling). However, committees may, with the prior approval of the Standardization Management Board based on satisfying all of the criteria below, develop a separate standard specifying additional conformity assessment requirements. The Standardization Management Board shall assess requests from committees, to produce a separate standard containing additional conformity assessment requirements, against the following criteria:

a) The product, process or service that is the subject of the principal standard shall not be subject generally to regulation, as in such cases the regulator will specify the relevant conformity assessment requirements.

b) The product, process or service shall be such as to impose significant potential risk to personnel or other equipment or property if it fails to comply in full with the specifications in the standard (e.g. equipment for high voltage live line working).

c) A market need for such a standard shall be identified and there shall be no existing standard that includes the relevant requirements.

d) The committee shall outline the conformity assessment requirements it wishes to include in the standard and the justification for such requirements.

Before deciding whether to approve the request, the SMB will first refer it to the CAB for a recommendation.

Annex SE
(normative)

Transitional period for the adoption by member countries of IEC publications

Transitional periods for the adoption by member countries of IEC publications to define a suitable transitional period from the use of the old to the new edition may be provided on an informative basis.

IEC publications should not specify arbitrary transitional periods that would be inconsistent with the requirements in different markets.

For those publications specifying a transitional period, the following standard text shall be added as a note in the Foreword after the paragraph on maintenance:

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than X months/years from the date of publication.

The standard text given above shall be incorporated into the foreword of publications no later than at the enquiry stage (CDV).

This standard text shall be reproduced in the abstract.

When the transitional period is used for a revised edition, then the following additional text shall be added to the abstract:

> In the meantime, the previous edition can still be ordered by contacting your local IEC member National Committee or the IEC Secretariat.

During the transitional period of a revised edition, both editions of the publications will be available.

Committees should also ensure that there is coherence between the transitional period and stability period. As a general rule, the transitional period should not exceed the stability period.

Annex SF
(normative)

Document distribution within IEC

	PARTY(IES) CONCERNED									
DOCUMENTS	**Proposal initiator**	**TC or SC secre-tariat**	**TC or SC P-members**	**TC or SC O-members**	**Category A liaisons**	**Office of CEO**	**WG/PT convenor**	**WG/PT experts**	**National bodies**	**TC or SC Chair**
Proposal stage										
New work item proposal	✶					●				
Copy of proposal		●				✶				
Comments on the proposal		✶				●				
Copies of proposal & ballot		❍	●	❍	❍	✶ [1)]				❍
Completed ballot			✶			●				
Votes/comments		●				✶				
Result of voting		✶				■				
	●	●	❍	❍	❍	✶ [1)]				❍
Preparatory stage										
Working draft(s) (WD)							✶	●		
Final working draft		●					✶	❍		
Committee stage										
Committee draft(s) (CD)		✶				■				
Comments		❍	●	❍	❍	✶ [1)]				❍
Compilation of comments + proposal		❍	✶	☆	☆	●				
Reaction to proposal		✶				●				❍
		❍	●	❍	❍	✶ [1)]				❍
Enquiry stage										
Committee Draft for Vote (CDV)		✶				■				
Committee Draft for Vote & ballot		❍	●	●	❍	✶ [1)]				❍
Votes/comments		❍	✶	✶		●			✶	
Result of vote and proposal		●				✶			❍	❍
		✶				■				●
		❍	●	❍	❍	✶ [1)]				❍
Text for Final Draft International Standard		✶				■				
Approval stage										
Final Draft International Standard and ballot		❍			❍	✶ [1)]			●	❍
Completed ballot						●			✶	
Final corrections to standard		✶				■	❍			❍
Result of voting		❍			❍	✶ [1)]			❍	❍
Publication stage										
International Standard		❍				✶ [1)]			❍	❍

✶ Sender of document
● Recipient for action
■ Recipient for registration action

1) For a SC, a copy is also sent to Chair and secretariat of the TC for information
❍ Recipient for information
☆ Optional action

Annex SG
(normative)

Reporting of secretariats within IEC

DOCUMENTS	PARTY(IES) CONCERNED							
	WG/PT convenor	WG/PT experts	SC secretariat	TC secretariat	TC or SC P- and O-members and A-liaisons	Office of CEO	Standardization Management Board	President, Vice-President and IEC Board members
SC working group / project team								
– meeting report	✶	○	○					
– progress report to SC meeting	✶	○	○					
TC working group / project team								
– meeting report	✶	○		○				
– progress report to TC meeting	✶	○		○				
Subcommittee								
– meeting report			✶			●		
				○	○	✶		
– progress report to TC meeting			✶			●		
				○	○	✶		
– report to Standardization Management Board			✶ [1)]	✶		●		
				○		✶	○	○
Technical committee								
– meeting report				✶		●		
					○	✶		
– report to Standardization Management Board				✶		●		
						✶	○	○
Office of CEO								
– progress report on the technical work			○	○	○	✶	○	○
Standardization Management Board								
– progress report on the technical work						●	✶	
					○	✶		○

✶ Sender
● Recipient for redistribution action
○ Recipient for information

1) Only if the SC meets in isolation from the parent TC

Annex SH
(normative)

IEC project stages

	SUB-STAGE				
STAGE	**00 Registration**	**20 Start of main action**	**60 Completion of main action**	**70 Completion of further action**	**90 Decision**
00 Definition of new project	**00.00** Registration of **PWI**				
10 Evaluation of project proposal	**10.00** Registration of project proposal for evaluation **PNW**				
15 Evaluation of Interest					
20 Drafting stage	**20.00** Registration of new project **ANW**				**20.98** Abandon **CAN**, **DEL**
30 Consensus building		**30.20** Circulation for comment 1CD			**30.92** Return to drafting phase or redefine project **BWG** **30.97** Merge or split project **MERGED** **30.98** Abandon **DREJ** **30.99** Register for next applicable phase **A2CD**
35 Second level consensus building		**35.20** Circulation for Comment **2CD to 9CD**			**35.91** Draft to be discussed at meeting **CDM** **35.92** Return to drafting phase **A3CD to A9CD** **35.99** Register for next applicable phase **ACDV**
40 Enquiry stage		**40.20** Circulation for enquiry **CCDV**			**40.91** Draft to be discussed at meeting **CDVM** **40.93** Repeat enquiry **NADIS** **40.95** Preparation of text subcontracted to CO **ADISSB** **40.99** Register for next applicable phase **ADIS, DEC**
50 Approval stage	**50.00** Registration for formal approval **RDIS**	**50.20** Circulation for formal approval **CDIS CDPAS**			**50.92** Return to drafting phase **NCD** **50.95** Preparation of text subcontracted to CO **APUBSB** **50.99** Register for next phase **APUB**
60 Publication stage	**60.00** Document under publication **BPUB**		**60.60** Document made available **PPUB**		
90 Review stage					**90.92** Review report **RR**
92 Revision or amendment		**92.20** Document under revision **AMW**			
95 Withdrawal procedure					**95.99** Proceed to withdrawal **WPUB**
99 Withdrawal stage			**99.60** Approval of withdrawal **DELPUB**		

Annex SI
(normative)

Numbering of documents

SI.1 Working documents

All IEC documents intended for circulation bear a reference. This reference is composed of three parts:

a) a number, indicating the committee for which the document is primarily intended;

b) the serial number of the document with respect to the committee;

c) a mnemonic indicating the type of document[2].

EXAMPLE Document **18/21/CD** is the 21st document for circulation in IEC/TC 18 and currently has the status of a committee draft.

The serial number is allocated by the IEC Secretariat at the time of circulation of the document, based on the register of all documents kept by the IEC Secretariat.

All documents intended for circulation shall use a standardized form. The files related to these standardized forms can be downloaded from the IEC web site at the following link: www.iec.ch/standardsdev/resources/docpreparation/forms_templates.

SI.2 Allocation of project number

When a new project is registered by the IEC Secretariat (see ISO/IEC Directives, Part 1), the latter allocates a number to the project. The number allocated remains the same for the ensuing CD, CDV and FDIS and for the published International Standard. The number allocated is purely a registration and reference number and has no meaning whatsoever in the sense of classification or chronological order. The number allocated to a withdrawn project or International Standard shall not be used again.

If the project represents a revision or amendment of an existing International Standard, the registered project shall be allocated the same number as the existing International Standard (with, in the case of an amendment, a suffix indicating the nature of the document). If, however, the scope is substantially changed, the project may be given a different number.

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2 List of mnemonics to indicate the type of document

AC	Administrative Circular	NCC	National Committee Comment (C/SMB only)
CC	Compilation of Comments on CD	NCP	National Committee Proposal
CD	Committee Draft for Comments	NP	New Work Item Proposal
CDV	Committee Draft for Vote	PAS	Publicly Available Specification
DA	Draft Agenda	PW	Programme of Work
DC	Document for Comments	Q	Questionnaire
DIS	Draft International Standard	QP	Question of Principle (SMB only)
DL	Decision List	R	Report
DTS	Draft Technical Specification	RSMB	Report to Standardization Management Board
DTR	Draft Technical report	RM	Report on Meeting
DV	Draft for Voting (C/SMB only)	RQ	Report on Questionnaire
FDIS	Final Draft International Standard	RV	Report of Voting (C/SMB only)
FMV	Four Months' Vote (IECQ CMC only)	RVC	Report of Voting on CDV, DTS or DTR
INF	Document for Information	RVD	Report of Voting on FDIS or PAS
ISH	Interpretation Sheet	RVN	Report of Voting on NWP
RR	Review Report	SBP	Strategic Business Plan
MT	Maintenance Team List	WD	Working Document (SB only)
MTG	Meeting Document		

SI.3 Meeting documents

Meeting documents, as the name implies, are intended for use only at a meeting of a committee. They shall be made available in the “Collaboration Platform” in the area “Plenary meetings” (collaborate.iec.ch) in each committee area. The system gives the possibility to create and upload new documents and classify them in folders by committee. It is possible for committee officers to create their own new folders.

Meeting documents shall be available for a given meeting to the participants only and shall not be distributed afterwards to National Committees unless this is requested by a National Committee or the secretariat of the committee.

As such documents are thus not generally available, no reference to them shall normally be made in the final minutes of the meeting or other documents intended for general circulation. However, where this is unavoidable, a note shall be added to the effect that copies can be obtained from the secretary on request until the next meeting.

A collection of meeting documents may be made available in the form of an archived folder and distributed with an “MTG” reference.

All documents issued at meetings for use in the meeting carry a reference composed of the number of the committee, the place of the meeting and the origin of the document, followed by a meeting serial number.

EXAMPLES

20(Paris/Secretariat)2

20(Paris/Belgium)3

If a National Committee reproduces a meeting document itself and sends copies to the meeting, it should leave a blank space for the serial number to be added at the meeting place.

SI.4 Documents from groups within a committee

The reference number of the documents should avoid giving the impression that they originate from a National Committee and it is recommended that the name of the member should be used and not that of his country.

EXAMPLE

100 WG1(Smith)5 or **100 WG1(Convenor)6**

Annex SJ
(normative)

Rules for terminology work

SJ.1 Scope

Annex SJ provides rules for terminology work in the IEC as well as some rules particular to the development of IEC 60050, *International Electrotechnical Vocabulary* (IEV).

The rules for terminology work are in conformity with the ISO/IEC Directives, Part 2, but Annex SJ provides additional rules specific to the drafting, structuring and presentation of terminology in the IEC. Adherence to these rules helps to ensure that the IEV (available online at www.electropedia.org) remains an exemplary terminology resource in all fields of activity of the IEC (as defined on www.iec.ch), and that terminology drafted by the committees can be integrated in the IEV without any need for modification of the terminological data.

SJ.2 Drafting and presentation of the International Electrotechnical Vocabulary

SJ.2.1 Introduction

Clause SJ.2 has been prepared on the basis of both the experience acquired in the preparation of the IEV by IEC/TC 1, *Terminology*, and the work of ISO/TC 37, *Terminology and other language and content resources*, in which experts of IEC/TC 1 participate.

SJ.2.2 Aim of the IEV

The aim of the IEV is to provide correct, precise and brief definitions of internationally accepted concepts in all fields of activity of the IEC, together with the terms by which these defined concepts shall be known.

It is not intended to cover all the concepts used in IEC standards, but is rather a broad vocabulary, giving

- the basic and reference terms and definitions to be used by all technical committees, and
- the recurrent terms and definitions used by technical committees.

The IEV is intended to help the standards writer to prepare standards, and to help the standards users to understand and implement them. It is also intended to be of help to the translators of normative (and more generally technical) texts.

The IEV is not meant to be a treatise or a tutorial on electrotechnology. This should be borne in mind when considering the degree of precision provided by the definitions.

SJ.2.3 Content and structure of the IEV

The terminological entries are categorized into classes as defined in Table SJ.1.

Table SJ.1 – Classes in the IEV

Class number	Class of terminological entries
1	General concepts
2	Materials
3	Measurement, automatic control
4	Electric equipment
5	Electronic equipment
6	Generation, transmission and distribution of energy
7	Information and communication technologies
8	Particular applications
9	Standardization and related activities

Each class is further divided into a number of subject fields (i.e. fields of special knowledge) each corresponding to a given field related to electrotechnology and prepared as a part of the IEV.

EXAMPLE 1

161 Electromagnetic compatibility

411 Rotating machinery

Within each part, terminological entries shall, as far as reasonably possible, be listed in an order. according to their interdependence, in sections which themselves form elements of the parts. Concepts applying to the same phenomenon or class of phenomena, or to the same technique or the same equipment, shall normally be classified in the same section, leading from the general to the specific, and from the whole to the elements.

Each part and section shall have a title. If this title contains technical terms, these terms shall be defined.

The terminological entries are thus constituted in such a way that they can be accessed and understood independently of their context in a given subject field.

The IEV is developed under the responsibility of IEC/TC 1, in cooperation with the other IEC technical committees, each part being prepared by a project team or working group, either within IEC/TC 1 or within another IEC technical committee (see SJ.4.1).

Each part of the IEV is published as a separate fascicle, and referenced as **IEC 60050-###** in the catalogue of IEC Publications.

EXAMPLE 2

IEC 60050-121:1998, *Electromagnetism*, which constitutes Part 121 of the IEV, and belongs to class 1 “General concepts”.

The terminological data contained in the various parts are used to compile an online dictionary entitled Electropedia (www.electropedia.org).

Each of the terminological entries corresponds to a concept, and comprises the following elements in the order specified (see SJ.3.1):

- an IEV number (see SJ.2.5);
- possibly one or more letter symbols designating the concept (see SJ.3.1.2);

then, for each of the **principal IEV languages** (see SJ.2.4):

- the preferred term designating the concept (see SJ.3.1.3), called the “entry term”, optionally accompanied by synonyms and abbreviated forms (see SJ.3.1.3.4);

- the definition of the concept (see 0);
- optionally non-verbal representations, examples and notes to the definition (see SJ.3.1.5 to SJ.3.1.7);
- optionally the source (see SJ.3.1.8);

and finally, for each of the **additional IEV languages** (see SJ.2.4), the term (and possible synonyms and abbreviated forms) alone.

The rule "one concept–one definition" shall be applied[3].

Where the same concept is used in more than one subject field, the concept shall be defined in the IEV part with the lowest IEV number. When it is considered useful to refer to the concept in another IEV part, the letter symbols designating the concept, the preferred term designating the concept and any synonyms and abbreviated forms may be repeated under a different IEV number *but the definition shall not be repeated*; instead a cross-reference to the terminological entry containing the definition shall be provided.

EXAMPLE 3

113-01-32
coherence
See IEV 103-10-26

Where several concepts are designated by the same term (i.e. there are homographs – see SJ.3.1.3.5.6), in one or several IEV languages, the concepts shall be placed in different terminological entries, even if the appropriate definitions differ from each other by a few words only, and even if corresponding terms do not exist in every IEV language (as defined in SJ.2.4). The specialized concepts shall be distinguished from the general concept by adding a specific use to the term. In each terminological entry, a cross-reference to the other terminological entry or entries in which the term is defined shall be added. See SJ.3.1.3.5.6 for more information on how to draft and structure terminological entries for which homographs exist.

EXAMPLE 4

113-01-06
process

…

Note 1 to entry: The term "process" has other meanings in the fields of dependability (see IEV 192-01-08), control technology (see IEV 351-42-33) and environmental standardization (see IEV 904-01-05).

192-01-08
process, <in dependability>

…

Note 1 to entry: The term "process" has other meanings in general (see IEV 113-01-06), and in the fields of control technology (see IEV 351-42-33) and environmental standardization (see IEV 904-01-05).

351-42-33
process, <in control technology>

…

Note 1 to entry: The term "process" has other meanings in general (see IEV 113-01-06), and in the fields of dependability (see IEV 192-01-08) and environmental standardization (see IEV 904-01-05).

904-01-05
process, <in environmental standardization>

…

Note 1 to entry: The term "process" has other meanings in general (see IEV 113-01-06), and in the fields of dependability (see IEV 192-01-08) and control technology (see IEV 351-42-33).

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3 IEC TC 1 is gradually applying this rule to the legacy content in the Electropedia.

SJ.2.4 Languages

The terminological entries corresponding to the concepts are given in two or more of the three IEC languages, i.e. French, English and Russian, referred to as the **principal IEV languages**.

The terms alone are also given in the **additional IEV languages** [Arabic, Chinese, Czech, Dutch (Belgian), Finnish, German, Italian, Japanese, Korean, Mongolian, Norwegian (Bokmål and Nynorsk), Polish, Portuguese, Serbian, Slovenian, Spanish and Swedish at the time of preparation of this document].

The principal and the additional IEV languages are referred to collectively in Annex SK as the **IEV languages**.

SJ.2.5 Numbering system

Each terminological entry has an IEV number composed of three elements, separated by dashes:

– **Part** number of the part (formerly called “chapter”): three digits, the first one being the class number (see Table SJ.1);

– **Section** number of the section: two digits (01 to 99);

NOTE In the past some of the “Chapters” (since renamed as “Parts”) had been subdivided into “parts”, each comprising a number of sections, as shown in the following example, taken from IEC 60050-393 “*Nuclear instrumentation: Physical phenomena and basic concepts*”:

Sections 393-01 to 393-04 --> Part 1 – Ionizing radiations and radioactivity
Sections 393-05 to 393-08 --> Part 2 – Nuclear reactors

These “parts” were renamed “sub-chapters” to avoid possible confusion with the “parts” (formerly “chapters”).

– **Entry** number of the terminological entry in the section: sequence of decimal digits in which leading zeroes are permissible but redundant (e.g. 1 to 113, 01 to 99, 001 to 127).

In each part, the sections are numbered from 01 to 99 consecutively. In each section, each terminological entry has a unique number.

EXAMPLE | **151-13-77** |

SJ.3 Drafting and presentation of terminological entries

SJ.3.1 Elements of the terminological entries

SJ.3.1.1 IEV number

For the numbering of terminological entries in the IEV, see SJ.2.5.

For the numbering of terminological entries in other documents, see the ISO/IEC Directives, Part 2, 2018, 16.4.

SJ.3.1.2 Letter symbol(s)

A letter symbol (or a limited number of letter symbols) may be used to designate the concept. This (these) symbol(s) shall be in accordance with the relevant standards, in particular with the IEC 60027, IEC 80000 and ISO 80000 series, which also provide rules for the printing of symbols, quantities, and quantity values. In documents the letter symbol(s) is (are) printed on a separate line. In the Electropedia the letter symbol(s) is (are) indicated in a separate element. Where a terminological entry contains more than one symbol, each symbol is presented on a separate line for clarity.

The letter symbols for quantities are rendered in italic type, whereas the letter symbols for units are rendered in upright type.

The letter symbols are independent of the language, and shall not be repeated in the terms in the principal or additional IEV languages (see SJ.2.4).

EXAMPLE 1

112-02-05

m

metre
meter, US

SI unit of length, equal to the length of the path travelled by light in vacuum during a duration of 1/299 792 458 of a second

Note 1 to entry: In the CGPM definition in English, "time interval" is used instead of "duration". However the two terms correspond to different concepts (see IEV 113-01-10 and IEV 113-01-13).

[SOURCE: CGPM]

mètre, m

unité SI de longueur, égale à la longueur du trajet parcouru dans le vide par la lumière pendant une durée de 1/299 792 458 de seconde

Note 1 à l'article: Dans la définition de la CGPM en anglais, "time interval" est utilisé à la place de "duration". Les termes "intervalle de temps" et "durée" correspondent toutefois à des concepts différents (voir IEV 113-01-10 et IEV 113-01-13).

[SOURCE: CGPM]

EXAMPLE 2

131-12-28

R_m

R

reluctance

for a reluctant element, quotient of the magnetic tension V_m by the magnetic flux Φ

$$R_\mathrm{m} = \frac{V_\mathrm{m}}{\Phi}$$

Note 1 to entry: The reluctance is the reciprocal of the permeance.

Note 2 to entry: The coherent SI unit of reluctance is henry to the power minus one, H^{-1}.

réluctance, f

pour un élément réluctant, quotient de la tension magnétique V_m par le flux magnétique Φ

$$R_\mathrm{m} = \frac{V_\mathrm{m}}{\Phi}$$

Note 1 à l'article: La réluctance est l'inverse de la perméance.

Note 2 à l'article: L'unité SI cohérente de réluctance est le henry à la puissance moins un, H^{-1}.

SJ.3.1.3 Terms

SJ.3.1.3.1 General

As mentioned in SJ.2.3, each concept is designated in each language by a preferred term (called the "entry term"), and possibly synonyms (see SJ.3.1.3.4) and abbreviated forms (see SJ.3.1.3.4.3). Terms may comprise one or several words, and may be followed by optional attributes, corresponding to specific features of the term, in the following order:

- specific use of the term (see SJ.3.1.3.5.6);
- grammatical information (see SJ.3.1.3.6.2);
- national variant (see SJ.3.1.3.4.2 and SJ.3.1.3.6.3).

No other attributes shall be used.

In certain subject fields, the preferred term may be a letter symbol [e.g. I^2t (IEV 441-18-23:2000-07)].

SJ.3.1.3.2 Choice or formation of terms

In general, it is recommended to apply the rules given in the ISO/IEC Directives, Part 2, and in ISO 704.

Ideally, the objective of the term–concept assignment in a given technical subject field is to ensure a one-to-one correspondence between term and concept. Synonyms and homographs are often unavoidable but shall be kept to a minimum, and duly indicated.

Before creating a new term, it is required to ascertain whether a term does not already exist for the concept in question.

A term has to be accepted and used by the specialists in the subject field covered by the terminology. Therefore well-established and widely used terms, even if etymologically questionable, should be changed only if there are very good reasons (e.g. risk of confusion or contradiction). However trade names (brand names) and archaic and colloquial terms shall not be chosen as terms.

For the creation of new terms (or for the revision of existing terminologies), the following principles should be followed (more information is given in ISO 704:2009, 7.4).

- The term is a label used to designate the concept (as described by the definition) in a **concise** and **unambiguous** (i.e. avoiding as far as possible homographs) **manner**: it should of course evoke the concept, but is not intended to replace the definition.
- Consistency: the terminology in any subject field should not be an arbitrary collection of terms, but rather a coherent terminological system corresponding to the concept system.
- Appropriateness: the terms proposed should adhere to familiar and established patterns of meaning within a language community; term formation that causes confusion shall be avoided; terms shall be as neutral as possible and avoid connotations, especially negative ones.
- Derivability: terms that allow for the formation of derivatives should be favoured.
- Linguistic correctness vis-à-vis the language shall be considered.
- Preference should be given to terms in native language rather than to terms borrowed from other languages.

In addition, it is to be noted that the terms in the various languages should not be word-for-word translations of the term in the initial language in which a specific terminological entry was prepared. The right process for the formation of the term in a given language is to start from the concept, as described by the definition, and then to choose (or to form) the most appropriate term in this language.

In the case of creation of a new term (neologism), it is recommended that the technical experts consult with linguistic experts in the country concerned.

SJ.3.1.3.3 Absence of a preferred term

When no preferred term can be found in a given language for a defined concept, and when no neologism can be formed, this shall be shown by means of five dots "·····" (half-high on the line) in place of the term.

In this case, the terminological entry shall not contain any preferred or admitted synonyms in that language, although it may contain deprecated synonyms.

EXAMPLE

713-01-27
intensity
square of the electric field magnitude of an electromagnetic wave
Note 1 to entry: Intensity is proportional to irradiance or to power flux density and is sometimes used in place of these terms when only relative values are important.

.....
DÉCONSEILLÉ: intensité, f
carré de la norme du champ électrique d'une onde électromagnétique en un point
Note 1 à l'article: Cette grandeur est proportionnelle à l'éclairement énergétique ou à la puissance surfacique.

⋮
ar شدة المجال
de .....
ABGELEHNT: Intensität, f
⋮

SJ.3.1.3.4 Synonyms

SJ.3.1.3.4.1 Use

Terms (including letter symbols and abbreviated forms that are terms) that are interchangeable with the entry term, possibly with some restrictions (specific use of a term, national variant, gender of a person), are considered and treated as synonyms.

When the same form is used for masculine and feminine, the two genders shall be given (see the example in SJ.3.1.3.6.2).

The use of synonyms shall be kept to a minimum; an abundance of synonyms in a given terminological entry is very often the sign that this terminological entry covers in fact several (closely related) concepts (see SJ.2.3).

Meanwhile, bearing in mind the aim of the IEV (see SJ.2.2), it is useful to list all terms by which a concept might be known, including those for which their use is admitted or deprecated.

For all principal IEV languages, the synonyms shall be placed on successive lines, following the line of the entry term, and in the order of preference. Synonyms shall be differentiated by their rendering (see SJ.3.1.3.5.1). One synonym may be rated as preferred; all others shall be rated as admitted or deprecated (see SJ.3.1.3.4.4).

The number of synonyms can be different for each language (see the first example in SJ.3.1.3.5.1 in which there are two synonyms in English and one in French).

SJ.3.1.3.4.2 National variants

When a language is spoken in several countries, a term relating to a concept can be different according to the country.

In this case, a term used in all the countries in which the language is spoken shall be placed first.

A variant, which is not used in all the countries, shall be followed by an alpha-2 code representing the country or countries in which the variant is used (see SJ.3.1.3.6.3).

EXAMPLE

earthing inductor **grounding inductor**, US

In order to promote standardization, such cases should be kept to the minimum.

SJ.3.1.3.4.3 Abbreviated forms

Abbreviated forms should be given only when they are of current usage for a given concept (see also SJ.3.1.3.5.7).

SJ.3.1.3.4.4 Admitted and deprecated synonyms

Deprecated synonyms, as well as obsolete terms, superseded terms, archaic terms, scientific-technical slang, and other terms which are detrimental to domain communication, shall be rated as deprecated terms (see also SJ.3.1.3.5.8).

Both full forms and abbreviated forms may be selected as deprecated terms if their use is rated as undesired.

If it is considered useful, provide an explanation of the reasons for the deprecation of the terms in a note to entry (see SJ.3.1.7).

SJ.3.1.3.5 Presentation of terms and synonyms

SJ.3.1.3.5.1 Letter form and rendering of terms and synonyms

Terms and synonyms shall be rendered as they would appear in the middle of a sentence, i.e. letters normally appearing in lower case shall remain in lower case (this is applicable in particular to the first letter of the term). Mathematical symbols, hyphens, parentheses, square brackets and other syntactic signs shall be used in a term or synonym only if they constitute part of the normal written form of the term. The term or synonym shall not be followed by a full stop unless this forms part of the term.

In the clause “Terms and definitions” of a document (see SJ.3.3.2 and SJ.3.3.3):

- the preferred term and any preferred synonym shall be rendered in boldface type;
- admitted and deprecated synonyms shall be rendered in lightface type;
- attributes relating to the terms and synonyms shall be rendered in lightface type.

EXAMPLE

root-mean-square value **RMS value** quadratic mean	**valeur moyenne quadratique**, f **moyenne quadratique**, f
St. Andrew’s cross	**croix de Saint-André**, f
control difference variable DEPRECATED: error variable	**variable de différence de régulation**, f DÉCONSEILLÉE: variable d’erreur, f

SJ.3.1.3.5.2 Grammatical form

In general, a term shall be presented in its grammatical base form, i.e.

- a noun in the singular (unless it is a plural word)
- for nouns, when different terms are used for masculine and feminine, both terms should be given

EXAMPLE

assistant AAD, m
assistante AAD, f
assistant à l'autonomie à domicile, m
assistante à l'autonomie à domicile, f
assistant ou assistante qui …

- a verb in the infinitive (without the word "to" in English), and
- an adjective in uninflected form (e.g. masculine singular in French, non-comparative form in English).

SJ.3.1.3.5.3 Multi-word terms

When a term is composed of several separate words, it shall be given in the usual order of words in the language to which it belongs.

When it is necessary to indicate where to place the defined term in an expression (or multi-word term), represent the other words in the term by "…" in the complete expression (or multiword term):

EXAMPLE

surface … density **areic**, adj	**surfacique**, adj
density of … **… density**, <for flux or current> **areic**, <for flux or current> adj	**densité de …**, f **surfacique**, <flux ou courant>adj
over… relay	**relais à maximum de …**, m

SJ.3.1.3.5.4 Parts of a term that may be omitted

It is not permissible to use parentheses to indicate parts of a term that may be omitted, either in the field under consideration or in an appropriate context. Instead, each term and synonym shall be presented on a separate line, as they would appear in the middle of a sentence (see SJ.3.1.3.5.1), in the order of usage preference.

EXAMPLE

Incorrect:	**(frequency) bandwidth**
Correct:	**frequency bandwidth** **bandwidth**
Incorrect:	**assistant(e) AAD**, m(f)
Correct:	**assistant AAD**, m **assistante AAD**, f

SJ.3.1.3.5.5 Field of application of a term

In some cases, it is desirable to specify or restrict the use or field of application of a term or synonym. This may be achieved by specifying a "specific use". A specific use shall be used only where it is essential for a term or synonym in a given language (e.g. to distinguish homographs) and is not always needed for all terms and synonyms, or for all languages, in a given terminological entry. So that it is clear to any user that the specific use is not part of the term, it is enclosed in angle brackets "<>" and is separated from the term by a comma. The specific use precedes any other term attributes.

NOTE In the IEV, "specific use" is used, when necessary for a given term or synonym, in place of the element "domain" specified in the ISO/IEC Directives, Part 2, 2021, 16.5.6.

EXAMPLE 1

161-02-19
rang, <d'un harmonique> m

nombre entier égal au rapport de la fréquence d'un harmonique à la fréquence du fondamentale

EXAMPLE 2

102-05-28
Laplacian, <of a scalar field>

scalar Δf associated at each point of a given space region with a scalar f, equal to the divergence of the gradient of the scalar field

Δf = div **grad** f

Note 1 to entry: In orthonormal Cartesian coordinates, the Laplacian of a scalar field quantity is:

$$\Delta f = \frac{\partial^2 f}{\partial x^2} + \frac{\partial^2 f}{\partial y^2} + \frac{\partial^2 f}{\partial z^2} .$$

Note 2 to entry: The Laplacian of the scalar field f is denoted Δf or $\nabla^2 f$, where Δ is the Laplacian operator.

SJ.3.1.3.5.6 Homographs

Where several concepts are designated by the same term, a cross-reference to the other terminological entry or entries in which the term is defined shall be added (see SJ.3.1.7). The homographs can be in one language only. In documents, the cross-reference shall be added in a note to entry (see example 1). In a database, such information may be transferred to a dedicated field and introduced by an appropriate text such as "Related entries:" (see example 2, which for purposes of illustration is an adapted version of the terminological entries in the IEV).

For homographs in additional IEV languages, the cross-reference may be added following the term, the introductory text (e.g. "related entry:") being translated into the additional IEV language concerned. So that to any user it is clear that the cross-reference is not part of the term, it is enclosed in angle brackets and is separated from the term by a comma (see example 3).

EXAMPLE 1

431-02-05

static characteristic, <of a transductor>
transfer curve, <of a transductor>

graphic representation of the relation between an output quantity and a control quantity under steady-state conditions

Note 1 to entry: Other static characteristics are defined in English for electronic tubes (IEV 531-18-04) and for arc welding power sources (IEV 851-12-32).

caractéristique de réglage, <d'un transducteur>

représentation graphique de la relation entre une grandeur de sortie et une grandeur de commande en régime établi

Note 1 à l'article: En anglais, le terme "static characteristic" désigne aussi la caractéristique statique des tubes électroniques (IEV 531-18-04) et des sources de courant de soudage à l'arc (IEV 851-12-32).

EXAMPLE 2

102-05-12

field

function that attributes a scalar, a vector or a tensor, or an interrelated set of such elements, to each point in a given region of the three-dimensional Euclidean space

Note 1 to entry: A field may represent a physical phenomenon such as an acoustic pressure field, a gravity field, the Earth's magnetic field, an electromagnetic field.

Note 2 to entry: A field can be time-dependent.

Note 3 to entry: In English, the term "field" has also another meaning in mathematics (in French "corps"), see IEV 102-02-18:2017-07, Note 2.

Related entries: field quantity (IEV 102-05-17)

champ, <fonction> m

fonction qui attribue un scalaire, un vecteur ou un tenseur, ou un ensemble de tels éléments liés entre eux, à chaque point d'un domaine déterminé de l'espace euclidien à trois dimensions

Note 1 à l'article: Un champ peut représenter un phénomène physique, comme par exemple un champ de pression acoustique, un champ de pesanteur, le champ magnétique terrestre, un champ électromagnétique.

Note 2 à l'article: Un champ peut dépendre du temps.

Note 3 à l'article: En anglais, le terme "field" a aussi en mathématiques le sens de "corps" (voir IEV 102-02-18:2017-07, Note 2).

Articles associés: champ (IEV 102-05-17)

102-05-17

field quantity

scalar, vector or tensor quantity, existing at each point of a defined space region and depending on the position of the point

Note 1 to entry: A field quantity may be a function of time or any other parameter.

Note 2 to entry: In English the term "field quantity", in French "grandeur de champ", is also used to denote a quantity, the square of which is proportional to power, whereas quantities proportional to power are called "power quantities", whether or not the quantities depend on the position of a point (see IEV 702-02-08). According to ISO 80000-1:2009, Annex C, the preferred term is then “root-power quantity”.

Related entries: field (IEV 102-05-12)

champ, <grandeur> m

grandeur scalaire, vectorielle ou tensorielle, qui existe en chaque point d'un domaine déterminé de l'espace et qui dépend de la position de ce point

Note 1 à l'article: Un champ peut être une fonction du temps ou de tout autre paramètre.

Note 2 à l'article: En anglais le terme "field quantity", en français "grandeur de champ", est aussi utilisé pour désigner une grandeur dont le carré est proportionnel à une puissance, tandis que les grandeurs proportionnelles à une puissance sont appelées "grandeurs de puissance", que les grandeurs dépendent ou non de la position d'un point (voir IEV 702-02-08). Conformément à l'ISO 80000-1: 2009, Annexe C, le terme privilégié est alors "grandeur racine de puissance".

Articles associés: champ (IEV 102-05-12)

EXAMPLE 3

131-12-45

⋮

ar …

⋮

ja **交流に対する抵抗**; **抵抗**, <関連エントリー: IEV 131-12-04>

351-57-05

⋮

ar …

⋮

zh **安全**, <相关条目: IEV 351-57-07>

SJ.3.1.3.5.7 Abbreviated forms

Abbreviated forms shall be specified as entry term or as synonym depending on their preferred usage. They shall not be followed by the indication “(abbreviation)”.

EXAMPLE

161-01-22
ESD
electrostatic discharge

702-06-57
pulse duration modulation
PDM
DEPRECATED: pulse width modulation

SJ.3.1.3.5.8 Deprecated synonyms

Deprecated synonyms (see SJ.3.1.3.4.4) shall be indicated by the prefix “DEPRECATED:” (in French: “DÉCONSEILLÉ:”), the term being rendered in lightface type.

EXAMPLE 1

102-06-04
matrice-colonne, f
DÉCONSEILLÉ: vecteur-colonne, m

The attributes “deprecated in this sense”, “obsolete” and “superseded” shall not be used; instead use the prefix “DEPRECATED:” together with an explanation in a note to entry.

EXAMPLE 2

845-02-28
brightness
DEPRECATED: luminosity
attribute of a visual sensation according to which an area appears to emit more or less light
Note 1 to entry: The term “luminosity” is obsolete.

SJ.3.1.3.6 Attributes to the terms

SJ.3.1.3.6.1 Presentation

The attributes follow the term, on the same line. They shall be separated from the term by a comma, and shall be separated from each other by a space. The attributes are rendered in lightface type.

A table giving the complete list of attributes, with examples, is given in SJ.5.

SJ.3.1.3.6.2 Grammatical information

The gender (m, f, m/f or n) shall be indicated if applicable for the language (see SJ.5). The number (sg or pl) and word class[4] (adj, adv, noun or verb) of all terms shall be indicated with the exception that the attribute “noun” is only necessary in English to distinguish a term from a non-noun homograph, and, in French, it is not necessary if the gender is indicated (since then it is implicit: only nouns have a gender).

---

4 The IEV also contains a few entries with the word class "adj and noun", i.e. the entry contains two concepts, one that is an adjective and another that is a noun. The word class "adj and noun" is no longer permissible; instead, each concept is given in a separate entry. IEC TC 1 is gradually applying this rule to the legacy content in the Electropedia.

Do not use the attribute “qualifier” (in French: “qualificatif”). Instead, word the definition in such a way that it is clear that the term is a qualifier [e.g. start the definition using an expression such as “qualifies …” (in French: “qualifie …”) or “pertaining to …” (in French: “relatif à …”)]. Provide any additional information in a note to entry.

EXAMPLE

harmonique, m

responsable de la protection, m/f

eddy currents, pl

transient, adj

transient, noun

SJ.3.1.3.6.3 National variant

A national variant shall be indicated by the alpha-2 country code(s), specified in ISO 3166, representing the country (or countries) in which the variant is used. The code is placed after the term or the previous attribute, if any. See the examples in SJ.3.1.3.4.2 and SJ.5.

SJ.3.1.3.6.4 Usage information

Usage information can be provided if necessary. So that it is clear to any user that the usage information is not part of the term, it is enclosed in angle brackets “<>”.

EXAMPLE

deci, <prefix>

déci, <préfixe>

...Schaltung, f <in Zusammensetzungen>

SJ.3.1.4 Definitions

SJ.3.1.4.1 Characteristics expressed

A definition shall be simple, clear, and relatively short. It shall, however, completely describe the concept from the viewpoint of the electrical engineer. This implies that the definition shall contain all the characteristics of the concept necessary and sufficient to enable the concept considered to be well understood and its boundaries to be defined.

Preference should be given to functional characteristics rather than to constructional aspects.

A definition shall not take the form of, or contain, a requirement.

A definition shall describe what a concept is, not what it is not except when the absence or the non-existence of a characteristic is essential to the understanding of a concept, in which case a negative form is required.

EXAMPLE

131-11-19

non-linear, adj

qualifies a circuit element or a circuit for which not all relations between the integral quantities are linear

SJ.3.1.4.2 Drafting

The definition shall have the same grammatical form as the term. Thus, to define a verb, a verb shall be used; to define a noun in the singular, the singular shall be used. In the case of adjectives, it is often essential to indicate in the definition to which objects the concept applies. The definition then begins with “qualifies ...” or “pertaining to ...” (see SJ.3.1.3.6.2). In the case

where a term is an adjective and a noun (see SJ.3.1.3.6.2), the definition shall be written so as to apply to both parts of speech.

Unless there is a specific reason, the definition shall not begin with an article.

The definition shall not begin with an expression such as “term used to describe” or “term denoting”.

The term designating the concept shall not be repeated in the definition.

A definition shall remain comprehensible even when separated from the context (subject field, title of the IEV part and section, neighbouring terminological entries) in which it appears. In particular, for terminological entries given in standards, a definition shall not rely on general explanations, for example in the foreword.

A definition shall consist of a single phrase, which should be as short as possible, shall be built in view of future possible translations into additional languages and shall follow plain syntax rules.

The form of a definition shall be such that it can replace the term in the context where the term appears. Additional information shall be given only in the form of examples or notes to entry.

Circularities shall be avoided. (For further information on circular definitions, see ISO 704.)

Except in subject fields in which non-verbal representations are conventionally used instead of a definition, a concept shall not be defined only by a figure or a formula, although a formula can be an essential element of a definition.

EXAMPLE 1

113-01-32

$\boldsymbol{v}$

velocity

vector quantity $v = \mathrm{d}\boldsymbol{r} / \mathrm{d}t$, where $\boldsymbol{r}$ is position vector and t is time

Note 1 to entry: The velocity is related to a point described by its position vector. The point may localize a particle, or be attached to any other object such as a body or a wave.

Note 2 to entry: The velocity depends on the choice of the reference frame. Proper transformation between frames must be used: Galilean for non-relativistic description, Lorentzian for relativistic description.

Note 3 to entry: The coherent SI unit of velocity is metre per second, m/s.

Figures, formulae and other forms of non-verbal representation which are not an essential element of a definition may be given to help to make clear a simplified definition. Such non-verbal representations shall be placed following the definition (see SJ.3.1.5).

EXAMPLE 2

131-12-29

Λ

perméance, f

pour un élément réluctant, quotient du flux magnétique Φ par la tension magnétique V_{m}

$$\Lambda = \frac{\Phi}{V_{\mathrm{m}}}$$

Note 1 à l’article: La perméance est l'inverse de la réluctance (IEV 131-12-28).

Note 2 à l’article: L’unité SI cohérente de perméance est le henry, H.

Note 3 à l’article: Dans un circuit équivalent électrique, les perméances sont représentées par des conductances, les flux magnétiques par des courants électriques et les tensions magnétiques par des tensions électriques.

SJ.3.1.4.3 Terms used in definitions

Technical terms appearing in a definition should be defined either in the IEV, or in another authoritative publication. Where reference is made to the concept, if there is more than one term for a concept (see SJ.3.1.3.4), the entry term shall be used to refer to the concept (in the case where both a full form and an abbreviated form are preferred terms, they may be used interchangeably). Meanwhile, when it is necessary to explain the formation or the usage of terms (e.g. in a given language), it is sometimes necessary to refer also to synonyms, both in the terminological entry itself and in another terminological entry.

It is useful to delimit the term or synonym (e.g. by enclosing it in quotation marks, or by rendering it in italic type) and to add the IEV number of the concept that the term or synonym designates. In documents, the cross-reference to the terminological entry shall be prefixed by "IEV " (reference to the term) or by "see IEV " (reference to a synonym) and delimited, by for example parentheses. In the Electropedia, when the cross-reference is to the term, it may be replaced by a hyperlink. If the term is defined in another document, precede the IEV number by a dated reference to the reference document.

EXAMPLE

Term defined in the same document (in this case the IEV):	**electrolytic conductivity** *conductivity* (IEV 121-12-03) of an electrolyte
Terms and synonym defined in the same document (in this case the IEV):	Note 1 to entry: The use of “rate” with this meaning is often deprecated in favour of “ratio”. For example, it is recommended to use “error ratio” and not “error rate” (see IEV 702-07-39). In other examples, “factor” is used in English for "taux" in French: total harmonic factor (IEV 103-07-32), modulation factor (IEV 702-06-19).
Hyperlink to the terminological entry (in this case in the Electropedia):	**electrolytic conductivity** *conductivity* of an electrolyte
Term defined in another document:	**tie stick** *hand stick* (IEC 60743:2001, 2.5.2) used to bind or unbind a conductor to or from an insulator

SJ.3.1.4.4 Style and form

The style and form shall be as uniform as possible throughout all IEC terminology.

Drawings, diagrams, graphs and formulae may be used when they provide for a better understanding of the text. Letter symbols used for quantities or units shall be in accordance with the relevant standards, in particular with the IEC 60027, IEC 80000 and ISO 80000 series.

The meaning of all letter symbols used in a definition shall be explained. It is not necessary to explain the meaning of SI units and common mathematical functions and operators. Meanwhile, in both cases, if the letter symbol or unit is defined in another terminological entry, it is useful to add between parentheses the IEV number (the cross-reference to the terminological entry shall be prefixed by "IEV "; in the Electropedia, the cross-reference to the terminological entry may be replaced by a hyperlink).

When graphical symbols are used, they shall be in accordance with the relevant IEC standards, in particular with the IEC 60617 DB.

Abbreviated terms defined in the IEV need not be explained provided that a cross-reference to the terminological entry is given; those not already defined in the IEV shall be explained.

SJ.3.1.4.5 Languages

The meaning shall be identical in all languages present, although it may be expressed differently to conform to the rules and structure of each language.

In the IEV, the definition of a concept shall be given in at least two of the principal IEV languages, i.e. English, French and Russian.

SJ.3.1.4.6 Presentation of the definitions

The words in a definition shall be rendered as they would appear in the middle of a sentence, i.e. letters normally appearing in lower case shall remain in lower case (this applies in particular to the first letter of the definition). The definition shall not end with a full stop unless this forms part of the last word.

SJ.3.1.5 Non-verbal representations

Non-verbal representations shall be placed following the definition.

In subject fields in which non-verbal representations are conventionally used instead of a definition, non-verbal representations shall be placed following the term(s) (i.e. in place of the definition).

EXAMPLE 1

395-01-02
u
unified atomic mass unit
1 u = 1,660 54 × 10^{-27} kg

It is necessary to differentiate between a formula that is an essential element of a definition (as described in SJ.3.1.4.2 and illustrated in example 1 of SJ.3.1.4.2) and that used as a non-verbal representation (as illustrated in the example above and example 2 of SJ.3.1.4.2).

Where a non-verbal representation is referred to in more than one terminological entry either it shall be repeated in every terminological entry or it shall be referred to by the string “SEE:” followed by a reference to the place in the document or database where it appears. The use of “SEE:” can also be useful for cases where non-verbal representations are large and where it is considered useful to group all non-verbal representations (e.g. in a particular clause of a document or in a place in a database reserved for non-verbal representations).

Since each terminological entry is autonomous, figures, tables, formulae, etc. shall in principle be numbered per entry, starting from 1.

EXAMPLE 2

732-06-01
firewall

functional unit that mediates all traffic between two networks and protects one of them or some part thereof against unauthorized access

SEE: Figure 1.

Note 1 to entry: The protected network is generally a private network, internal to an organization.

Note 2 to entry: A firewall may permit messages or files to be transferred to a high-security workstation within the internal network, without permitting such transfer in the opposite direction.

Note 3 to entry: The firewall may have different types of implementation. Examples are dual-homed-host, screened subnet, screening router, or bastion host.

Figure 1 is a “shared” non-verbal representation for IEV 732-06-01, IEV 732-06-02, IEV 732-06-03, IEV 732-06-04 and IEV 732-06-05:

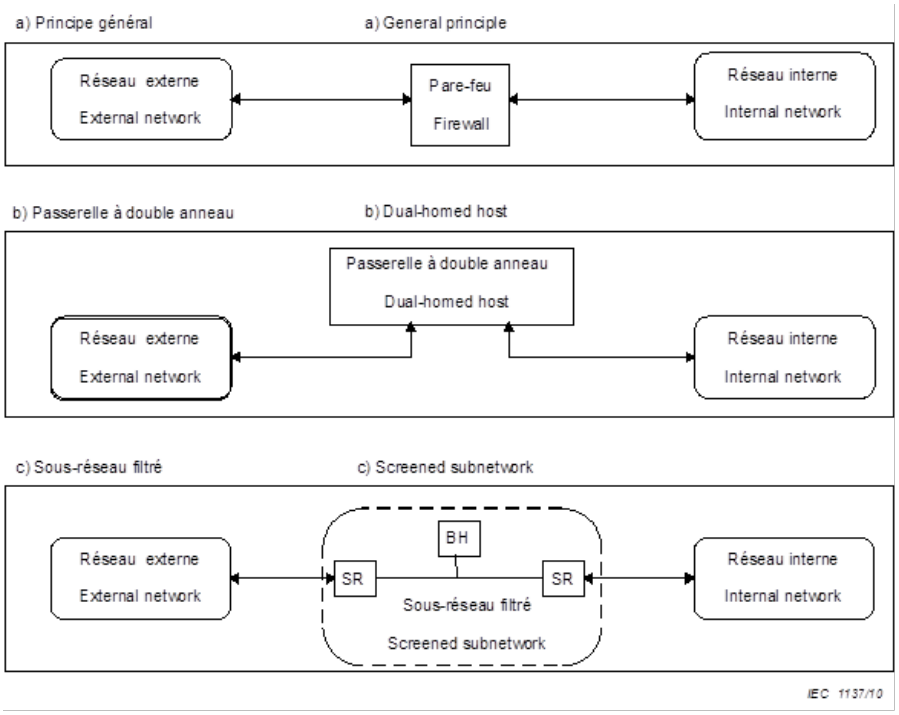

Figure 1 – Fire wall

To allow for text-only readers, an ALT text should be provided for all image-based (as opposed to character-based) content (see example 2).

EXAMPLE 3

732-07-19
search robot
knowledge robot
knowbot

component of a search engine that collects data from Internet resources and stores them in a database

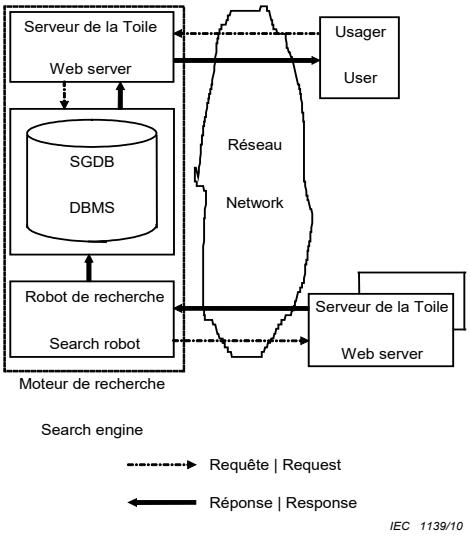

Figure 1 – Example of interactions of users, search engines, and Web servers

<img src="" alt="A user sends a request to a Web server which is part of a search engine. The Web server forwards the request to a database management system (DBMS), which finds links for the users' keywords and returns it back to the user via the Web server. The database is fed by the search robot, which reads the content of public Web pages at regular intervals and follows all available links between pages. The search robot acts like an ordinary Web user. The DBMS indexes all texts and links found by the search robot for full text and hypertext access.">

SJ.3.1.6 Examples

In certain cases, it may be necessary or useful to add one or more examples to the definition. The text of an example shall be preceded by the text “EXAMPLE” (in French: “EXEMPLE”). Several examples within the same terminological entry shall be designated “EXAMPLE 1”, “EXAMPLE 2”, “EXAMPLE 3”, etc. (in French: “EXEMPLE 1”, “EXEMPLE 2”, “EXEMPLE 3”, etc.).

EXAMPLE

722-01-15
logatom

phonetic element, chosen without inherent meaning, for use in telephonometry, consisting of a vowel sound preceded and followed by a consonant sound or a consonant combination sound

EXAMPLE BALP, KID, FROP.

[SOURCE: CCITT Red Book, Volume V, 1960, pages 74 and 75]

SJ.3.1.7 Notes to entry

SJ.3.1.7.1 General

In certain cases, it may be necessary or useful to add one or more notes to entry. These can be used, for example,

- to add further explanations, details or special cases which can give additional information about the concept and assist the reader to understand it (see examples 1 and 2),
- to point out deviations from earlier definitions or differences between the definitions being adopted and other definitions,
- to add a reference to another IEV number under which the terminological entry was published previously (see example 2),
- to add references to homographs (see example 2 in SJ.3.1.3.5.5 and example 1 in SJ.3.1.3.5.6),
- to draw attention to linguistic or etymological peculiarities,
- to explain the reasons for the deprecation of a term, synonym or symbol (see example 2 in SJ.3.1.3.5.8),
- to explain the derivation of an abbreviated form (see example 3), and
- to specify the units in which a quantity is expressed (see example 1).

EXAMPLE 1

131-12-28
reluctance

for a reluctant element, quotient of the magnetic tension V_{m} by the magnetic flux Φ

$$R_{\mathrm{m}} = \frac{V_{\mathrm{m}}}{\Phi}$$

Note 1 to entry: The reluctance is the reciprocal of the permeance.

Note 2 to entry: The coherent SI unit of reluctance is henry to the power minus one, H^{-1}.

EXAMPLE 2

351-41-01
variable quantity
variable

physical quantity the value of which is subject to change and can usually be measured

Note 1 to entry: The term "variable" alone is frequently used to circumvent the lengthy but correct designation "variable quantity".

Note 2 to entry: See also IEV 112-01-01.

Note 3 to entry: This entry was numbered 351-21-01 in IEC 60050-351:2006.

EXAMPLE 3

3.1
système de gestion d'énergie
EMS

système informatique comprenant une plate-forme logicielle offrant les services de support de base et un ensemble d'applications offrant les fonctionnalités requises pour le bon fonctionnement des installations de production et de transmission d'électricité afin d'assurer la sécurité adéquate d'approvisionnement énergétique à un coût minimal

Note 1 à l'article: L'abréviation "EMS" est dérivé du terme anglais développé correspondant "energy management system".

The notes to entry shall be given in each of the languages present. If a note to entry applies to one language only and not to another language, the other language shall contain a note to entry which either provides a translation of the note together with an indication of the language(s) concerned [for example “In English, …” (for clarity, it is useful to include the indication of the language in the notes in all language sections)] (see the example in SJ.3.1.7.2) or states “Note # to entry: This note applies to the … language only.” (in French: “Note # à l'article: Cette note ne s'applique qu'à la langue ….”).

The provisions of SJ.3.1.4.3 and SJ.3.1.4.5 are also applicable to the terms used in notes to entry.

SJ.3.1.7.2 Presentation of the notes to entry

A note to entry shall be placed under the definition, after any non-verbal representations and examples. Each note to entry consists of one or several “regular” (i.e. starting with a capital letter, and ending with a full stop) sentences, preceded by the text “Note # to entry:” (in French: “Note # à l'article:”), where # is an Arabic number starting at 1. A single note to entry shall be numbered (see example 3 in SJ.3.1.7.1).

EXAMPLE

191-06-08
up state

state of an item characterized by the fact that it can perform a required function, assuming that the external resources, if required, are provided

Note 1 to entry: This state relates to availability performance.

Note 2 to entry: In French, the adjective "disponible" qualifies an item in an up state.

SJ.3.1.8 Sources

Where the same concept is used in more than one subject field, follow the rules in SJ.2.3. In such cases, it is not necessary to indicate the source.

When a concept is similar to that in another IEV part but is modified to apply to a different subject area (i.e. in another IEV part), or is derived from another authoritative terminology document (e.g. an ISO/IEC Guide), with or without modification to the definition and possibly to the term, the source shall be provided.

The source of any repeated terminological entry shall be introduced by the text “SOURCE:” (in both English and French) in lightface, and placed at the end of the terminological entry:

SOURCE: {document reference} reference of the concept, {modified – …}

where

- **document reference** comprises either the source of the document or, for terminological entries that are modified versions of another IEV entry, the prefix “IEV ”, and the year of publication or the number of the edition,
- **reference of the concept** comprises the IEV number of the concept (for terminological entries derived from the IEV, as specified in SJ.2.5), and
- **modified** (where necessary) for those cases where the definition has been modified. If this is the case, append an en dash "–" and a description of the nature of the modifications and the reasons for them.

In documents, the source may be placed between square brackets. (In Annex SJ examples showing both forms of presentation are provided.)

EXAMPLE

Source in the IEV:	SOURCE: IEV 192-03-01:2015-02, modified – Note 1 to entry has been omitted
Source in a document:	[SOURCE: CISPR 22:2008, 3.5]

SJ.3.2 Basic terminology

General terms concerning standardization and certification are defined in ISO/IEC Guide 2.

Terms relating to quantities and units are specified in the IEC 60027 series, IEC 60050-113, IEC 60050-114, IEC 60050-121, IEC 60050-131 and many other parts of IEC 60050, and in the IEC 80000 and ISO 80000 series.

IEC 60050-112 and ISO 80000-1:2009, Annex A, cover in particular the use of some special terms such as:

- coefficient, factor, parameter, number, ratio, level, constant;
- massic …, specific …;
- volumic …, … density;
- lineic …, linear … density;
- areic …, surface … density.

General terms concerning safety are defined in ISO/IEC Guide 51.

Terms relating to measurements and measuring instruments are specified in ISO/IEC Guide 99 and in IEC 60050-300 which comprises Parts 311, 312, 313 and 314.

SJ.3.3 Structure and layout of IEV documents

SJ.3.3.1 General

The overall structure and layout of IEV documents shall be in accordance with the ISO/IEC Directives, Part 2. An IEV document shall thus comprise the following elements as laid out in the ISO/IEC Directives, Part 2:

- Table of contents
- Foreword
- Introduction, indicating the principles and rules followed
- Scope
- Terms and definitions
- Annexes (as necessary)
  - figures
  - tables of symbols
- Bibliography (as necessary)
- Index (as necessary); can be useful for documents circulated as CD, CDV and FDIS, or for documents published separately from the Electropedia.

A template IEV.dot is available for the clause “Terms and definitions”. For all the other clauses, the template iecstd.dot applies. These templates are available from the IEC website (www.iec.ch) in the section Standards development > TC/SC resource area > Drafting IEC publications.

SJ.3.3.2 Clause “Terms and definitions” – Structure and layout

As mentioned in SJ.2.5, a part is subdivided into a series of sections, each section comprising:

- a section header, in the principal IEV languages;
- a number of “terminological entries” or “blocks”, each corresponding to a concept and identified by an IEV number.

The individual presentation of the various elements of the terminological entries is given in SJ.3.3.1.

The arrangement of these elements within each “block” is given in Figure SJ.1.

IEV number
{letter symbol}

English entry term {attribute(s)}
{English synonym(s) {attribute(s)}}
English definition
{English non-verbal representation}
{English examples}
{English notes to entry}
{[Source]}

French entry term {attribute(s)}
{French synonym(s) {attribute(s)}}
French definition
{French non-verbal representation}
{French examples}
{French notes to entry}
{[Source]}

Russian entry term {attribute(s)}
{Russian synonym(s) {attribute(s)}}
Russian definition
{Russian non-verbal representation}
{Russian examples}
{Russian notes to entry}
{[Source]}

ar **Arabic entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
cs **Czech entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
de **German entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
es **Spanish entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
fi **Finnish entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
it **Italian entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
ja **Japanese entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
ko **Korean entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
mn **Mongolian entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
nl BE **Dutch (Belgian) entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
no **Norwegian entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
pl **Polish entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
pt **Portuguese entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
sl **Slovenian entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
sr **Serbian entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
sv **Swedish entry term** {attribute(s)}; {synonym {attribute(s)}}; ...
zh **Chinese entry term** {attribute(s)}; {synonym {attribute(s)}}; ...

NOTE 1 The signs { and } mark optional elements. When present, attributes are separated from the term by a comma, and are separated from each other by a space (see SJ.3.1.3.6.1).

NOTE 2 The terms in additional IEV languages are placed at the end of the “block” (one single line for each language), preceded by the ISO 639 alpha-2 code for the language considered, and in the alphabetic order of this code. The synonyms are separated by semicolons. In the case of homographs in an additional IEV language, it is possible to append a cross-reference to the terminological entry containing the homograph (see example 3 in SJ.3.1.3.5.6).

NOTE 3 When the IEC cooperates with other international organizations for publishing some parts of the vocabulary including more than the three principal languages or other additional languages, the above-mentioned layout may be changed accordingly.

NOTE 4 In the final publication, the “terminological entries” or “blocks” are generated as snapshots from the Electropedia.

Figure SJ.1 – Arrangements of the elements within a block (all elements shown)

SJ.3.3.3 Clause “Terms and definitions” – Structure and layout for drafts

The arrangement of the elements is specified in the ISO/IEC Directives, Part 2.

SJ.4 Procedures for the preparation of the IEV parts

SJ.4.1 General – Technical Committee No. 1 responsibility

IEC/TC 1, *Terminology*, has the overall responsibility for preparing the International Electrotechnical Vocabulary.

However, in a number of cases (more than 50 % of the projects), the work is initiated by another technical committee (TC), and carried out in a working group belonging to that TC, but still under the responsibility of IEC/TC 1. A close cooperation shall then be established between that TC and IEC/TC 1, the present clause giving the rules to be followed in such a case. In particular, the first Committee Draft is distributed by the initiating TC and the subsequent drafts, although prepared by the same Working Group, by IEC/TC 1.

When a part does not correspond to the scope of a single TC, its preparation is entrusted to IEC/TC 1. This applies in particular to the parts of Class 1, General concepts, and to those of Class 7, Telecommunications.

SJ.4.2 Database procedure

The IEV is managed in accordance with the IEC Supplement, Annex SK, *Procedures for the maintenance of the IEC standards in database format*.

SJ.4.3 Development of projects (New work)

(See ISO/IEC Directives, Part 1, and the IEC Supplement, Annex SK)

SJ.4.3.1 Proposal (NP) stage

(See ISO/IEC Directives, Part 1, and the IEC Supplement, Annex SK)

The new work item proposal (NP) and report on voting are circulated with a reference of the initiating committee. If accepted, the project is assigned to IEC/TC 1.

Where a part is relevant to several TCs, the Chair and secretary of IEC/TC 1 may, after consulting with the Chairs and secretaries of the TCs concerned, assign the project to IEC/TC 1/WG 100, *Fundamental concepts*, or set up a new working group directly under the responsibility of IEC/TC 1.

SJ.4.3.2 Preparatory stage

(See ISO/IEC Directives, Part 1, and the IEC Supplement, Annex SK)

The project team or working group shall, within the framework of the task it has been assigned:

- define the field of the terminology to be studied, state its limits and any possible overlap with other IEV parts;
- list the concepts to be defined;
- classify the concepts in a logical order and number them;
- verify, by looking in the Electropedia and checking with the secretariat of IEC/TC 1 (who will provide information for concepts at draft stage) that these concepts have not already been defined in another IEV part: should this be the case, the existing definition should be used. A definition may only be changed if it is:

– incorrect or unsatisfactory, or

– rendered obsolete because of further developments.

This shall be indicated in the corresponding terminological entry of the new project by the mention “modified”[5] in the source field (see SJ.3.1.8).

- give a definition in English, French and Russian; when the Russian Federation is not represented in the working group, the Russian term(s) and definition may be provided at the FDIS stage (see SJ.4.3.5) by the National Committee of the Russian Federation, using the English and French definitions as a basis for translation;
- establish, on behalf of its TC, the first committee draft (CD).

This first CD, as well as the subsequent drafts shall be bilingual (English and French).

The following points shall be noted.

- It is essential to request the presence of a representative of the secretariat of IEC/TC 1 to attend the first meeting of the project team or working group and all other important meetings in order to ensure that the work is correctly developed; this representative will ensure that the general rules are followed, ensure effective coordination with other IEV parts, and, with the aid of the IEC Secretariat, if necessary, establish liaisons with ISO and other international organizations (ITU, CIE, UIC, IUPAP, etc.).
- It is essential to work in at least two languages; for instance, the obligation to prepare immediately in French a definition proposed in English (or vice versa) will ensure a more precise definition; a definition checked by a group of experts is better than a translation made subsequently by a single person; translation into a third language is simplified when a bilingual definition exists. In practice, it is therefore essential that every working group comprise at least one expert of English mother tongue and one expert of French mother tongue.
- As already mentioned in SJ.2.3, the terms shall be chosen and the definitions of the concepts written with a view to their further integration into a dictionary in which the logical order of every IEV part might not be visible.

SJ.4.3.3 Committee (CD) stage

(See ISO/IEC Directives, Part 1, and the IEC Supplement, Annex SK)

The committee draft (CD) and associated compilation of comments are circulated with a reference of the initiating TC.

Follow-up of a CD

a) If there are substantial comments, the convenor of the project team or working group shall call an “enlarged meeting”, and invite, in addition to the project team or working group members:
   - the Chair and the secretary of the TC entrusted with the part;
   - the Chair and the secretary of IEC/TC 1;
   - a representative of every National Committee which has made important comments on the draft or which may be interested in this draft (even if the National Committee has already appointed an expert to the PT/WG);
   - a representative of other international organizations concerned;
   - an IEC Secretariat Technical Officer.

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5 In that case, it is up to the secretary of IEC/TC 1 to examine, together with the PT/WG convenors and TC Secretaries concerned, whether a revision of the source definition is needed.

For this meeting the convenor of the project team or working group shall prepare a term-by-term compilation of the comments received, on which he (or she) may mention the action he (or she) proposes for each comment.

a) This “enlarged meeting” shall lead to proposals on how to deal with the comments received, i.e.

   - submission of the document, with or without amendments, to the secretariat of IEC/TC 1 for circulation as enquiry draft (CDV) (see SJ.4.3.4);
   - preparation of a new committee draft for comments.

   These proposals, together with a version of the compilation of comments marked up with the decisions taken during the “enlarged meeting” are then forwarded to the secretary of IEC/TC 1 by the convenor of the project team or working group (subject to the agreement of his (or her) TC, if appropriate).

b) The decision to circulate an enquiry draft shall then be taken by the Chair of IEC/TC 1, in consultation with the secretary of IEC/TC 1, taking into account these proposals, and on the basis of the consensus principle (see ISO/IEC Directives, Part 1). The document shall then be forwarded to IEC Secretariat by the secretary of IEC/TC 1, with the request that the draft be distributed as an enquiry draft (CDV) (see SJ.4.3.4).

c) If necessary, the procedure described in a) to b) above shall be repeated until the draft is ready for submission to National Committees for approval as an enquiry draft (CDV).

SJ.4.3.4 Enquiry (CDV) stage

(See ISO/IEC Directives, Part 1, and the IEC Supplement, Annex SK)

SJ.4.3.5 Approval (FDIS) stage

(See ISO/IEC Directives, Part 1, and the IEC Supplement, Annex SK)

In order to expedite the publication process, and unless the secretariat of IEC/TC 1 informs IEC Secretariat that the FDIS is likely to be rejected (in which case the IEC Secretariat shall wait until the end of the voting period), at the same time as the FDIS is distributed, the IEC Secretariat shall send this FDIS to the National Committee of the Russian Federation to obtain the Russian version of the FDIS, as well as to the National Committees in charge of the additional IEV languages.

These National Committees shall return their translations within six months, in accordance with the instructions provided by the IEC Secretariat:

	NC Russian Federation	NCs in charge of additional languages
Section header	X	
Term	X	X

The secretariat of IEC/TC 1 shall send as soon as possible (and anyhow before the end of the period allowed for the translations) the “final version” of the document, in English and French, to the IEC Secretariat.

SJ.4.3.6 Publication stage

(See ISO/IEC Directives, Part 1, and the IEC Supplement, Annex SK)

The task of the translations into Russian and additional IEV languages is dealt with in SJ.4.3.5 above. If the translations are not available within six months (or any longer period that the secretariat may specify in the case of exceptionally long documents, or when the six months’ period covers a holiday period), which follow the date at which the FDIS was sent to the National

Committee responsible for the translation, the IEV part concerned will be published without the missing translation(s).

The checking of the printer's proof, if necessary after importation into the database by the IEC Secretariat, is then ensured in parallel:

- by the IEC Secretariat;
- by the secretariat of IEC/TC 1, with the help of the convenor of the working group and the members of the Editing Committee;
- by the National Committees concerned for the other languages.

The terms and definitions in the Russian language, and the terms in the additional languages shall be in accordance with the decisions of the National Committees concerned, and shall not be subject to change or deletion by IEC/TC 1 or by IEC Secretariat without consultation of the National Committee concerned (this is valid in particular for possible corrigenda).

SJ.4.4 Revision of IEV parts or sections

The revision of each IEV part shall be included in the programme of maintenance of IEC/TC 1 publications. This programme is prepared by IEC/TC 1, in consultation, when appropriate, with the TCs concerned. It is then included in the Strategic Business Plan, and is subject to approval by the Standardization Management Board.

SJ.4.5 Amendments

If the concepts concerned are deemed to be of interest for several Parts, IEC/TC 1/WG 100 *Fundamental concepts* (or other “horizontal” MTs such as TC 1/JMT 195, *Maintenance of IEC 60050-195*, as appropriate) is consulted, and advantage can be taken of the meeting of IEC/TC 1/WG 100 in conjunction with the IEC/TC 1 plenary meeting to expedite the treatment of this update.

In the case of the addition of new terminological entries, these terminological entries are given numbers following the last one in the existing section(s) concerned, irrespective of the logical order in which they should appear in the section(s). The reordering of the entries within sections, leading from the general to the specific, and from the whole to the elements, will be carried out when a subsequent revision or a new edition of the part is prepared.

SJ.4.6 Cancellation of IEV parts or sections

Sometimes, a revised part or a new part does not correspond exactly with an existing part, but involves the cancellation of one or more sections belonging to one or more existing parts. Such a cancellation of sections or parts shall be explained in detail in the Foreword of the new part and, for the individual terminological entries concerned, a reference to the other IEV number under which the terminological entry was published previously shall be added (see SJ.3.1.7.1).

It can also happen that an existing part (or whole sections of a part) has become obsolete.

It is then the responsibility of the secretariat of IEC/TC 1 to ask for cancellation of this part or of these sections (after consultation of the TC concerned, if appropriate) by requesting the IEC Secretariat to circulate a formal enquiry to the National Committees.

SJ.4.7 Cooperation with other international organizations

It can happen that certain parts of the IEV are of interest not only to the IEC, but also to other international organizations such as ISO, ITU, CIE, UIC, UIE, etc. In such cases, the Chair and secretary of IEC/TC 1 shall propose the setting up of a working group composed of members of the IEC TCs concerned as well as members of the other international organization. Details of the procedure will be laid down by IEC/TC 1 in each individual case.

EXAMPLE Part 845: *Lighting,* has been prepared together by the IEC and CIE (International Commission on Illumination).

SJ.4.8 Terminologies specific to technical committees

A TC may also develop specialized “glossaries”, for the purposes of its own publications, glossaries to be included in the “terms and definitions” clause of its own standards or in an independent standard. The concepts defined in such glossaries shall be restricted to the field corresponding to the scope of the standard or of the TC.

The TC shall of course make sure that the terms and definitions included in these glossaries are consistent and not in contradiction with the relevant concepts of the IEV, and that the necessary coordination measures have been taken in liaison with IEC/TC 1.

These glossaries may also include terms taken directly and without modification from the IEV.

If the TC considers that some of its existing specialized terms and definitions should be given a more general validity and included in the IEV, it shall inform the secretariat of IEC/TC 1, in order to begin the process. If approval is granted, the procedures defined in SJ.4.3, SJ.4.4 or SJ.4.5 are applicable.

SJ.5 List of data categories and attributes

Data category	Applicability	Subclause	ISO 10241-1:2011	Examples	
				English	French
IEV number	Mandatory	SJ.3.1.1	6.1	**Standard: 3.1**	**IEV: 161-01-22**
Letter symbols	If applicable	SJ.3.1.2	6.3	R_m	m
Preferred terms, synonyms and abbreviated forms	In the order of preference	SJ.3.1.3	6.2	**pulse duration modulation** **PDM**	**modulation d'impulsions en durée**, f **MID**, f modulation d'impulsions en largeur, f
Deprecated synonyms	If applicable	SJ.3.1.3.4.4, SJ.3.1.3.5.8	6.2	DEPRECATED: pulse width modulation	DÉCONSEILLÉ: vecteur-colonne, m
Specific use of the term	If needed	SJ.3.1.3.5.5	–	**Laplacian**, <of a scalar field>	**rang**, <d'un harmonique> m
National variant	If needed	SJ.3.1.3.4.2, SJ.3.1.3.6.3	6.2.3.5	**grounding inductor**, US	**unité de traitement**, f CA
Grammatical information:		SJ.3.1.3.6.2	6.2.3		
– **gender**	Mandatory (if applicable for the language)				**diaphragme**, m
– **number**	If needed			**eddy currents**, pl	**courants de Foucault**, m pl
– **usage information**	If needed			**deci**, <prefix>	**déci**, <préfixe>
– **word class**	Mandatory[a]			**subset**	**sous-ensemble**, m
				transient, noun	**transitoire**, nom
				transient, adj	**transitoire**, adj
				automate, verb	**automatiser**, verbe
Non-verbal representation	If needed	SJ.3.1.5	6.5	SEE: Figure 1	VOIR: Figure 1
Example	If needed	SJ.3.1.6	6.6	EXAMPLE BALP, KID, FROP.	EXEMPLE BALP, KID, FROP.
Note to entry	If needed	SJ.3.1.7	6.7	Note 1 to entry: Other static characteristics are defined in English for electronic tubes (IEV 531-18-04) and for arc welding power sources (IEV 851-12-32).	Note 1 à l'article: En anglais, le terme "static characteristic" désigne aussi la caractéristique statique des tubes électroniques (IEV 531-18-04) et des sources de courant de soudage à l'arc (IEV 851-12-32).
Source	If applicable	SJ.3.1.8	6.8	SOURCE: IEC Guide 104:2010, 3.2	SOURCE: IEC 62127-1:2007, 3.54, modifié

[a] The attribute "noun" is only necessary in English to distinguish a term from a non-noun homograph (e.g. the term "transient" can be both an adjective and a noun). In French, the attribute "noun" is not necessary if the gender is indicated (since then it is implicit: only nouns have a gender).

Annex SK
(normative)

Procedures for IEC standards as databases

SK.1 Introduction

This Annex of the IEC Supplement to the ISO/IEC Directives describes procedures concerning IEC standards consisting of a “collection of standardized items” managed in a database [standards as databases (SDBs)]. The procedure for SDBs (herein named the SDB procedures) defined in this Annex distinguish between:

a) the SDB management procedure (i.e. the procedure for creation and modification of the SDB)

b) the SDB content procedure (i.e. the procedure for the development of the content of an SDB).

There are distinct similarities and differences between the SDB procedure and that for standards following the procedures outlined in Clauses 2 and 3 [herein named the classic procedure (SK.3.2.1)]. The terminology used in this Annex has been selected in order to make these similarities and differences clear and to avoid misinterpretation.

It is highlighted that the maintenance of the SDB content in some cases covers two mutually interactive areas of responsibility: one set of stakeholders being responsible for the development of specialized technical content and the other set of stakeholders being responsible for the SDB content as a whole and thus being responsible for the transition of that specialized technical content into the SDB.

SK.2 Scope

This Annex describes the procedures for both the management and the content of IEC standards consisting of a “collection of standardized items” managed in a database [standards as databases (SDBs)].

Procedures related to the database management system (SK.3.1.4) are excluded from this Annex as they are under the responsibility of the Office of the CEO.

SK.3 Terms and definitions

For the purposes of this Annex, the terms and definitions given in the ISO/IEC Directives, Part 2, and the following apply.

SK.3.1 Entities and their management

SK.3.1.1

characteristic
abstraction of a property of an object or of a set of objects

Note 1 to entry: Characteristics are used for describing concepts.

[SOURCE: ISO 1087-1:2000, 3.2.4, modified – Note 1 to entry has been added]

SK.3.1.2

concept
unit of knowledge created by a unique combination of characteristics (SK.3.1.1)

[SOURCE: ISO 1087-1:2000, 3.2.1]

SK.3.1.3

database
collection of data organized according to a conceptual structure describing the characteristics (SK.3.1.1) of the data and the relationships among their corresponding entities

Note 1 to entry: A database can support one or more domains.

[SOURCE: ISO/IEC 2382:2015, 2121413, modified – The last part has been transferred to a note to entry and "application areas" has been replaced by "domains"]

SK.3.1.4

database management system
DBMS
collection of integrated services that support database management and together support and control the creation, use and maintenance of a database (SK.3.1.3)

[SOURCE: ISO/IEC TR 10032:2003, 2.41, modified – "which" replaced by "that"]

SK.3.1.5

standard as database
SDB
standard for which a valid form of publication is a database

Note 1 to entry: A standard as database can contain, in addition to the concepts (SK.3.1.2), non-normative equivalent terms and translations (where provided by appropriate national bodies).

Note 2 to entry: The term "database-based standard" previously used for this concept in the IEC Supplement to the ISO/IEC Directives, Part 1, Annex SL, is obsolete.

Note 3 to entry: The SDB management and the SDB content procedures (SK.3.2.2 and SK.3.2.3) are normally considered to be part of the SDB.

[SOURCE: ISO/IEC 11581-40:2011, 3.4, modified – The term has been revised and the Note deleted; the abbreviation SDB has been added. The definition has been revised and the second part of the definition has been transferred to Note 1 to entry in which the term "icons" has been replaced by "concepts". Notes 2 and 3 to entry have been added to explain the use of the term "database-based standard", and the SDB procedures.]

SK.3.1.6

data element
item
unit of data that is considered, in context, to be indivisible

Note 1 to entry: A unit of data that is considered indivisible in one context (e.g., telephone number) can be divisible in another context (e.g., country code, area code, local number)

Note 2 to entry: The concept "data element" includes the concept "standardized item", where examples of standardized items are symbols (graphical or letter), terms and definitions, data element types, data sheets.

[SOURCE: ISO/IEC 2382:2015, 2121599, modified – A synonym has been added, and the domain has been omitted. Notes 1 to 3 to entry have been replaced.]

SK.3.1.7

data model
graphical and/or lexical representation of data, specifying their properties, structure, and inter-relationships

[SOURCE: ISO/IEC 11179-1:2015, 3.2.7]

SK.3.1.8

information model
model of a bounded set of facts, concepts, or instructions to meet a specified requirement

[SOURCE: ISO 10303-1:1994, 3.2.21 modified – "a formal model" replaced by "model" in the definition]

SK.3.1.9

metamodel
model that describes how and with what an architecture will be described in a structured way

[SOURCE: ISO/TR 21965:2019, 3.2.7]

SK.3.1.10

change request
CR
proposal to add, to change or to withdraw one or more data elements in an SDB (SK.3.1.5)

Note 1 to entry: The CR is used as the basic element of the SDB content procedure (SK.3.2.3).

Note 2 to entry: The complete process from CR proposal to publication is called the SDB content procedure.

[SOURCE: ISO/IEC 30122-4:2016, 3.6, modified – Definition adapted for the context of this Annex. Note 1 to entry replaced by Notes 1 and 2 to entry.]

SK.3.1.11

version control
establishment and maintenance of baselines and the identification and control of changes to baselines that make it possible to return to a previous baseline

[SOURCE: ISO/IEC/IEEE 24765:2017, 3.4546]

SK.3.2 Procedures and stages

SK.3.2.1

classic procedure
standards development procedure outlined in Clauses 2 and 3, and based on the circulation of documents to the National Committees

SK.3.2.2

SDB management procedure
procedure for the creation, maintenance and decommissioning of an SDB (SK.3.1.5)

SK.3.2.3

SDB content procedure
procedure for the development of the content of an SDB (SK.3.1.5)

SK.3.2.4

CR proposal stage
stage of the SDB content procedure (SK.3.2.3) comprising the registration and identification of a CR (SK.3.1.10) in the database management system (SK.3.1.4) by the CR proposer (SK.3.3.4)

SK.3.2.5

CR preparatory stage
stage of the SDB content procedure (SK.3.2.3) where the information provided at the CR proposal stage (SK.3.2.4) is completed for setting the CR (SK.3.1.10) into the CR evaluation stage (SK.3.2.6)

SK.3.2.6

CR evaluation stage
stage of the SDB content procedure (SK.3.2.3) during which the SDB team (SK.3.3.3) members comment on the CR (SK.3.1.10)

SK.3.2.7

CR validation stage
stage of the SDB content procedure (SK.3.2.3) during which the SDB team (SK.3.3.3) members submit their approval ballot on the CR (SK.3.1.10)

SK.3.2.8

CR publication stage
stage of the SDB content procedure (SK.3.2.3) where the result of the CR (SK.3.1.10) is implemented

SK.3.3 Roles

SK.3.3.1

SDB owner committee
committee responsible for an SDB (SK.3.1.5)

SK.3.3.2

SDB manager
DEPRECATED: Secretary
person appointed by the SDB owner committee (SK.3.3.1) to manage the SDB content procedure (SK.3.2.3)

Note 1 to entry: The term "Secretary" previously used for this concept in earlier editions of the IEC Supplement to the ISO/IEC Directives, Part 1, Annex SK, is deprecated since it can be confused with the role of the Secretary of the committee.

SK.3.3.3

SDB team
permanent group of experts appointed by and acting as delegates on behalf of their National Bodies at the evaluation stage (SK.3.2.6) and validation stage (SK.3.2.7)

Note 1 to entry: For purposes of communication and marketing, the SDB owner committee may give the SDB team a name.

SK.3.3.4

CR proposer
person (or body) authorized to submit a CR (SK.3.1.10) in a standard as database (SK.3.1.5)

Note 1 to entry: The CR is submitted at the CR proposal stage (SK.3.2.4)

SK.4 Procedures

SK.4.1 Overview

SK.4.1.1 The procedures described in this Annex are intended to be sufficiently generic and high level to be applicable to all SDBs, and to distinguish between the SDB management procedure (SK.3.2.2) and the SDB content procedure (SK.3.2.3).

SK.4.1.2 Note that at the operational level, in order to ensure transparency and traceability, and to enable common services to be provided for all SDBs, it is essential that certain procedural details are respected. For example, as an enabler for the integration of the SDB content procedure into the IEC systems (used for the management of the classic procedure), common forms have been created for the management of change requests (CRs) to complement the forms already available for the management of projects.

SK.4.1.3 Supplementary procedural information, requirements and criteria that apply to a particular SDB can be described in separate documents within the domain of the SDB owner committee, but such supplementary information, requirements and criteria shall be consistent with the procedures specified in this Annex. Such supplementary procedural information, requirements and criteria that apply to a particular SDB are subject to SDB owner committee approval (see SK.4.3.2.3). These supplementary procedures are normally considered to be part of the SDB (see Note 3 to entry to SK.3.1.5).

SK.4.2 SDB roles

SK.4.2.1 SDB owner committee

The SDB owner committee (SK.3.3.1) is responsible for the SDB (SK.3.1.5) content as a whole. As such they are also responsible for the integration of any specialized technical content into the SDB.

SK.4.2.2 SDB manager

The tasks performed by the SDB manager (SK.3.3.2) depend on the needs of the SDB, and in some cases can be fulfilled by more than one person. Details of additional roles specific to the SDB shall be provided in the supplementary procedural information (see Note 3 to entry to SK.3.1.5 and SK.4.1.3). Note that the roles of committee "Secretary" and "SDB manager" can be fulfilled by the same person, but this is not mandatory.

The process for appointing an SDB manager is analogous to that for a convenor (as defined in 1.12). Such appointments shall be confirmed by the National Body. The SDB manager may be reappointed for additional terms of up to three-years. There is no limit to the number of terms.

SK.4.2.3 SDB team

The SDB team (SK.3.3.3) reports to the SDB owner committee (SK.3.3.1) and is managed by the SDB manager (SK.3.3.2).

At the time of the establishment of an SDB, an SDB team shall comprise at least 5 members from the P-members of the SDB owner committee approving the creation of the SDB. While it is recommended that all the SDB owner committee’s P-members are present in the SDB team, it is not mandatory. An SDB team shall always be represented by at least 5 P-members of the SDB owner committee.

All P-members of the SDB owner committee have the right to appoint one or more experts to the SDB team. These SDB team members act as experts during the CR evaluation stage (by analogy with 1.12.1), but the voting carried out in the CR validation stage follows the one member/country—one vote principle, and votes submitted by National Bodies shall be explicit: positive, negative, or abstention (as defined in 2.7.2).

The SDB team might need to invite the CR proposer and/or the identified committees of interest to participate during the CR content procedure.

SK.4.3 SDB management procedure

SK.4.3.1 General

The SDB management procedure (SK.3.2.2) refers to the creation, maintenance and decommissioning of the data models (SK.3.1.7) and their metamodels (SK.3.1.9) that house the content of the SDB.

NOTE 1 SDB data models and metamodels can be limited depending on the structure and technology used for the database management system (DBMS).

NOTE 2 The SDB management procedure covers the interaction with the database management system but does not impose how a database is developed or implemented, or have an influence on its daily operations.

The following high-level descriptions assume the existence of an SDB advisory group as defined in 1.2 to provide feedback and advice for committees wishing to create or modify an SDB. It is expected that this SDB advisory group is populated by experts experienced in IEC SDBs and representatives of the IEC Central Office experienced in the DBMS.

A high-level overview of the lifecycle of the SDB management procedure is shown in Figure SK.1.

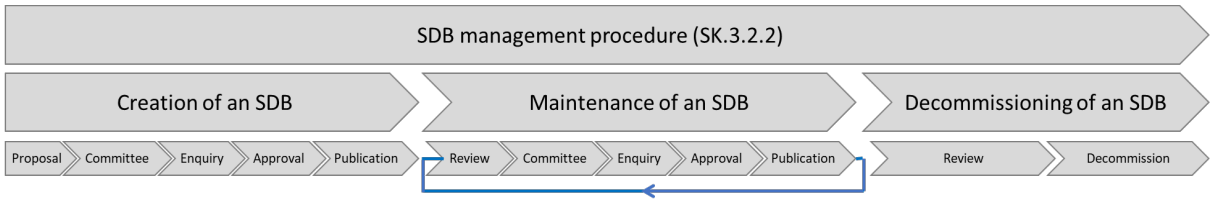

Figure SK.1 – SDB management procedure

SK.4.3.2 Creation of an SDB

SK.4.3.2.1 Proposal stage: proposal for creation of an SDB (including conversion of one or more standards to an SDB)

The proposal for the creation of an SDB follows the same process as 2.3 and shall be prepared by the SDB owner committee. The formal proposal shall also include the following items i to iii, and shall be submitted for evaluation:

i. market relevance: scope, business case, stakeholders, benefits, potential users, committees of interest, considerations on the licence model associated with needed information exchange interfaces (GUI languages, machine exchange formats);

ii. database draft definition: including data model, potential common shared content and interoperability relations with existing SDBs, data quality, and exchange format;

iii. content uniqueness: whether the proposed SDB content is already available in existing ISO or IEC standards or covered in existing SDBs.

SDB advisory group feedback shall also be obtained covering items i to iii, adding information regarding the technical feasibility, and whether the proposed SDB can be implemented on the current DBMS.

The proposal shall be circulated to the P-Members of the proposing SDB owner committee, identified committees of interest and to the SMB. See 2.3.5 for the acceptance criteria.

Once the RVN has been circulated, the inclusion of the project in the programme of work concludes the proposal stage.

SK.4.3.2.2 Committee stage

The committee stage is carried out in accordance with 2.5. At the committee stage, the proposing SDB owner committee shall develop the proposal and request feedback from all P-members and O-members of the SDB owner committee for the proposed SDB. The technical aspects related to harmonized data modelling and the capability of the DBMS shall be considered with the support of the SDB advisory group.

The committee stage ends when all technical issues have been resolved and the proposal is accepted for circulation as an enquiry draft and is registered by the office of the CEO.

SK.4.3.2.3 Enquiry stage

The enquiry stage is carried out in accordance with 2.6. At the enquiry stage, the proposing SDB owner committee shall request both comments and a vote on the proposed SDB to all National Bodies. At this stage the SDB definition shall include as a minimum:

i. market relevance: scope, business case, stakeholders, benefits, potential users, identified committees of interest, considerations on the licence model associated with needed information exchange interfaces (GUI languages, machine exchange formats);

ii. database definition: including data model, potential common shared content and interoperability relations with existing SDBs, data quality, and exchange format;

iii. content uniqueness: whether proposed SDB content is already available in existing ISO or IEC standards or covered in existing SDBs;

iv. technical feasibility: whether the proposed SDB can be implemented on the current DBMS;

v. set of data elements as a proof-of-concept and a DBMS feasibility report;

vi. proposed SDB manager and SDB team, and supplementary procedural information (SK.4.1.3);

vii. proposed licence model associated with the information exchange interfaces.

SK.4.3.2.4 Approval stage

The approval stage is carried out in accordance with 2.7. The approval stage requires the fulfilment of the three following actions.

a) Approval is first required at committee level in accordance with the criteria in 2.7.3.

b) The proposing SDB owner committee in collaboration with the SDB advisory group prepare an SMB recommendation regarding the creation of the proposed SDB. The recommendation shall include a confirmation that the proposed SDB is fit for purpose with respect to end user needs, together with a proposed implementation deadline to ensure that the SDB is created in time for the market needs.

c) An approval by the SMB, who might seek consultation with the SDB advisory group.

SK.4.3.2.5 Publication (implementation) stage

The publication of the SDB refers to the setting up and putting into service of the SDB as defined in the approved documentation.

Where applicable the publication requires various testing and associated implementation of any transition plan to a new or updated version of the SDB in accordance with the proposed implementation deadline in b)SK.4.3.2.4 b).

SK.4.3.3 Maintenance of the SDB

The maintenance procedures for the SDB are in accordance with 2.9 of the IEC Supplement, with the exception that an SDB has no formal stability period. If the decommissioning of an SDB is being considered, then this shall follow the procedure described in SK.4.3.4

The SDB shall be continuously reviewed to assess whether modification of the SDB is needed. Proposals for modifying an existing SDB may be made by the bodies specified in 2.3.2. In all cases, modification proposals will be managed by the SDB owner committee.

A proposal for modification of the SDB requires consultation with the SDB owner committee members to validate that the proposed changes are appropriate and are within the capabilities of the DBMS. The technical aspects related to harmonized data modelling and the capability of the DBMS shall be considered with the support of the SDB advisory group.

A proposal for modification shall also include the transition plan from the old to the new instance of the SDB. The review report shall address the following points:

i. market relevance: the rationale for the modification requested in response to market needs (business drivers);

ii. description of the modification: description of what modifications are proposed to the data model(s), data quality requirement and interfaces;

iii. database definition: impact analysis of the modifications, especially on common content and relations with existing SDBs, data quality, exchange format;

iv. content transition considerations: the proposed content transition plan, together with a set of data elements to illustrate the modifications;

v. technical feasibility: described by the DBMS feasibility report.

If the proposal for SDB maintenance includes a change in the scope of the SDB, then further consultation is required with the Office of the CEO and the SDB advisory group in line with the principles outlined in SK.4.3.2, including the feasibility, version handling and transition.

The steps for the modification of the SDB are the same as those for SDB creation omitting the proposal stage (SK.4.3.2.1).

Consideration shall be given to which previous version(s) of the SDB need to be kept available.

SK.4.3.4 Decommissioning of an SDB

SK.4.3.4.1 Review

Proposals for decommissioning of an existing SDB may be made by the bodies specified in 2.3.2. In all cases the request will be managed by the SDB owner committee.

Input is required on the following:

i. market relevance: rationale of the decommissioning request;

ii. transition considerations: business impact assessment on stakeholders, users and identified committees of interest, transition strategy;

iii. content considerations: content transition plan for its withdrawal;

iv. decommission plan.

The decommission of the SDB is decided by the P-members of the SDB owner committee. The approval criterion is a 2/3 majority of those in favour of decommissioning.

The decision to decommission the SDB is ratified by the technical management board (in consultation with the SDB advisory group).

SK.4.3.4.2 Decommission

The SDB shall be decommissioned according to the decommission plan. The action is fully under the management of the Office of the CEO.

SK.4.4 SDB content procedure

SK.4.4.1 General

The SDB content procedure (SK.3.2.3) described in this Annex is an adaptation of the classic procedure described in Clauses 2 and 3 to the development of SDBs as opposed to projects. It is based on the use of a web-accessible database and electronic communication. The SDB content procedure is designed for use with a standard as database (SDB), and as such the durations for the various stages are less than those for the classic procedure. Indeed, the prescribed throughput durations for evaluation and validation can only be achieved through the use of electronic communication.

A high-level overview of the SDB content procedure, including that for editorial changes, and its relationship with the classic procedure is shown in Figure SK.2.

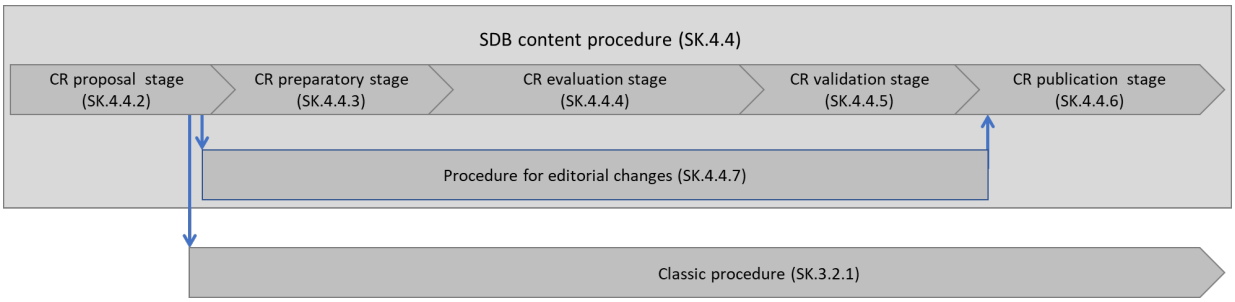

Figure SK.2 – SDB content procedure

The SDB content procedure comprises 5 stages:

– the CR proposal stage (SK.4.4.2);
– the CR preparatory stage (SK.4.4.3);
– the CR evaluation stage (SK.4.4.4);
– the CR validation stage (SK.4.4.5);
– the CR publication stage (SK.4.4.6).

Figure SK.3 shows a process map of the SDB content procedure, and indicates default durations.

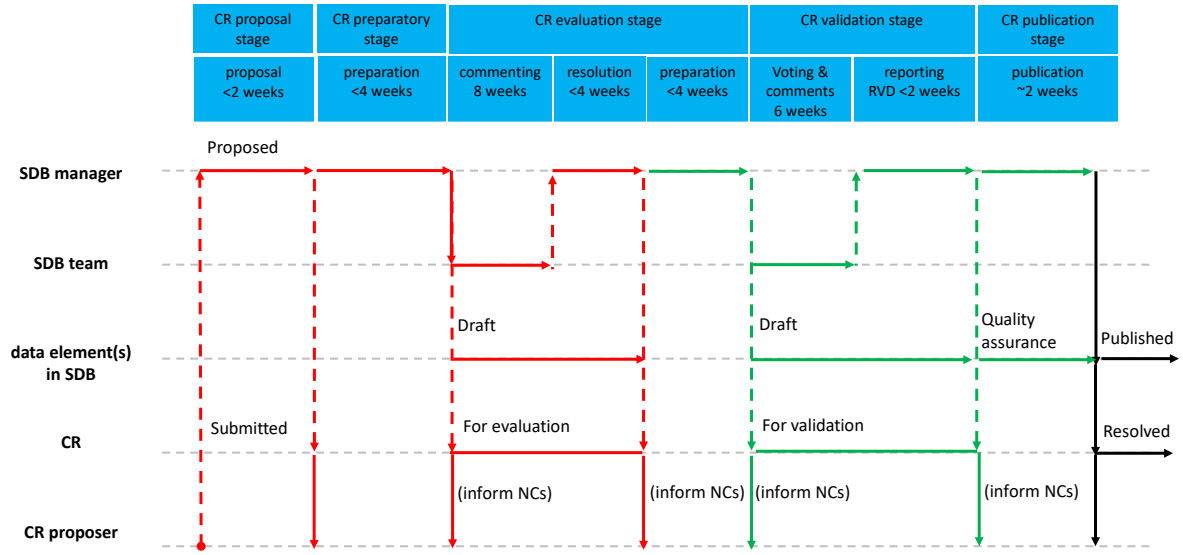

Figure SK.3 – Process map of the SDB content procedure

SK.4.4.2 CR proposal stage

A change request is initiated by the CR proposer (SK.3.3.4) through the appropriate CR form. The CR proposer shall complete all the required information in the CR form.

The required information includes a short title describing the scope of the CR as well as an identification of the data elements of the SDB content to which the proposal applies. The proposal encompasses the following information:

– scope of the CR;
– identification of the data elements in the SDB to which the proposal applies;
– purpose and justification of the CR;
– identification of other CRs that the current CR needs to be processed with;
– committees of interest;
– information relating to patents;
– information relating to trademarks and copyright;
– relationship with any SDGs.

Proposals may be made by the bodies specified in 2.3.2.

Proposals are evaluated by the SDB manager to determine which route shall be used for the submitted proposal.

If the changes are considered as editorial only and accepted by the SDB manager, then the change request can move directly to the CR publication stage SK.4.4.6, and the choice documented in the CR form. If the changes are considered to be unsuitable for the CR content procedure, as specified by the supplementary procedural information (SK.4.1.3), the submitted proposal can be transferred to the classic procedure and the choice documented within the CR form.

For requests originating from committees other than the SDB owner committee, a copy of the documented CR form is communicated to the committees concerned.

SK.4.4.3 CR preparatory stage

At the CR preparatory stage, the SDB manager (SK.3.3.2), if needed in consultation with the SDB team, validates and completes the information provided by the CR proposer.

The proposal encompasses the following information using the respective CR form:

– scope of the CR;
– identification of the data elements in the SDB to which the proposal applies;
– purpose and justification of the CR;
– identification of other CRs that the current CR needs to be processed with;
– committees of interest;
– information relating to patents;
– information relating to trademarks and copyright;
– relationship with any SDGs.

NOTE 1 More detailed information applicable to a specific standard as database can be specified by the SDB owner committee (SK.4.3.1).

If required, a maintenance team (MT) can be set up to assist the SDB manager in the preparation activities. When established, the MT has a one-to-one relation to an SDB and consists of members with expertise to assist the SDB manager in managing the maintenance of the SDB.

When the quality of the information provided at the CR preparatory stage is satisfactory, the SDB team is informed (with copies to the CR proposer and identified committees of interest) and asked by the SDB manager to make an evaluation and to comment.

The SDB manager shall decide, if needed in consultation with the SDB team, whether the CR is within the scope of the SDB and valid for further work and, taking into consideration the supplementary procedural information (see Note 3 to entry to SK.3.1.5 and SK.4.1.3), whether the CR should be:

a) handled with the SDB content *procedure (SK.3.2.3) and proceed to the CR evaluation stage (SK.4.4.4);* or
b) handled with the *classic procedure (SK.3.2.1);* or
c) handled as editorial changes (SK.4.4.7) and proceed to the CR publication stage; or
d) rejected altogether.

The decision shall be announced to the SDB owner committee, the CR proposer and the identified committees of interest.

If, within 2 weeks from the date of the decision, 2 or more P-members of the SDB team disagree with the decision a) to d) of the SDB manager, the CR shall be discussed at an SDB team meeting[6].

NOTE 1 The duration required for preparatory work should normally not exceed 4 weeks but might exceptionally be longer if the original proposal is not sufficiently mature. In such a case, the preparation is comparable to “stage 0” work (see Annex SH) and the time is counted from final agreement with the CR proposer.

[6] Currently this action / decision can occur at the CR evaluation stage

SK.4.4.4 CR evaluation stage

The commenting is comparable to the commenting on a CD. If the CR is satisfactorily defined, if this is in accordance with the supplementary procedural information (see Note 3 to entry to SK.3.1.5 and SK.4.1.3), the SDB team might have the option to evaluate the CR at an SDB team meeting. If the CR evaluation draft is circulated, the default duration is 8 weeks.

The final step of the CR evaluation stage comprises the resolution by the SDB manager of the comments of the members of the SDB team followed by the conclusion whether the CR should be:

a) continued with the *SDB content procedure (SK.3.2.3) and proceed to the CR validation stage (SK.4.4.5);* or

b) continue with the *classic procedure (SK.3.2.1);* or

c) improved and be *re-evaluated;* or

d) handled as editorial changes (SK.4.4.7) and proceed to the CR publication stage; or

e) rejected altogether.

Such resolution shall be announced to the SDB owner committee, the CR proposer and the identified committees of interest.

If, within 2 weeks from the date of announcement, 2 or more P-members disagree with proposal b), c), d) or e) of the SDB manager, the CR shall be discussed at an SDB team meeting.

NOTE 1 The entry of a new data element in the SDB is not to be seen as “new work”, but rather as part of the continuous maintenance of the existing collection of data elements. Therefore, to arrive at a conclusion, a simple majority of the submitted votes can be used at the CR evaluation stage, applying the choice between continuation/rejection as well as between the SDB content procedure and the classic procedure.

NOTE 2 If the CR references more than one data element, some of which are acceptable for continuation with the SDB content procedure while others are not, the original CR might be divided into two or more new CRs and processed separately. Such new CRs start at the CR process stage already achieved.

The SDB manager revises the CR in line with the resolution of the comments received during the CR evaluation stage and checks that the data element(s) associated with the CR are, after the proposed revisions, still sufficiently and properly described, within the scope of the SDB and consistent with the data elements already existing in the SDB. If required, corrections are made. For this, the SDB manager might seek assistance from a maintenance team (MT) or from other internal or external experts. The default duration for this preparation is up to 4 weeks.

SK.4.4.5 CR validation stage

The duration for voting shall not exceed 8 weeks (default 6 weeks). Approval criteria are defined in 2.7.3.

At the CR validation stage, the one member/country—one vote principle is followed, and votes submitted by National Bodies shall be explicit: positive, negative, or abstention. Meanwhile the SDB owner committee members and identified committees of interest are permitted to submit comments.

The report on the result of the vote shall indicate which data elements have been approved and for data elements that have been rejected, shall indicate the associated reasons in the observations. The report on the result of the vote shall be announced to the SDB owner committee, the CR proposer and identified committees of interest within 4 weeks after closure of the vote.

Approved data elements shall advance to the CR publication stage (SK.4.4.6).

For rejected data elements and any approved data elements that are dependent on unapproved data elements, the SDB manager can decide to proceed with the CR as follows:

a) refine the CR and re-submit to CR evaluation stage (SK.4.4.4); or

b) reject the CR.

If, within 2 weeks from the date of announcement, 2 or more P-members disagree with decision a) or b) of the SDB manager, the CR shall be discussed at an SDB team meeting.

SK.4.4.6 CR publication stage

The SDB manager prepares the final version of the approved data elements for final quality assurance and publishes them:

a) within 2 weeks of the date of announcement of the result of the vote at the CR validation stage; or

b) in the case that the CR is dependent on other data elements being approved in other CRs, within 2 weeks of the date of announcement of the result of the CR validation vote of these other CRs; or

c) in accordance with the approved supplementary procedural information (SK.4.1.3).

When the CR is published, the SDB owner committee is informed (with copies to the CR proposer and identified committees of interest).

SK.4.4.7 Editorial changes to an existing data element

Proposed changes to a data element that affect neither its use nor semantics (i.e. editorial changes) can proceed directly to the CR publication stage (as described in SK.4.4.6), without passing through the CR preparatory, evaluation and validation stages.

Specific criteria on which changes are classified as editorial changes can differ, depending on the SDB, and are described in the approved supplementary procedural information (SK.4.1.3) of the responsible SDB owner committee.

Annex SL
(normative)

Organization, rules and procedures of the International Special Committee on Radio Interference (CISPR)

SL.1 Introduction

The International Special Committee on Radio Interference (CISPR) is an organization within the IEC that is established to consider the protection of radio reception from interference. The committee constitutes subcommittees that provide both product (vertical) and basic standard (horizontal) roles. The full Terms of Reference and Scope are also published on the IEC internet website. A full history of the CISPR is provided in publication CISPR 16-3.

CISPR follows the ISO/IEC Directives Parts 1 and 2 and the IEC Supplement with the following deviations.

SL.2 Membership

SL.2.1 "I" Members

In addition to the normal categories of IEC membership, CISPR has "I" members as defined below:

> Category "I" members are organizations, other than IEC National Committees, that have a recognized interest in the international aspects of the reduction of radio interference. “I” members representatives may participate in the work of any committee, subcommittee or working group. "I" members have the right to comment but do not have any voting rights on IEC publications.

An International organization may become an "I" member of the CISPR, subject to acceptance by the Plenary Assembly of the CISPR.

The current membership is shown on the IEC CISPR web page.

SL.3 Chair and Vice-Chair

SL.3.1 Chair

The Chair of the CISPR is the Chair of the Plenary Assembly.

The procedures contained in the ISO/IEC directives shall be used to seek nominations for the position of Chair. The Secretariat of CISPR shall nominate a Chair who shall be appointed by the Plenary Assembly on the recommendation of the Steering Committee. The Chair of the CISPR shall be appointed initially for a period of six years. In the interest of continuity, this period shall embrace not less than two successive Plenary Meetings and, if necessary, the period of office shall be adjusted to permit this condition to be fulfilled. Further terms of office shall be subject to the ISO/IEC directives with the exception that they shall be ratified by the CISPR Plenary meeting.

SL.3.2 Vice-Chair

The procedures for appointment of Chairs contained in the ISO/IEC Directives (ISO/IEC Directives Supplement, Clause 1.8.1.2 a) and b)) shall be used to seek nominations for the position of Vice-Chair of CISPR. The Secretariat of CISPR shall nominate a Vice-Chair who shall be appointed by the Plenary Assembly upon the recommendation of the Steering

Committee. The Vice-Chair shall initially be elected for a period of up to six years. Further terms of office shall be subject to the ISO/IEC Directives with the exception that they shall be ratified by the CISPR Plenary meeting.

The Vice-Chair shall advise the Chair, and act as Chair in her or his absence.

SL.3.3 Subcommittee Chairs

The procedures contained in the ISO/IEC Directives shall be used to seek nominations for the position of subcommittee Chairs. The Secretariat of each subcommittee shall nominate a Chair who shall be appointed by the Plenary Assembly on the recommendation of the Steering Committee. The period of office shall initially be for six years. Further terms of office shall be subject to the ISO/IEC directives with the exception that they shall be ratified by the CISPR Plenary meeting. The Steering Committee may take temporary appointments in the intervals between meetings of the Plenary Assembly.

SL.3.4 Subcommittee Vice-Chairs

The procedures for appointment of Chairs contained in the ISO/IEC Directives (ISO/IEC Directives Supplement Clause 1.8.1.2 a) and b)) shall be used to seek nominations for the position of a CISPR Sub-committee Vice-Chair. The Secretariat of the relevant CISPR subcommittee shall nominate a Vice-Chair who shall be appointed by the CISPR Plenary Assembly upon the recommendation of the Steering Committee. The subcommittee Vice-Chair shall initially be appointed for a period of up to six years. Further terms of office shall be subject to the ISO/IEC Directives with the exception that they shall be ratified by the CISPR Plenary Assembly.

Subcommittees shall define the role of their Vice-Chair, which must include at least advising the subcommittee Chair and acting as subcommittee Chair in his absence.

SL.3.5 Working Group Convenors

Working group convenors shall be appointed by the CISPR committee which the group reports to (i.e. the ‘parent committee’) for a term of up to three years. The term shall be set so that it ends at a suitable future plenary session of the parent committee. The procedure to follow where terms of convenors have ended or a convenor has relinquished the post prior to a plenary meeting is:

1. The first draft agenda for the relevant plenary meeting shall include an item to review the position of WG Convenor.

2. The parent committee Secretariat shall ascertain if the current convenor is willing to continue.

3. The parent committee Secretariat shall apply the timescales in the IEC Directives for circulation of documents before plenary meetings to inform the committee members of the review of the position of convenor and inviting members to submit nominations. An AC document is used for this purpose and this should include the WG scope for reference by members.

4. If there is a single nomination for the position of convenor, whether that is the existing convenor or other person, then the plenary meeting of the parent committee shall endorse their appointment.

5. If there is more than one nomination for the position of convenor, there shall be a secret ballot taken during the parent committee plenary meeting. Each P-member delegation present at the meeting will be entitled to vote and the new convenor shall be the person receiving the highest number of votes, with abstentions not counted.

6. The parent committee Secretariat shall circulate an INF document announcing the result of the review

7. In the event that a convenor steps down and there is no nomination for a replacement, the CISPR Steering Committee shall appoint a temporary convenor and the parent committee shall seek nominations and appoint a convenor at the earliest opportunity by correspondence or at the next plenary meeting.

There is no limit to the number of terms, as long as the convenor keeps the support of the parent committee or sub-committee. The National Committee which has designated the convenor as expert is expected to confirm its support to the convenor in their (new) role.

SL.4 Plenary Assembly

SL.4.1 Constitution

The Plenary Assembly shall consist of delegates representing the CISPR National Committees and Member Bodies.

SL.4.2 Terms of reference

The Plenary Assembly shall be the supreme body of the CISPR. Its responsibilities are as follows:

a) to elect (ratify) the Chair and Vice-Chair of the CISPR;
b) to allocate the Secretariat of the CISPR;
c) to appoint (ratify) Chairs of subcommittees;
d) to allocate Secretariats of subcommittees;
e) to approve changes in membership of the CISPR;
f) to modify, as necessary, the structure and organization of the CISPR;
g) to consider matters of policy and general interest referred to it by the Steering Committee;
h) to consider technical matters as requested by National Committees and Member Bodies, the Chair of the CISPR or Chairs of the subcommittees.

SL.4.3 Setting CISPR Policy

SL.4.3.1 CISPR Policy

For the purposes of these rules and procedures, CISPR Policy is defined as the preferred approach to standardization recommended to be taken by CISPR Subcommittees as agreed by CISPR using approval requirements for International Standards.

Policy setting could include, for example, guidance on preferred test methods, the use of referee methods or the optimum way to utilise measurement uncertainty.

Setting CISPR policy in the CISPR plenary assembly or by correspondence will be reserved for those occasions when decisions needed to be made to inform/guide sub-committees in their work to establish consistency in standardization across CISPR.

If decisions on CISPR policy are made, it is with the intention that the policy is adopted universally.

SL.4.3.2 Procedure for setting CISPR Policy

Policy proposal documents for consideration and voting at the plenary assembly must be circulated to NCs at least three months in advance of the meeting. To be adopted at the meeting, the following must be achieved:

a) a two-thirds majority of the votes cast by CISPR P-members vote are in favour and
b) not more than one-quarter of the total number of votes cast are negative.

Abstentions are excluded when the votes are counted.

Where policy is adopted at CISPR level, Subcommittees should adopt the policy when developing new publications or amendments to existing publications.

If a CISPR Subcommittee does not apply a policy which has been adopted at CISPR level, then the Secretary of the Subcommittee shall enter a note in the first draft of a publication circulated. The note shall highlight the text which does not follow the agreed policy.

The text inserted by the Secretary will alert P-members so that they can refer back to their original decision on the policy.

SL.5 Steering Committee

SL.5.1 Constitution

The Steering Committee shall consist of the following:

a) the Chair of the CISPR (to be Chair of the Steering Committee);
b) the Vice-Chair of the CISPR;
c) the Chairs of all CISPR subcommittees;
d) the immediate past Chair of the CISPR;
e) the Chief Executive Officer of the IEC;
f) the Secretariat of the CISPR;
g) additional members as co-opted by the Chair of the CISPR;
h) a representative of each of the Member Bodies of the CISPR other than the National Committees of the IEC. Details of current members are shown on the CISPR page of the IEC website;
i) a representative of each liaison body;
j) the conveners of those Working Groups which report directly to the Steering Committee (when required).

SL.6 Terms of reference

The responsibilities of the Steering Committee are as follows:

a) To approve the CISPR Strategic Business Plan.
b) To assist and advise the Chair of the CISPR in the conduct of the affairs of the CISPR.
c) To maintain contact with all work in progress in the CISPR.
d) To give guidance and assistance to those carrying out the work of the CISPR.
e) To consider progress reports from subcommittees, and from Working Groups which report directly to the Steering Committee.
f) To advise the Chair of the CISPR as to the arrangements to be made for meetings of the CISPR.

g) To refer new objects of study to a subcommittee when the terms of reference do not directly apply.

h) To set up Working Groups reporting to the Steering Committee.

i) To coordinate and direct the work between sub committees on common issues.

SL.7 Appeals

Mostly covered by ISO/IEC Directives Part 1.

National Committees and Member bodies have the right to appeal

to the Steering Committee on a decision of a subcommittee,

to the CISPR Plenary Assembly on the decision of the Steering Committee.

The decision of the Plenary Assembly in the case of an appeal is final.

Any matters of technical coordination between IEC and CISPR which cannot be resolved by the parties concerned or by the IEC Advisory Committee on Electromagnetic Compatibility (ACEC) will be referred to the Standards Management Board (SMB) for a decision after taking into consideration the position of the CISPR Steering Committee.

SL.8 Amendments to CISPR rules and procedures

The organization, rules and procedures of the CISPR, as described in this annex, may only be amended either by the Plenary Assembly or by correspondence with CISPR member bodies. Such amendments can only be made on the condition that not more than one-quarter of the membership cast a negative vote.

Annex SM
(normative)

Deviations of TC 100's procedures and organizational structures from the ISO/IEC Directives

SM.1 Introduction

The establishment of TC 100 required procedures and organizational structures reflecting market needs so that the work could be completed in a timely and efficient manner. Therefore, a flexible organization with new positions and functions was developed, which deviated from the ISO/IEC Directives.

This was supported by National Committees and the Standardization Management Board.

TC 100 follows the ISO/IEC Directives Part 1 and Part 2 along with the Supplement – Procedures specific to IEC, with the following deviations.

SM.2 Terms and definitions

SM.2.1.1

Technical Secretary
TS
individual supporting a number of technologies relating to technical areas and/or working groups, project teams and maintenance teams in technical, organizational and administrative activities

SM.2.1.2

Technical Area
TA
area of related technologies for which standardization is needed

SM.2.1.3

Technical Area Manager
TAM
individual managing the activities of a TA

SM.3 Structure and organization

SM.3.1 TC Structure

An overview structure of TC 100 is shown in Figure SM.1.

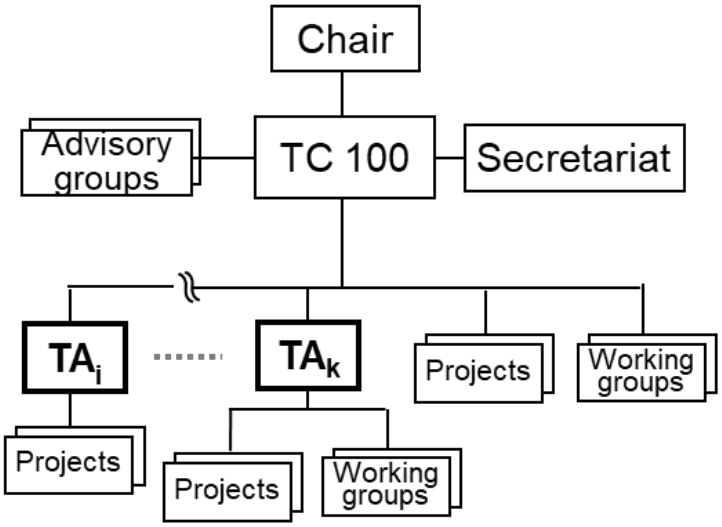

Figure SM.1 – Structure of TC 100

SM.3.2 Technical Area (TA)

SM.3.2.1 Description

A Technical Area (TA) is a technologically categorized area in TC 100, in which projects of related technology are allocated. A TA is similar to a subcommittee but TC 100 avoids organizing a conventional rigid sub-committee structure and employs a TA and project team, working group and maintenance team system, in which all technical work is carried out by these groups under TC 100, and these projects are flexibly grouped within TAs for efficient standards development and practical project management reflecting the rapidly changing multimedia technology. All circulation of working documents and voting of TC 100 projects are conducted at the TC 100 level.

The TA system is based on the following concepts:

– a TA has a minimum of two active projects;
– any modification of title and scope of a TA is proposed by the respective TA and approved at the TC 100 level;
– the TAM and TS manage the TA in the same way as a subcommittee Chair and secretary respectively;
– TAs are flexibly established and disbanded to meet rapidly changing multimedia technology.

The daily management and activity of TA are almost the same as those of a sub-committee.

SM.3.2.2 Establishment of a TA

A TA is established by the TC 100, when it is foreseen that related projects needing coordination are expected or approved.

– establishment of TA is discussed in Plenary based on the proposal by TC 100 Secretariat or TC 100 officers or advisory groups in TC 100;

– the proposed scope shall be clearly broad enough to support two or more IEC publications, or a multi-part publication, in the foreseeable future;
– consideration shall be given that one project already exists and additional projects are expected with submission of a quality draft within six months.

SM.3.2.3 Membership

Members of the TA include:

– Technical area manager;
– Technical secretary(ies);
– – Project leaders from project teams, convenors from working groups and maintenance teams within the responsibility of the TA ;
– Liaison representatives of internal (IEC/ISO), A liaison of the TA.

As agreed in the procedures, National Committees cannot be members of a TA. They are members of TC 100.

SM.3.2.4 Disbandment of a TA

A TA will be disbanded by the TC 100 secretariat when all projects are finished, and no new projects are expected in this area of technology in the near future. Maintenance Teams working under a TA will be re-allocated to TC 100.

SM.4 Functions and responsibilities

SM.4.1 Technical Secretary (TS)

SM.4.1.1 Appointment

The Technical Secretary (TS) of a TA will be proposed by a P-member, nominated by the TC 100 secretariat and appointed by the TC 100. The number of technical secretaries in TC 100 will be evaluated by the TC 100 and relate to existing TAs and work.

In case a new TS is needed, the TC 100 secretary takes appropriate action by asking P-members for proposals giving a clear description of the TA.

A TS supports a number of TAs and/or project teams/working groups/maintenance teams.

The National Committee proposing a TS shall

– indicate its intention to participate actively in the work of TC 100, and
– be in a position to ensure that adequate resources are available for the work in the relevant TA.
– The TS should be suitably qualified with broad technical knowledge. The person shall
– have an aptitude for administration and organization,
– have some relevant technical knowledge,
– have sufficient administrative and organizational ability,
– have support from their National Committee to perform the duties of a TS in a timely and effective manner.

The TS may nominate an assistant TS. The TC 100 Chair appoints an assistant TS upon request.

SM.4.2 Technical Area Manager (TAM)

SM.4.2.1 Elucidation

A Technical Area Manager (TAM) and TS shall communicate with each other on their respective responsibilities and duties. A TAM and TS shall also coordinate document status within a TA.

The TAM reports to TC 100 Chair on the activities of their TA. The TS reports to TC 100 secretariat on their activities.

Appropriate decisions related to the development process of standards are taken by the TAM, in consultation with the TS and the project leader or convenor.

SM.4.2.2 Appointment

A TAM is proposed by the industry for which the TA is important, a P-member of TC 100 or a TC 100 officer, nominated by the TC 100 secretariat and appointed by the TC 100 Chair.

In case of a new TA, the TC 100 secretary takes appropriate action to receive proposals for a nomination of a TAM.

The TAM should be suitably qualified, usually with relevant technical knowledge about any involvement in the TA for which he will be appointed. The person shall also have

– an aptitude for management,
– relevant technical knowledge and be able to judge what is essential within the TA,
– support from the industry to perform the duties of a TAM in a timely and effective manner.

SM.4.2.3 Term of office

Term of office of a TAM ends when the TA is disbanded or three years after appointment of the TAM, where in the latter case successive extensions each of three-year periods may be approved by TC 100 Chair.

SM.4.2.4 Relinquishment

If the TAM resigns, he should announce his intention by giving a minimum of six months' notice to the TC 100 secretary.

The TC 100 secretary will take appropriate action to receive proposals for nomination of a successor.

SM.5 Meetings

SM.5.1 TA meetings

SM.5.1.1 Organization of meeting

The TS should organize a TA meeting only if there is need for a meeting (physical or virtual). This should be completed in cooperation with the TAM. In the event of a physical meeting, it should preferably be held in conjunction with a TC 100 plenary meeting.

SM.5.1.2 Attendance of meeting

A TA is a coordination group within a specified area. Meetings should coordinate work in the relevant project teams and when necessary with groups outside the TA having interest in the subject.

TA meetings should, in principle, be attended by its members only. In addition to those members, guests can participate in meetings on the invitation of the TAM. The TC 100 Chair and secretariat are entitled to be present at TA meetings as observers.

If a TA meeting is held in conjunction with a TC 100 plenary meeting, representatives of National Committees can attend the TA meeting as observers. NC representatives can obtain meeting documents by means of the electronic distribution system used for that meeting.

If a TA meeting is held independently from TC 100 plenary meeting, the TA meeting notice should be distributed to all national committees one month before the meeting date. The notice shall be distributed as a TC 100 informative document. The representatives of National Committees can attend the meeting as an observer by the invitation of the TAM.

SM.6 Reporting

SM.6.1 TA to TC

The report to the TC 100 Chair differs from the minutes of a TA meeting. Most reports will be written following a TA meeting. The report describes the current status of projects within the TA and other relevant issues. Using the latest report, it should be possible for the TC 100 secretariat to inform the SMB about the current status of any project.

The TAM should make a report to the TC 100 Chair in plenary meetings or on request.

The report should contain the following items:

– last meeting data and next meeting data;
– questions/remarks to be brought to TC 100;
– Programme of Work and state of art of projects;
– maintenance forthcoming year;
– developments and expectations in market covered by TA;
– requests for new/modified liaisons, if any.

SM.6.2 Availability of reports

In general, reports to the TC 100 Chair should be available at least one week before the TC meeting and circulated to the TC 100 secretariat.

Annex SN

Voting/commenting periods on technical documents

Documents for votes and comments:		
New Work Item Proposal	NP	12 weeks [7]
Committee Draft for Vote	CDV	12 weeks
Final Draft International Standard	FDIS	6 weeks
Publicly Available Specification	PAS	8 weeks
Draft Technical Report	DTR	8 weeks
Draft Technical Specification	DTS	12 weeks
Questionnaire	Q	6 weeks
Documents for comments only:		
Committee Draft	CD	8, 12 or 16 weeks
Document for Comments	DC	6 weeks

7 The voting period may be shortened to 8 or 4 weeks in specific cases, see 2.3.4.

Annex SO
(normative)

Systems standardization

SO.1 Introduction

The multiplicity of technologies and their convergence in many new and emerging markets, particularly those involving large scale infrastructure, now demand a top down approach to standardization, starting at the system or system architecture rather than at the product level. System standards are also increasingly required in sectors such as environment, energy efficiency, safety, and health. The intent of the Systems Committee approach is to engage additional stakeholders and enhance collaboration across the IEC.

In this context, a system is formally defined as:

A group of interacting, interrelated, or interdependent elements forming a purposeful whole of a complexity that requires specific structures and work methods in order to support applications and services relevant to IEC stakeholders.

The structures and procedures needed in IEC to accommodate the systems approach are, as far as possible, the same as those already in place for more traditional standardization activity. However, some further provisions are required in order to ensure that a particular systems standardization programme:

- is fully market relevant;
- can be managed within clearly defined boundaries;
- engages all the appropriate interests, both within and beyond the IEC community;
- is meant to facilitate collaboration and communication between SyCs and all other committees of the IEC; and
- does not duplicate, overlap, or conflict with other work being undertaken in the same area.

SO.1.1 Definitions

SO.1.1.1 Systems Reference Deliverable (SRD)

See Clause SO.7.1

SRDs may address (but are not limited to):

- Standards mapping to provide a listing of the standards and potentially existing standards development activities relevant to the domain;
- Roadmap(s) to provide forward-looking plans related to the evolution of standards applicable to the domain. Such roadmaps may identify gaps in the standards available;
- Databases to support domain-specific information such as data dictionaries and registration mechanisms;
- Architectures which are tailored to the viewpoints of the domain’s stakeholders. These architectures may identify how identified standards will interface together to meet domain needs;
- Profiles to identify groups of standards, and parameters and options within standards, specifically applicable to the domain. Profiles allow single standards (and options within a standard) or groups of standards to be identified which together will meet the domain needs;
- Interfaces and transfer functions across the domain to identify any special interfacing and interworking functions needed by the domain;

- Use Cases to define domain needs documented from the viewpoints of the domain's stakeholders and users. Use Cases define the various ways in which stakeholders and users are expected to operate within the domain. Use Cases thereby define the range of requirements that must be addressed by domain standardization. Use Cases are expected to be entered into the Use Case Management Repository (UCMR) and will provide the evolving requirements of the domain;
- Domain definition to define the scope and understanding of the domain boundaries.

SO.1.1.2 Systems Committee (SyC)

A specialized type of committee working at the systems level taking into account the needs and concerns of all stakeholders. SyCs develop reference architectures, use cases, and appropriate deliverables and guidance on the interfaces, functionality and interaction of a system within its agreed terms of reference. SyCs and TCs will avoid duplication of each other's work while striving for close collaboration. A SyC can draft Systems Reference Deliverables (SRD) and in certain instances international standards. It functions generally in a similar manner as a conventional technical committee, except as per this Annex.

SO.2 Establishment of Systems Committees

SO.2.1 Systems committees are established and dissolved as per ISO/IEC Directives Part 1, 1.5.1

SO.2.2 A proposal for the establishment of a new systems committee is made as per ISO/IEC Directives Part 1, 1.5.3

SO.2.3 The proposal for a new systems committee shall address requirements in ISO/IEC Directives Part 1, 1.5.4. The proposal shall be made using the appropriate form (NTC). Additionally, the proposal shall include:

- a possible work programme;
- a roadmap to be further detailed and updated by the SyC.

The roadmap shall identify any closely related systems activities to clearly position the expected new systems work with the active participation of the existing SyCs and TCs. Such a mapping should be communicated with these respective SyCs and TCs.

SO.2.4 The evaluation of the proposal shall be as per the requirements of ISO/IEC Directives Part 1, 1.5.5.

SO.2.5 The circulation of the proposal shall be as per the requirements of ISO/IEC Directives Part 1, 1.5.6, with the exception to substitute the term technical committee with Systems Committee.

SO.2.6 The Standardization Management Board evaluates the replies and provided 2/3 majority of the National Bodies voting are in favour of the proposal, and at least 5 National Bodies who voted in favour expressed their intention to participate actively, decides either to:

a) establish a new Systems committee, or

b) assign the work to an existing Committee

SO.2.7 By default, the Secretariat of Systems Committee is allocated to the IEC Secretariat. Once set up and at any time of its existence, a Systems Committee can seek approval from SMB to allocate its secretariat to a National Committee. The allocation of the secretariat in this case shall follow the same procedure as that used for Technical Committees.

SO.2.8 SyCs shall have a labelling assignment distinctive from the TC numbering systems (e.g. SyC AAL, SyC Smart Energy, etc.).

SO.2.9 As soon as possible after the decision to establish a new SyC, the necessary Registered members (R-members) and liaisons shall be arranged.

SO.2.10 The scope of an SyC shall be established as per ISO/IEC Directives Part 1, 1.5.10 with the following exceptions:

- Substitute the term technical committee with Systems Committee;
- The scope is a statement precisely defining the limits of the work of a SyC. The definition of the scope of a SyC shall begin with the words "Systems Standardization of …" or "Standardization of systems in the field of …" and shall be drafted as concisely as possible;
- SyCs shall prepare a strategic business plan for its own specific field of activity (see 2.1.2 of ISO/IEC Directives, Part 1).

SO.2.11 The modification of the scope or title of an SyC shall be as per ISO/IEC Directives Part 1, 1.5.11, with the exception to substitute the term technical committee with Systems Committee.

SO.3 Establishment of subcommittees of Systems Committees

ISO/IEC Directives Part 1, 1.6 apply except for the following:

- Substitute the term technical committee with Systems Committee;
- Secretariat of a subcommittee of a Systems Committee shall follow the same rules as those of Systems Committees.

SO.4 Participation in the work of Systems Committees

All National Committees have the right to participate in the work of Systems Committees.

The same processes for participation in a committee apply to Systems Committees. ISO/IEC Directives Part 1, 1.7 shall apply with the exception to substitute the term technical committee with Systems Committee.

In the SyCs, decisions will continue to be made by P-members of the SyC through votes in plenary or by correspondence. SyC plenary delegates should be assigned by their normal process by the National Committees. NCs will continue to have the responsibility to reconcile all their concerned national stakeholders in whatever process they currently use to form a vote or position.

SO.4.1 P-members and O-members

See ISO/IEC Directives Part 1, 1.7 with the exception to substitute the term technical committee with Systems Committee.

SO.4.2 Other types of participation

SO.4.2.1 Registered members

Participation by TCs and non-IEC groups is strongly encouraged in the work of a SyC. In order to facilitate a more active exchange of information and work, further to the current liaison process, a new type of membership for a SyC has been formed and is called Registered Member, (R-member).

A Registered Member (R-member) provides the ability to represent an organization within the Systems Committees for the purpose of contributing to the Systems Committee work program.

An R-member is either an external organization (which is legally recognized), or a subset of it, or an IEC entity (e.g. TC, SC).

In order for an R-member organization to be included in a Systems Committee it shall be recognized and approved by 2/3 majority of the Systems Committee P members. R-membership is for term of 2-years and can be renewed.

The SyC shall regularly review the list of R-members for active participation and recommend any additions or removals. The SyC shall notify the SMB of all approved R-members.

The R-member entity will have one (or more) formal representatives (R-Rp) who will designate R-member Experts (R-Exp) to join a “Pool of Experts” associated with the Systems Committee.

R-members do not have voting rights and may not submit proposals for new work.

The following summarizes the associated activities and responsibilities of both R-members and the Systems Committees:

SO.4.2.1.1 R-member role

The roles of the R-members are:

- R-members comprise of R-member representative(s) (R-Rp), and defined R-member experts (R-Exp) allocated by the R-member representative(s);
- The activity of the R-member is bidirectional, i.e. the R-member is expected to contribute and report back developments from the committee as an effective communications pathway;
- R-member experts’ role is to contribute to the development process and to facilitate the flow of information between entities.

SO.4.2.1.2 R-member responsibilities to Systems Committees:

The R-member organisation shall appoint R-member representative(s) (R-Rp) who in turn shall appoint R-member experts (R-Exp).

The responsibilities of the R-members are:

R-Rp shall:

- Provide the administration and authorisation of its R-member experts (R-Exp);
- Provide/share/facilitate access to shareable documents, and draft standardization activities on-going at R-member level to the Systems Committee members and other R-members.

R-Exp shall:

- Provide meaningful inputs to the work of the SyC (technical knowledge, market trends, etc.);
- Provide the vision and standardization needs, and potentially standardization roadmap (if R-member is involved in some kinds of standardization) as perceived by the R-member;
- Provide detailed understanding of already published deliverables, and technical/standardization activities on-going at R-member.

SO.4.2.1.3 Systems Committees responsibilities regarding R-members

- (SyC) Provide/share/facilitate access to shareable documents, and draft standardization activities on-going at IEC;
- (SyC) Provide a global roadmap and synthesis of the standardization activities (not only in the IEC but also other standards organizations) in the Systems Committee domain.

SO.4.2.1.4 Expected activities of R-members and Systems Committees

(R-Rp and R-Exp) Responsible for contributing in the Systems Committee representing their R-member organisation and reporting Systems Committee activities back to their organisation:

- Actively Contribute by representing the R-member in Systems Committee activities;
- Report on the global IEC Systems roadmap in the concerned domain of their R-member Organisation;
- Report on the IEC Systems Committee activities;
- Notify the IEC Systems Committee as soon as the R-member starts working on a new activity in the scope of the Systems Committee activity with the goal to:
  - Ensure that the R-member activities seamlessly complement already known IEC activities;
  - Prevent any risk of overlapping activities between R-members activities and the known IEC activities.
- (R-Exp) R-experts may be selected to participate in specific projects and working groups by invitation of the Convenor/Project Leader;
- Systems Committees shall take into account the inputs of the R-members:
  - Take into consideration the expertise and vision of the R-members;
  - Register R-member existing deliverables and on-going activities into the roadmap the IEC Systems Committee is producing;
  - Regularly update and publish the roadmap to expose these activities to the market and to the other R-members (through free access web site and other types of publications, but also to the IEC internal information process);
  - Monitor R-member participation to ensure principles of contributing R-member are upheld.

SO.4.2.2 Pool of Experts

The Pool of Experts is a group of experts nominated by R-members or National Committees who are expected to contribute to the committee by appointment as an expert to a project team or working group through NC appointment, or through project leader/convenor invitation.

Members of the pool of experts only have access to documents provided by the SyC officers to the pool of experts. Once appointed to a WG or PT, the expert will also have access to associated WG / PT documents.

The National Committees of experts nominated by R-members shall be notified.

SO.4.2.3 Open forum

Optionally SyCs may establish Open Forums with even more flexible representation. Members of the open forum will consist of SyC participants appointed by the NCs as well as self-nominated individuals. SyC Chair will be the convenor of the open forum. The open forum will be used by the SyC leadership for consultation on topics of interest.

Members of the open forum only have access to documents provided by the SyC officers to the open forum participants.

SO.4.2.4 Liaisons

A systems committee may establish Liaisons through the normal process. See ISO/IEC Directives Part 1, 1.15, 1.16 and 1.17.

SO.4.2.5 Commenting process

For any document circulated by the SyC for vote or comment, the following points apply:

- Documents proposing new projects (NWIP, PWI and RR's) will be provided to the representative of the R-member and within two weeks, the representative shall respond to the SyC Secretary indicating their support or disagreement to the contents of the document;
- SyC officers will take feedback of the R-members into consideration deciding whether to amend or advance the SyC document for circulation;
- Documents circulated by the SyC for voting or comment shall be shared for information to all R-members of the SyC.

SO.5 Chairs of Systems Committees

SO.5.1 Appointment

The same processes for appointment of Chairs apply to Systems Committees as described in ISO/IEC Directives Part 1, 1.8.1b with the following exception:

The Secretariat is bound by the results of the questionnaire (Clause 1.8.1).

SO.5.2 Responsibilities

See ISO/IEC Directives Part 1, 1.8.2 applies for responsibilities except to substitute technical committee with Systems Committee.

SO.5.3 Vice Chairs

Systems Committees can choose to appoint one or more Vice-Chairs at their discretion.

The process for appointing Vice-Chairs shall be per IEC Supplement Part 1, 1.8.3 with the exception to substitute the term technical committee with Systems Committee.

SO.6 Secretariat of Systems Committees

SyCs and the CO have the ability to add assistant secretaries as the specific situations warrant.

SO.6.1 Responsibilities

ISO/IEC Directives Part 1 1.9.2 applies with the exception to substitute the terms technical committee with Systems Committee, and National Body with IEC Secretariat.

SO.7 SyC Deliverables

Systems Committees can publish Systems Reference Deliverables (SRD) and International Standards (IS).

SO.7.1 Systems Reference Deliverable

A Systems Reference Deliverable (SRD) is a deliverable produced by a SyC, which provides guidance on the use and application of standards in the corresponding SyC's domain. An SRD can be a normative document which may be referenced in the same way as any other IEC deliverable

The clauses of an SRD can be normative or informative, as may be appropriate.

The development, voting, and approval processes for an SRD shall be as defined in ISO/IEC Directives Part 1, 3.1 except 3.1.3 which shall not apply. The decision to initiate a maintenance

project for an SRD shall be as defined in 2.9. Once approved, the development process of the maintenance project shall follow the regular SRD process.

In case that the SyC would like to transform an SRD to an IS, it is required to use the process outlined in SO.7.2.

SO.7.2 International Standard process for Systems Committees

In exceptional circumstances a SyC may request permission from the SMB to develop an International Standard (IS), in which case the document shall follow the normal IS process. The process for initiating an IS in a SyC is shown in Figure SO.1.

If a need for an International Standard is identified by a SyC, the SyC shall consult with related TC/SCs to determine whether they are willing to develop the IS within the defined timeframe.

TC/SCs and SyCs shall work together to determine the best method to resolve such gaps in standardization. TC/SCs may be unable to address the standards gap identified by the SyC or may raise concerns that such work may overlap or duplicate existing work. In these cases, both the TC/SC and SyC have an equal obligation to resolve the difficulty.

As one alternative to producing an IS, the SyC may propose the creation of a new TC/SC or PC. The SyC should communicate with the existing TC/SCs to have their support on the establishment of a new TC/SC or PC.

The process for SyCs developing an IS shall be:

- consultation with related TC/SCs as described above;
- a decision by the SyC P-members authorizing the request to SMB for development of an IS;
- submit a QP to the SMB for approval to begin the process to develop an IS.

Note: this process must be used for any IS developed by a SyC.

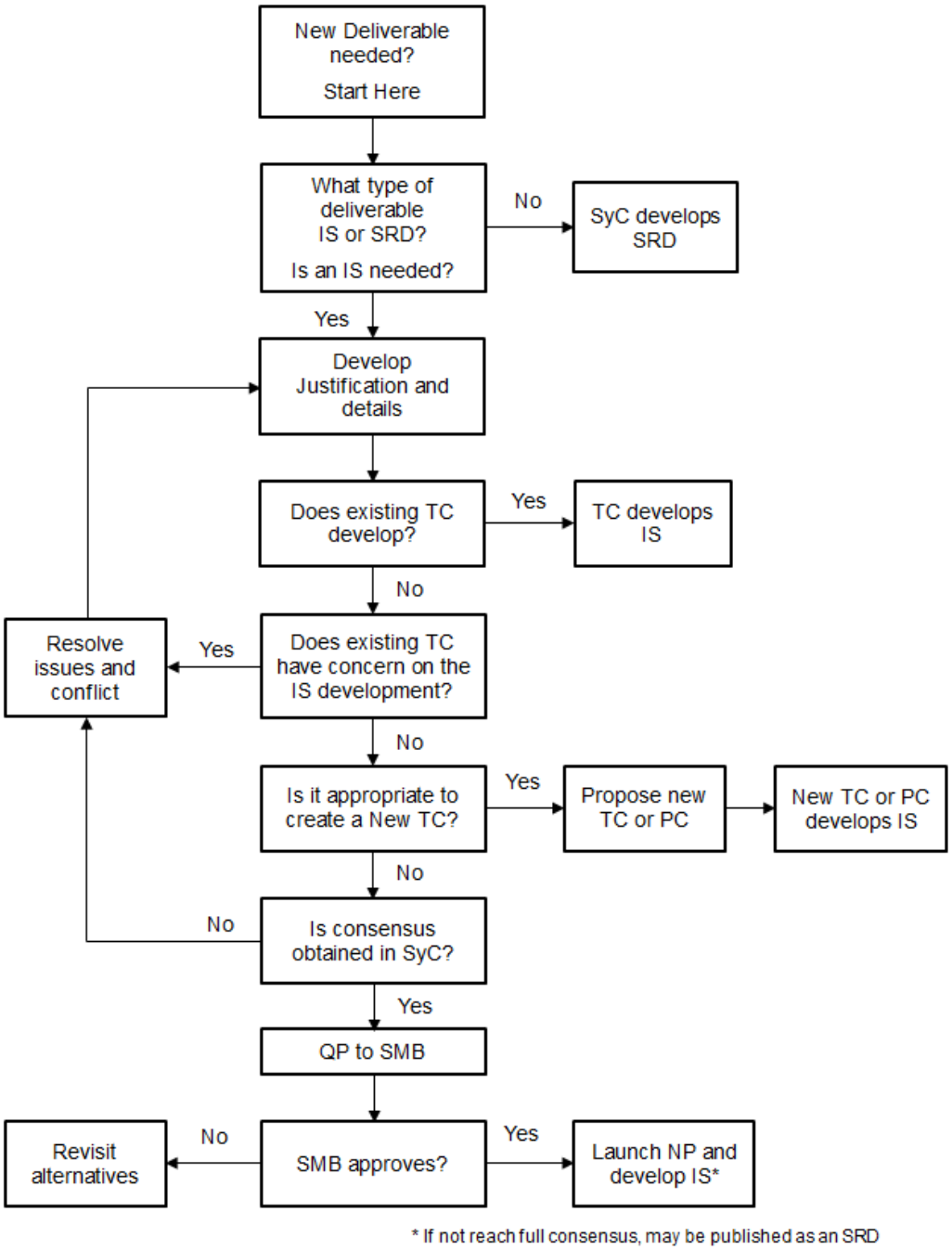

Figure SO.1 – Process for initiating and IS in a SyC

Annex SP
(normative)

Procedures for Questions of Principle from technical committees

SP.1 Introduction

This Annex of the IEC Supplement to the ISO/IEC Directives describes procedures for technical committees to raise Questions of Principle (QP) to the Standardization Management Board (SMB) for decisions and clarifications of the ISO/IEC Directives or the IEC Supplement, major changes of structure, derogations of process or other substantive issues.

SP.2 Examples of Questions of Principle

Examples of types of issues that may be addressed through a Question of Principle include but are not limited to the following:

– Title and scope of TCs (new and revised);
– Designation of SC secretariat if there is more than one NC offering their candidature;
– Transformation of a SC into a TC;
– Dissolution of a TC;
– Approval of Category D liaisons;
– Derogations from the ISO/IEC Directives Parts 1 and 2 and the IEC Supplement;
– Requests by committee for approval of a deliverable for conformity assessment requirements;
– Development and maintenance of a publication using the data base procedures;
– Designation of a publication as a horizontal standard;
– Designation of a registration authority;
– Clarification of specific items in the ISO/IEC Directives Part 1 and 2, the IEC Supplement, an IEC Administrative Circular, or an SMB Decision.

SP.3 Procedures for Questions of Principle

SP.3.1 Roles of TCs and SCs

Questions of Principle may only be submitted by TCs or SyCs to the SMB after approval by the P-members either through their reports to the SMB or as a separate QP document. Questions of Principle originating from SCs, whether co-meeting or meeting separately from their parent TCs, must be submitted through the parent TC via a TC decision or through the RSMB. It is the responsibility of technical committees to manage the work of their bodies, including SCs, so it is left to the discretion of a TC (or SyC) to approve or reject the submission of a QP proposed by one of its SCs.

SP.3.2 Roles of the IEC Secretariat

In their report to the SMB, TCs may identify issues which it feels are appropriate as QPs and include them in the report section for noting QPs. In addition, the Report to the SMB also contains a section to report any other issues/ concerns needing SMB and/or IEC CO intervention or general requests to the SMB.

The IEC Secretariat, at its discretion, can elevate issues raised in the sections of Issues/Concerns to the SMB part of the report, if it feels they represent appropriate Questions of Principle. Similarly, the CO may demote items to the Issues/Concerns section if the issue has been previously addressed by the SMB or does not warrant consideration as a Question of Principle. SMB/5941/R 4 / 7

SP.3.3 Structure / wording of Questions of Principle

Each QP should clearly state the issue, note the relevant reference (Directives, AC, or SMB Decision) and be written so that an answer – yes/no – can be given by the Standardization Management Board.

SP.3.4 Circulation to the SMB for voting

Upon receipt of the Report or QP by the SMB, the Technical Officer shall prepare an appropriate cover page and immediately advance any Questions of Principle to the SMB Secretariat for circulation to the SMB.

All QPs will be immediately circulated to the SMB separately from the RSMB document. The SMB will use a four-week period to discuss and vote on Questions of Principle. The SMB Secretariat will prepare a voting report noting the decision and comments of SMB members.

The decision and comments shall be circulated to the members of the TC regarding the outcome of their QP.

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