



ISO/IEC Directives Part 1 + IEC Supplement

Procedures for the technical work – Procedures specific to IEC



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INTRODUCTION TO THE CONSOLIDATED VERSION

0.1 About the consolidated version

The ISO/IEC Directives, Part 1 define the basic procedures to be followed in the development of International Standards and other publications.

The 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.

Generic terminology is used in the common parts of the ISO/IEC Directives and this has been replaced by terminology particular to the IEC in this Supplement (for example, the TMB is called the Standardization Management Board in this Supplement).

This consolidated version contains both the ISO/IEC Directives, Part 1 and the IEC Supplement, and therefore provides the complete set of procedural rules to be followed by IEC committees.

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 About the structure of the consolidated version

The clause structure of this consolidated version follows that of Part 1 of the ISO/IEC Directives. In order to assist in cross-referencing the texts, the IEC specific clauses are highlighted in blue under the clauses of the ISO/IEC Directives. If there is no highlighted blue text under a particular clause, it means that there are no IEC-specific requirements or recommendations.

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

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

To add a new Clause 1.9.5 about Secretariat allocation when multiple offers are received

To revise Clause 2.3.4 by removing the option of parallel ballot on a new work item proposal and an enquiry draft.

To add a new Clause A.1.1 about mandatory elements in Guides

To update Annex SN – Deviations of TC 100's procedures and organizational structures from the ISO/IEC Directives.

To update Annex SP – Systems standardization.

ISO/IEC DIRECTIVES –

Part 1: Procedures for the technical work

FOREWORD

The **ISO/IEC Directives** are published in two parts:

- Part 1: Procedures for the technical work
- Part 2: Principles and rules for the structure and drafting of ISO and IEC documents

Furthermore, the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC) and ISO/IEC Joint Technical Committee (JTC) 1 have published independent supplements to Part 1, which include procedures that are not common.

This part sets out the procedures to be followed within ISO and the IEC in carrying out their technical work: primarily the development and maintenance of International Standards through the activities of technical committees and their subsidiary bodies.

ISO, IEC and ISO/IEC JTC 1 provide additional guidance and tools to all those concerned with the preparation of technical documents on their respective websites (www.iso.org/directives; www.iec.ch/members_experts/refdocs/ and www.jtc1.org).

This seventeenth edition incorporates changes agreed by the respective technical management boards since publication of the sixteenth edition in 2020. Procedures which are not common to all the ISO/IEC Directives are published separately in the ISO Supplement (also referred to as the Consolidated ISO Supplement), the IEC Supplement or the ISO/IEC JTC 1 Supplement, respectively. The Supplements are to be used in conjunction with this document.

The following clauses have been modified with respect to the previous edition:

- When relevant, the term "Committee" is introduced covering TC, SC, SyC, and PC
- Foreword paragraph d) updates language to support offering remote participation to meetings
- Clause 1.7.4 clarifies the criteria for P-members active participation and includes remote participation
- Clause 1.9.2 updates language about decision preparation and management responsibilities
- Clause 1.12.1 updates the end of term for WG convenors and clarifies the liaison participation in WGs.
- Clause 1.12.6 updates language to clarify that NP ballots are need in both ISO and IEC in the case of joint ISO/IEC projects
- Clause 1.15.1 clarifies the language about automatic acceptance of liaisons requests from Committee of the same organization and clarifies the confirmation process
- Clause 1.21.6 Clarifies the experts form committees in liaison can be members of WGs
- Clause 2.1.8 updates language to require a committee decision for changing the project leader during the course of a project
- Clause 2.4.3 updates language to require a Committee decision to expend the scope of a standard during the development stages
- Clause 2.5.2 updates language by removing the sentence "National bodies shall fully brief their delegates on the national position before meetings."
- Clause 2.6.4 updates language adding other alternatives when approval criteria are not met (TS, PAS or cancellation of the project)

- Clause 2.7.2 updates language to require a decision about a failed FDIS ("may" replaced by "shall")
- Clause 2.10.2 updates language to allow corrigenda for publications older than 3 years
- Clause 2.10.4 updates language to remove corrigenda and only count amendments when referring to the limit of 2
- Clause 3.1.1 and 3.3.1 updates language to indicate that no technical changes are allowed on approved draft Technical Reports and draft Technical Specifications
- Annex B.4.2.2 updates language to require any change of cooperation mode to be made by mutual agreement
- Annex E.5.2 updates language to clarify that the editing committee is expected to support the Secretary in the preparation of resolutions
- Annex F.2.2 updates language to require an advance information of the P-members prior submitting a project to the fast-track procedure
- Annex H updates language to merge the content of the Annex SN of the ISO supplements with the Annex H of the ISO/IEC Directives. Registration Authorities as earlier defined in ISO are now applicable to IEC and ISO
- Annex I updates language by replacing all the text regarding patent agreements and related forms with hyperlinks to the ISO and IEC web sites
- New Annex L "Selection Criteria for People Leading the Technical Work", the former Annex SQ of the ISO supplement is moved to the common ISO/IEC Directives Part 1 as a new Annex L

The track changes version of this seventeenth edition should be consulted for the details of the changes made.

These procedures have been established by ISO and IEC in recognition of the need for International Standards to be cost-effective and timely, as well as widely recognized and generally applied. In order to attain these objectives, the procedures are based on the following concepts.

a) Current technology and project management

Within the framework of these procedures, the work may be accelerated and the task of experts and secretariats facilitated both by current technology (e.g. IT tools) and project management methods.

b) Consensus

Consensus, which requires the resolution of substantial objections, is an essential procedural principle and a necessary condition for the preparation of International Standards that will be accepted and widely used. Although it is necessary for the technical work to progress speedily, sufficient time is required before the approval stage for the discussion, negotiation and resolution of significant technical disagreements. For further details on the principle of consensus, see 2.5.6.

c) Discipline

National Bodies need to ensure discipline with respect to deadlines and timetables in order to avoid long and uncertain periods of "dead time". Similarly, to avoid re-discussion, National Bodies have the responsibility of ensuring that their technical standpoint is established taking account of all interests concerned at national level, and that this standpoint is made clear at an early stage of the work rather than, for example, at the final (approval) stage. Moreover, National Bodies need to recognize that substantial comments tabled at meetings are counter-productive, since no opportunity is available for other delegations to carry out the necessary consultations at home, without which rapid achievement of consensus will be difficult.

d) Cost-effectiveness

These procedures take account of the total cost of the operation. The concept of "total cost" includes direct expenditure by National Bodies, expenditure by the offices in Geneva (funded mainly by the dues of National Bodies), travel costs and the value of the time spent by

experts in working groups and committees, at both national and international level. Opportunities for remote participation at meetings should be sought to the extent possible.

Terminology used in this document

NOTE 1 Wherever appropriate in this document, for the sake of brevity the following terminology has been adopted to represent similar or identical concepts within ISO and IEC.

Term	ISO	IEC
National Body	Member Body (MB)	National Committee (NC)
technical management board (TMB)	Technical Management Board (ISO/TMB)	Standardization Management Board (SMB)
Chief Executive Officer (CEO)	Secretary-General	General Secretary
office of the CEO	Central Secretariat (CS)	Central Office (CO)
council board	Council	Council Board (CB)
advisory group	Technical Advisory Group (TAG)	Advisory Committee
Secretary	Committee Manager	Secretary
Committee	TCs, SCs, and PCs	TCs, SCs, PCs, and SyCs
For other concepts, ISO/IEC Guide 2 applies.		

NOTE 2 In addition the following abbreviations are used in this document.

JTAB	Joint Technical Advisory Board
JPC	Joint Project Committee
JTC	Joint Technical Committee
JWG	joint working group
TC	technical committee
SyC	systems committee (IEC)
SC	subcommittee
PC	project committee
WG	working group
PWI	preliminary work item
NP	new work item proposal
WD	working draft
CD	committee draft
DIS	draft International Standard (ISO)
CDV	committee draft for vote (IEC)
FDIS	final draft International Standard
PAS	Publicly Available Specification
TS	Technical Specification
TR	Technical Report

1 Organizational structure and responsibilities for the technical work

1.1 Role of the technical management board

The technical management board of the respective organization is responsible for the overall management of the technical work and in particular for:

- a) establishment of technical committees;
- b) appointment of chairs of technical committees;
- c) allocation or re-allocation of secretariats of technical committees and, in some cases, subcommittees;
- d) approval of titles, scopes and programmes of work of technical committees;
- e) ratification of the establishment and dissolution of subcommittees by technical committees;
- f) allocation of priorities, if necessary, to particular items of technical work;
- g) coordination of the technical work, including assignment of responsibility for the development of standards regarding subjects of interest to several technical committees, or needing coordinated development; to assist it in this task, the technical management board may establish advisory groups of experts in the relevant fields to advise it on matters of basic, sectoral and cross-sectoral coordination, coherent planning and the need for new work;
- h) monitoring the progress of the technical work with the assistance of the office of the CEO, and taking appropriate action;
- i) reviewing the need for, and planning of, work in new fields of technology;
- j) maintenance of the ISO/IEC Directives and other rules for the technical work;
- k) consideration of matters of principle raised by National Bodies, and of appeals concerning decisions on new work item proposals, on committee drafts, on enquiry drafts or on final draft International Standards.

NOTE 1 Explanations of the terms "new work item proposal", "committee draft", "enquiry draft" and "final draft International Standard" are given in Clause 2.

NOTE 2 For detailed information about the role and responsibilities of the ISO technical management board, see the Terms of reference of the TMB – www.iso.org/iso/home/standards_development/list_of_iso_technical_committees/iso_technical_committee.htm?com_mid=4882545 and for the IEC see www.iec.ch/dyn/www/f?p=103:47:0:::FSP_ORG_ID,FSP_LANG_ID:3228,25.

1.2 Advisory groups to the technical management board

1.2.1 A group having advisory functions in the sense of 1.1 g) may be established

- a) by one of the technical management boards;
- b) jointly by the two technical management boards.

NOTE In IEC certain such groups are designated as Advisory Committees.

1.2.2 A proposal to establish such a group shall include recommendations regarding its terms of reference and constitution, bearing in mind the requirement for sufficient representation of affected interests while at the same time limiting its size as far as possible in order to ensure its efficient operation. For example, it may be decided that its members be only the chairs and secretaries of the technical committees concerned. In every case, the TMB(s) shall decide the criteria to be applied and shall appoint the members.

Any changes proposed by the group to its terms of reference, composition or, where appropriate, working methods shall be submitted to the technical management boards for approval.

1.2.3 The tasks allocated to such a group may include the making of proposals relating to the drafting or harmonization of publications (in particular International Standards, Technical Specifications, Publicly Available Specifications and Technical Reports), but shall not include the preparation of such documents unless specifically authorized by the TMB(s).

1.2.4 Any document being prepared with a view to publication shall be developed in accordance with the procedural principles given in Annex A.

1.2.5 The results of such a group shall be presented in the form of recommendations to the TMB(s). The recommendations may include proposals for the establishment of a working group (see 1.12) or a joint working group (see 1.12.6) for the preparation of publications. Such working groups shall operate within the relevant technical committee, if any.

1.2.6 The internal documents of a group having advisory functions shall be distributed to its members only, with a copy to the office(s) of the CEO(s).

1.2.7 Such a group shall be disbanded once its specified tasks have been completed, or if it is subsequently decided that its work can be accomplished by normal liaison mechanisms (see 1.16).

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 Central Office.

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 cases¹ 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

1.3.1 Joint Technical Advisory Board (JTAB)

The JTAB has the task of avoiding or eliminating possible or actual overlapping in the technical work of ISO and IEC and acts when one of the two organizations feels a need for joint planning.

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).

The JTAB deals only with those cases that it has not been possible to resolve at lower levels by existing procedures. (See Annex B.) Such cases may cover questions of planning and procedures as well as technical work.

Decisions of the JTAB are communicated to both organizations for immediate implementation. They shall not be subject to appeal for at least 3 years.

1.3.2 Joint Technical Committees (JTC) and Joint Project Committees (JPC)

1.3.2.1 JTC and JPC may be established by a common decision of the ISO/TMB and IEC/SMB, or by a decision of the JTAB.

1.3.2.2 For JPC, one organization has the administrative responsibility. This shall be decided by mutual agreement between the two organizations.

Participation is based on the one member/country, one vote principle.

Where two National Bodies in the same country elect to participate in a JPC then one shall be identified as having the administrative responsibility. The National Body with the administrative responsibility has the responsibility of coordinating activities in their country, including the circulation of documents, commenting and voting.

Otherwise the normal procedures for project committees are followed (see 1.10).

1.4 Role of the Chief Executive Officer

The Chief Executive Officer of the respective organization is responsible, *inter alia*, for implementing the ISO/IEC Directives and other rules for the technical work. For this purpose, the office of the CEO arranges all contacts between the technical committees, the council board and the technical management board.

Deviations from the procedures set out in the present document shall not be made without the authorization of the Chief Executive Officers of ISO or IEC, or the ISO/IEC Joint Technical Advisory Board (JTAB), or the technical management boards for deviations in the respective organizations.

1.5 Establishment of technical committees

1.5.1 Technical committees are established and dissolved by the technical management board.

1.5.2 The technical management board may transform an existing subcommittee into a new technical committee, following consultation with the technical committee concerned.

1.5.3 A proposal for work in a new field of technical activity which appears to require the establishment of a new technical committee may be made in the respective organization by

- a National Body;
- a technical committee or subcommittee;
- a project committee;
- a policy level committee;
- the technical management board;
- the Chief Executive Officer;
- a body responsible for managing a certification system operating under the auspices of the organization;
- another international organization with a National Body membership.

1.5.4 The proposal shall be made using the appropriate form (see Annex SJ in the Consolidated ISO Supplement to the ISO/IEC Directives and www.iec.ch/standardsdev/resources/docpreparation/forms_templates), which covers

- a) the proposer;
- b) the subject proposed;
- c) the scope of the work envisaged and the proposed initial programme of work;
- d) a justification for the proposal;
- e) if applicable, a survey of similar work undertaken in other bodies;
- f) any liaisons deemed necessary with other bodies.

For additional informational details to be included in the proposals for new work, see Annex C. The form shall be submitted to the office of the CEO.

1.5.5 The office of the CEO shall ensure that the proposal is properly developed in accordance with ISO and IEC requirements (see Annex C) and provides sufficient information to support informed decision making by National Bodies. The office of the CEO shall also assess the relationship of the proposal to existing work, and may consult interested parties, including the technical management board or committees conducting related existing work. If necessary, an ad hoc group may be established to examine the proposal.

Following its review, the office of the CEO may decide to return the proposal to the proposer for further development before circulation for voting. In this case, the proposer shall make the changes suggested or provide justification for not making the changes. If the proposer does not make the changes and requests that its proposal be circulated for voting as originally presented, the technical management board will decide on appropriate action. This could include blocking the proposal until the changes are made or accepting that it be balloted as received.

In all cases, the office of the CEO may also include comments and recommendations to the proposal form.

For details relating to justification of the proposal, see Annex C.

Proposers are strongly encouraged to conduct informal consultations with other National Bodies in the preparation of proposals.

1.5.6 The proposal shall be circulated by the office of the CEO to all National Bodies of the respective organization (ISO or IEC), asking whether or not they

- a) support the establishment of a new technical committee providing a statement justifying their decision ("justification statement"), and
- b) intend to participate actively (see 1.7.1) in the work of the new technical committee.

The proposal shall also be submitted to the other organization (IEC or ISO) for comment and for agreement (see Annex B).

The replies to the proposal shall be made using the appropriate form within 12 weeks after circulation. Regarding 1.5.6 a) above, if no such statement is provided, the positive or negative vote of a National Body will not be registered and considered.

1.5.7 The technical management board evaluates the replies and either

- decides the establishment of a new technical committee, provided that
 - 1) a 2/3 majority of the National Bodies voting are in favour of the proposal; abstentions are excluded when the votes are counted; and

- 2) at least 5 National Bodies who voted in favour expressed their intention to participate actively,

and allocates the secretariat (see 1.9.1), or

- assigns the work to an existing technical committee, subject to the same criteria of acceptance.

1.5.8 Technical committees shall be numbered in sequence in the order in which they are established. If a technical committee is dissolved, its number shall not be allocated to another technical committee.

1.5.9 As soon as possible after the decision to establish a new technical committee, the necessary liaisons shall be arranged (see 1.15 to 1.17).

1.5.10 A new technical committee shall agree on its title and scope as soon as possible after its establishment, preferably by correspondence.

The scope is a statement precisely defining the limits of the work of a technical committee.

The definition of the scope of a technical committee shall begin with the words "Standardization of ..." or "Standardization in the field of ..." and shall be drafted as concisely as possible.

For recommendations on scopes, see Annex J.

The agreed title and scope shall be submitted by the Chief Executive Officer to the technical management board for approval.

1.5.11 The technical management board or a technical committee may propose a modification of the latter's title and/or scope. The modified wording shall be established by the technical committee for approval by the technical management board.

1.5.12 "Stand-by" – a Committee is said to be in a "stand-by" status when it has no tasks on its working programme but retains its title, scope and secretariat so that it can be reactivated should a new task be assigned to it.

The decision to put a committee on stand-by or to reactivate it is taken by the technical management board on a proposal from the committee in question.

1.6 Establishment of subcommittees

1.6.1 Subcommittees are established and dissolved by a 2/3 majority decision of the P-members of the parent committee voting, subject to ratification by the technical management board. A subcommittee may be established only on condition that a National Body has expressed its readiness to undertake the secretariat.

1.6.2 At the time of its establishment, a subcommittee shall comprise at least 5 members of the parent technical committee having expressed their intention to participate actively (see 1.7.1) in the work of the subcommittee.

1.6.3 Subcommittees of a technical committee shall be designated in sequence in the order in which they are established. If a subcommittee is dissolved, its designation shall not be

allocated to another subcommittee, unless the dissolution is part of a complete restructuring of the technical committee.

1.6.4 The title and scope of a subcommittee shall be defined by the parent technical committee and shall be within the defined scope of the parent technical committee.

1.6.5 The secretariat of the parent technical committee shall inform the office of the CEO of the decision to establish a subcommittee, using the appropriate form. The office of the CEO shall submit the form to the technical management board for ratification of the decision.

1.6.6 As soon as possible after ratification of the decision to establish a new subcommittee, any liaisons deemed necessary with other bodies shall be arranged (see 1.15 to 1.17).

1.7 Participation in the work of Committees

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

In order to achieve maximum efficiency and the necessary discipline in the work, each National Body shall clearly indicate to the office of the CEO, with regard to each technical committee or subcommittee, if it intends

- to participate actively in the work, with an obligation to vote on all questions formally submitted for voting within the technical committee or subcommittee, on new work item proposals, enquiry drafts and final draft International Standards, and to contribute to meetings (**P-members**), or
- to follow the work as an observer, and therefore to receive committee documents and to have the right to submit comments and to attend meetings (**O-members**).

A National Body may choose to be neither P-member nor O-member of a given committee, in which case it will have neither the rights nor the obligations indicated above with regard to the work of that committee. Nevertheless, all National Bodies irrespective of their status within a technical committee or subcommittee have the right to vote on enquiry drafts (see 2.6) and on final draft International Standards (see 2.7).

National Bodies have the responsibility to organize their national input in an efficient and timely manner, taking account of all relevant interests at their national level.

1.7.2 Membership of a subcommittee is open to any National Body, regardless of their membership status in the parent technical committee.

Members of a technical committee shall be given the opportunity to notify their intention to become a P- or O-member of a subcommittee at the time of its establishment.

Membership of a technical committee does not imply automatic membership of a subcommittee; National Bodies shall notify their intended status in each subcommittee

1.7.3 A National Body may, at any time, begin or end membership or change its membership status in any technical committee or subcommittee in IEC by informing the office of the CEO and the secretariat of the committee concerned, and in ISO by direct input via the Global Directory, subject to the requirements of clauses 1.7.4 and 1.7.5.

1.7.4 A committee secretariat shall notify the office of the CEO if a P-member of that committee:

- 1) has been persistently inactive by failing to attend physically, by correspondence or remotely 2 successive committee meetings and failing to have any experts appointed to the technical work, or

2a) In IEC:

has failed to vote on questions formally submitted for voting within the Committee (see 1.7.1).

2b) In ISO:

has failed to vote on over 20 % (and at least 2) of the questions formally submitted for voting on the committee internal balloting (CIB) within the Committee over one calendar year (see 1.7.1).

Upon receipt of such a notification, the Chief Executive Officer shall remind the National Body of its obligation to take an active part in the work of the Committee. In the absence of a satisfactory response to this reminder within 4 weeks, the National Body shall without exception automatically have its status changed to that of O-member.

Even with the existence of a response within 4 weeks, should the member in question continue to be persistently inactive (see condition 1 above) up to and including the next plenary (or a minimum 6 months), the National Body shall without exception automatically have its status changed to that of O-member.

A National Body having its status so changed may, after a period of 12 months, indicate to the office of the CEO that it wishes to regain P-membership of the committee, in which case this shall be granted.

NOTE this clause does not apply to the development of Guides.

1.7.5 If a P-member of a technical committee or subcommittee fails to vote on an enquiry draft or final draft International Standard prepared by the respective committee or on a systematic review ballot for a deliverable under the responsibility of the committee, the Chief Executive Officer shall remind the National Body of its obligation to vote. In the absence of a satisfactory response to this reminder, the National Body shall automatically have its status changed to that of O-member. A National Body having its status so changed may, after a period of 12 months, indicate to the Chief Executive Officer that it wishes to regain P-membership of the committee, in which case this shall be granted.

NOTE this clause does not apply to the development of Guides.

1.8 Chairs of Committees

1.8.1 Appointment

Chairs of technical committees shall be nominated by the secretariat of the technical committee and approved by the technical management board, for a maximum period of 6 years, or for such shorter period as may be appropriate. Extensions are allowed, up to a cumulative maximum of 9 years.

Chairs of subcommittees shall be nominated by the secretariat of the subcommittee and approved by the technical committee for a maximum period of 6 years, or for such shorter period as may be appropriate. Extensions are allowed, up to a cumulative maximum of 9 years. Approval criterion for both appointment and extension is a 2/3 majority vote of the P-members of the technical committee. Secretariats of technical committees or subcommittees may submit nominations for new chairs up to one year before the end of the term of existing chairs. Chairs appointed one year before shall be designated as the "chair elect" of the committee in question. This is intended to provide the chair elect an opportunity to learn before taking over as chair of a committee.

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.

1.8.1.2 Procedure

Twelve months before the end of the term of office of a committee Chair, Central Office 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 Responsibilities

The chair of a technical committee is responsible for the overall management of that technical committee, including any subcommittees and working groups.

The chair of a technical committee or subcommittee shall

- a) act in a purely international capacity, divesting him or herself of a national position; thus s/he cannot serve concurrently as the delegate of a National Body in his or her own committee;
- b) guide the secretary of that technical committee or subcommittee in carrying out his or her duty;
- c) conduct meetings with a view to reaching agreement on committee drafts (see 2.5);
- d) ensure at meetings that all points of view expressed are adequately summed up so that they are understood by all present;
- e) ensure at meetings that all decisions are clearly formulated and made available in written form by the secretary for confirmation during the meeting;
- f) take appropriate decisions at the enquiry stage (see 2.6);
- g) advise the technical management board on important matters relating to that technical committee via the technical committee secretariat. For this purpose she/he shall receive reports from the chairs of any subcommittees via the subcommittee secretariats;
- h) ensure that the policy and strategic decisions of the technical management board are implemented in the committee;
- i) ensure the establishment and ongoing maintenance of a strategic business plan covering the activities of the technical committee and all groups reporting to the technical committee, including all subcommittees;
- j) ensure the appropriate and consistent implementation and application of the committee's strategic business plan to the activities of the technical committee's or subcommittee's work programme;

k) assist in the case of an appeal against a committee decision.

In case of unforeseen unavailability of the chair at a meeting, a session chair may be elected by the participants.

SC chairs shall attend meetings of the parent committee as required and may participate in the discussion, but do not have the right to vote. In exceptional circumstances, if a chair is prevented from attending, s/he shall delegate the secretary (or in ISO and IEC, another representative) to represent the subcommittee. In the case where no representative from the SC can attend, a written report shall be provided.

1.8.3 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 Allocation

The secretariat of a technical committee shall be allocated to a National Body by the technical management board.

The secretariat of a subcommittee shall be allocated to a National Body by the parent technical committee. However, if two or more National Bodies offer to undertake the secretariat of the same subcommittee, the technical management board shall decide on the allocation of the subcommittee secretariat.

For both technical committees and subcommittees, the secretariat shall be allocated to a National Body only if that National Body

- a) has indicated its intention to participate actively in the work of that technical committee or subcommittee, and
- b) has accepted that it will fulfil its responsibilities as secretariat and is in a position to ensure that adequate resources are available for secretariat work (see D.2).

Once the secretariat of a technical committee or subcommittee has been allocated to a National Body, the latter shall appoint a qualified individual as secretary (see D.1 and D.3).

In IEC, the National Body may appoint one or more assistant secretaries (see D.1 and D.4). Secretariats are invited to consider the appointment of assistant secretaries with the objective of increasing gender and geographic diversity.

See Clause 1.9.5 in the case of multiple offers.

1.9.2 Responsibilities

The National Body to which the secretariat has been allocated shall ensure the provision of technical and administrative services to its respective technical committee or subcommittee.

The secretariat is responsible for monitoring, reporting, and ensuring active progress of the work, and shall use its utmost endeavour to bring this work to an early and satisfactory conclusion. These tasks shall be carried out as far as possible by correspondence.

The secretariat is responsible for ensuring that the ISO/IEC Directives and the decisions of the technical management board are followed.

A secretariat shall act in a purely international capacity, divesting itself of a national point of view.

The secretariat is responsible for the following to be executed in a timely manner:

a) Working documents:

- 1) Preparation of committee drafts, arranging for their distribution and the treatment of the comments received;
- 2) Preparation of enquiry drafts and text for the circulation of the final draft International Standards or publication of International Standards;
- 3) Ensuring the equivalence of the English and French texts, if necessary with the assistance of other National Bodies that are able and willing to take responsibility for the language versions concerned. (See also 1.11 and the respective Supplements to the ISO/IEC Directives);

b) Project management

- 1) Assisting in the establishment of priorities and target dates for each project;
- 2) Notifying the names, etc. of all working group and maintenance team convenors and project leaders to the office of the CEO;
- 3) Proposing proactively the publication of alternative deliverables or cancellation of projects that are running significantly overtime, and/or which appear to lack sufficient support;

c) Meetings (see also Clause 4), including:

- 1) Establishment of the agenda and arranging for its distribution;
- 2) Arranging for the distribution of all documents on the agenda, including reports of working groups, and indicating all other documents which are necessary for discussion during the meeting (see E.5);
- 3) Regarding the decisions (also referred to as resolutions) taken in a meeting:
 - ensuring that the decisions endorsing working groups recommendations contain the specific elements being endorsed;
 - making the decisions available in writing for confirmation during the meeting (see E.5); and
 - posting the decisions within 48 hours after the meeting in the committee's electronic folder.
 - Committees, SEGs or other SMB Groups are required as a minimum to publish Decision Lists with Actions within one week after their meetings.
- 4) Preparation of the minutes of meetings to be circulated within 4 weeks after the meeting;
- 5) Preparation of reports to the technical management board (TC secretariat), in the IEC within 4 weeks after the meeting, or to the parent committee (SC secretariat);
- 6) In case of unforeseen unavailability of the secretary at a meeting (if the Secretariat is unable to provide a replacement), an acting secretary may be appointed by the committee for the meeting.

d) Decisions

The committee secretariat shall ensure that:

- all resolutions are clearly drafted, reviewed, and presented;

- all decisions taken by the committee, whether at a plenary meeting or by correspondence, are documented and traceable through committee resolutions or numbered documents reporting the results of a committee decision.

e) Advising

Providing advice to the chair, project leaders, and convenors on procedures associated with the progression of projects.

In all circumstances, each secretariat shall work in close liaison with the chair of its technical committee or subcommittee. The secretariat and the chair are jointly responsible for the effective management of the committee.

The secretariat of a technical committee shall maintain close contact with the office of the CEO and with the members of the technical committee regarding its activities, including those of its subcommittees and working groups.

The secretariat of a subcommittee shall maintain close contact with the secretariat of the parent technical committee and as necessary with the office of the CEO. It shall also maintain contact with the members of the subcommittee regarding its activities, including those of its working groups.

The secretariat of a technical committee or subcommittee shall update in conjunction with the office of the CEO the record of the status of the membership of the committee.

1.9.3 Change of secretariat of a technical committee

If a National Body wishes to relinquish the secretariat of a technical committee, the National Body concerned shall immediately inform the Chief Executive Officer, giving a minimum of 12 months' notice. The technical management board decides on the transfer of the secretariat to another National Body.

If the secretariat of a technical committee persistently fails to fulfil its responsibilities as set out in these procedures, the Chief Executive Officer or a National Body may have the matter placed before the technical management board, which may review the allocation of the secretariat with a view to its possible transfer to another National Body.

1.9.4 Change of secretariat of a subcommittee

If a National Body wishes to relinquish the secretariat of a subcommittee, the National Body concerned shall immediately inform the secretariat of the parent technical committee, giving a minimum of 12 months' notice.

If the secretariat of a subcommittee persistently fails to fulfil its responsibilities as set out in these procedures, the Chief Executive Officer or a National Body may have the matter placed before the parent technical committee, which may decide, by majority vote of the P-members, that the secretariat of the subcommittee should be re-allocated.

In either of the above cases an enquiry shall be made by the secretariat of the technical committee to obtain offers from other P-members of the subcommittee for undertaking the secretariat.

If two or more National Bodies offer to undertake the secretariat of the same subcommittee or if, because of the structure of the technical committee, the re-allocation of the secretariat is linked with the re-allocation of the technical committee secretariat, the technical management board decides on the re-allocation of the subcommittee secretariat. If only one offer is received, the parent technical committee itself proceeds with the appointment.

1.9.5 Allocation if multiple offers received

If two or more National Bodies offer to undertake the secretariat of the same technical committee or subcommittee, 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 technical committees and subcommittees, 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 or subcommittee shall be decided by the technical management board.

1.10 Project committees

Project committees are established by the technical management board to prepare individual standards not falling within the scope of an existing technical committee.

NOTE Such standards carry one reference number but may be subdivided into parts.

Procedures for project committees are given in Annex K.

Project committees wishing to be transformed into a technical committee shall follow the process for the establishment of a new technical committee (see 1.5).

1.11 Editing committees

It is recommended that committees establish one or more editing committees for the purpose of updating and editing committee drafts, enquiry drafts and final draft International Standards and for ensuring their conformity to the ISO/IEC Directives, Part 2 (see also 2.6.6).

Such committees should comprise at least

- one technical expert of English mother tongue and having an adequate knowledge of French;
- one technical expert of French mother tongue and having an adequate knowledge of English;
- the project leader (see 2.1.8).

The project leader and/or secretary may take direct responsibility for one of the language versions concerned.

Editing committees shall meet when required by the respective technical committee or subcommittee secretariat for the purpose of updating and editing drafts which have been accepted by correspondence for further processing.

Editing committees shall be equipped with means of processing and providing texts electronically (see also 2.6.6).

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).

1.12.1 Technical committees or subcommittees may establish, by decision of the committee, working groups for specific tasks (see 2.2, 2.4, 2.5 and 2.6). A working group operates by consensus, reports and gives recommendations, if any, to its parent committee through a convenor appointed by the parent committee.

Working group convenors shall be appointed by the committee for up to three-year terms. Such appointments shall be confirmed by the National Body (or liaison organization). The convenor may be reappointed for additional terms of up to three-years. There is no limit to the number of terms.

Responsibility for any changes of convenors rests with the committee and not with the National Body (or liaison organization).

The convenor may be supported by a secretariat, as needed.

A working group comprises a restricted number of experts individually appointed by the P-members, A-liaisons of the parent committee and C-liaison organizations, brought together to deal with the specific task allocated to the working group. The experts act in a personal capacity and not as the official representative of the P-member or A-liaison organization (see 1.17) by which they have been appointed with the exception of those appointed by C-liaison organizations (see 1.17). However, it is recommended that they keep close contact with that P-member or organization in order to inform them about the progress of the work and of the various opinions in the working group at the earliest possible stage. A working group may also include representatives appointed by liaison committees (see 1.15.4).

It is recommended that working groups be reasonably limited in size. The technical committee or subcommittee may therefore decide upon the maximum number of experts appointed by each P-member and liaison organizations.

Once the decision to set up a working group has been taken, P-members and A- and C-liaison organizations shall be officially informed in order to appoint expert(s). Working groups shall be numbered in sequence in the order in which they are established.

When a committee has decided to set up a working group, it shall ensure that a convenor or an acting convenor is appointed at the same time the WG is set up. The convenor shall arrange for the first meeting of the working group to be held within 12 weeks. This information shall be communicated immediately after the committee's decision to the P-members of the committee and A- and C-liaison organizations, with an invitation to appoint experts within 6 weeks. Additional projects may be assigned, where appropriate, to existing working groups.

1.12.2 The composition of the working group is defined in the ISO Global Directory (GD) or in the IEC Expert Management System (EMS) as appropriate. Experts not registered to a working

group in the ISO GD or the IEC EMS respectively, shall not participate in its work. Convenors may invite a specific guest to participate in a single meeting and shall notify the guest's National Body of the invitation ahead of the meeting via the office of the CEO.

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

1.12.3 Persistently inactive experts, meaning absence of contributions through attendance to working group meetings or by correspondence shall be removed, by the office of the CEO at the request of the technical committee or subcommittee secretary, from working groups after consultation with the P-member.

1.12.4 On completion of its task(s) – normally at the end of the enquiry stage (see 2.6) of its last project – the working group shall be disbanded by decision of the committee, the project leader remaining with consultant status until completion of the publication stage (see 2.8).

1.12.5 Distribution of the internal documents of a working group and of its reports shall be carried out in accordance with procedures described in the respective Supplements of the ISO/IEC Directives.

1.12.6 In special cases a joint working group (JWG) may be established to undertake a specific task in which more than one ISO and/or IEC technical committee or subcommittee is interested. Committees who receive requests to establish JWG shall reply to such requests in a timely manner.

NOTE For specific rules concerning JWGs between ISO committees and IEC committees, see Annex B in addition to the following.

The decision to establish a joint working group shall be accompanied by mutual agreement between the committees on:

- the committee/organization having the administrative responsibility for the project;
- the convenor of the joint working group, who shall be nominated by a P-member from one of the committees, with the option to appoint a co-convenor from the other committee;
- the membership of the joint working group (Membership is open to P-members, representatives appointed by liaison committees as per 1.15.4, category A liaisons of the respective committees, and C-liaisons that wish to participate. The number of representatives may be limited to an equal number from each committee, if agreed by concerned committees.)

The committee/organization with the administrative responsibility for the project shall:

- record the project in their programme of work;
- be responsible for addressing comments (usually referred back to the JWG) and ensure that the comments and votes at all stages of the project are compiled and handled appropriately (see 2.5, 2.6 and 2.7) – all comments are made available to the leadership of the committees;
- prepare drafts for the committee, enquiry and approval stages according to procedures given in 2.5, 2.6 and 2.7;
- be responsible for maintenance of the publication.

Approval criteria are based on the Directives used by the committee with the administrative lead. If the lead committee is a JTC 1 committee, the Consolidated JTC 1 Supplement also applies.

For proposal stage (NP)

- It is possible to establish a JWG at a later stage, in which case its administrative lead will be confirmed by the committees concerned.
- Once the joint work is agreed, the committee with the administrative lead informs ISO/CS or IEC/CO respectively, of its lead and of the committees participating in the work.

- The other committees launch a call for experts for participation in the JWG.

For ISO/ISO or IEC/IEC JWGs, only one NP ballot is needed. If a NP has already been launched or approved in one committee, it cannot be balloted again in another committee.

For ISO/IEC JWGs, two NPs are launched, one in each organization.

For preparatory stage (WD)

- The JWG functions like any other WG: consensus is required to advance to CD.

For committee stage (CD)

- The CD is circulated for review and comment by each committee.
- The final CD requires consensus by all committees, as defined in the ISO/IEC Directives, Part 1.

For DIS and FDIS ballots

- National Bodies are requested to consult all national mirror committees involved to define one position. A statement is included on the cover page to draw attention of National Bodies.
- For an ISO/IEC JWG, two DIS/FDIS votes are launched, i.e. one in each organization.

The Foreword identifies all committees involved in the development of the deliverable.

1.13 Groups having advisory functions within a committee

1.13.1 A group having advisory functions may be established by a technical committee or subcommittee to assist the chair and secretariat in tasks concerning coordination, planning and steering of the committee's work or other specific tasks of an advisory nature.

1.13.2 A proposal to establish such a group shall include recommendations regarding its constitution and terms of reference, including criteria for membership, bearing in mind the requirement for sufficient representation of affected interests while at the same time limiting its size as far as possible in order to ensure its efficient operation. Members of advisory groups shall be committee officers, individuals nominated by National Bodies and/or as relevant by A-liaison organizations. The parent committee shall approve the final constitution and the terms of reference prior to the establishment of any nominations to the advisory group.

For chair's advisory groups, consideration shall be given to the provision of equitable participation.

1.13.3 The tasks allocated to such a group may include the making of proposals relating to the drafting or harmonization of publications (in particular International Standards, Technical Specifications, Publicly Available Specifications and Technical Reports), but shall not include the preparation of such documents.

1.13.4 The results of such a group shall be presented in the form of recommendations to the body that established the group. The recommendations may include proposals for the establishment of a working group (see 1.12) or a joint working group (see 1.12.6) for the preparation of publications.

1.13.5 The internal documents of a group having advisory functions shall be distributed to its members only, with a copy to the secretariat of the committee concerned and to the office of the CEO.

1.13.6 Such a group shall be disbanded once its specified tasks have been completed and agreed by the parent committee.

1.14 Ad hoc groups

Technical committees or subcommittees may establish ad hoc groups, the purpose of which is to study a precisely defined problem on which the group reports to its parent committee at the same meeting, or at the latest at the next meeting.

The membership of an ad hoc group shall be chosen from the delegates present at the meeting of the parent committee, supplemented, if necessary, by experts appointed by the committee. The parent committee shall also appoint a convenor.

An ad hoc group shall be automatically disbanded at the meeting to which it has presented its report.

1.15 Liaison between technical committees and with the IEC Conformity Assessment

1.15.1 Within each organization, technical committees and/or subcommittees working in related fields shall establish and maintain liaison. Liaisons shall also be established, where appropriate, with technical committees responsible for basic aspects of standardization (e.g. terminology, graphical symbols). Liaison shall include the exchange of basic documents, including new work item proposals and working drafts.

Committees shall take an official decision on the establishment or removal of an internal liaison. Committees receiving requests for internal liaisons shall automatically accept such requests. A notification of this acceptance shall be forwarded to office of the CEO and the requesting committee.

1.15.2 The maintenance of such liaison is the responsibility of the respective technical committee secretariats, which may delegate the task to the secretariats of the subcommittees.

1.15.3 A technical committee or subcommittee may designate a Liaison Representative, or Liaison Representatives, to follow the work of another technical committee with which a liaison has been established, or one or several of its subcommittees. The designation of such Liaison Representatives shall be notified to the secretariat of the committee concerned, which shall communicate all relevant documents to the Liaison Representative(s) and to the secretariat of that technical committee or subcommittee. The appointed Liaison Representative shall make progress reports to the secretariat by which s/he has been appointed.

1.15.4 Such Liaison Representatives shall have the right to participate in the meetings of the technical committee or subcommittee whose work they have been appointed to follow but shall not have the right to vote. They may contribute to the discussion in meetings, including the submission of written comments, on matters within the competence of their own technical committee and based on feedback that they have collected from their own committee. They may also attend meetings of working groups of the technical committee or subcommittee, but their involvement is limited to contributing the viewpoint of their own technical committee on matters within its competence.

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

1.16.1 Arrangements for adequate liaison between ISO and IEC Committees are essential. The channel of correspondence for the establishment of liaison between ISO and IEC Committees is through the offices of the CEOs. As far as the study of new subjects by either organization is concerned, the CEOs seek agreement between the two organizations whenever a new or revised programme of work is contemplated in the one organization which may be of interest to the other, so that the work will go forward without overlap or duplication of effort (see also Annex B).

1.16.2 Liaison Representatives designated by ISO or IEC shall have the right to participate in the discussions of the other organization's technical committee or subcommittee whose work they have been designated to follow, and may submit written comments; they shall not have the right to vote.

1.17 Liaison with other organizations

1.17.1 General requirements applicable to all categories of liaisons

In order to be effective, liaison shall operate in both directions, with suitable reciprocal arrangements.

The desirability of liaison shall be taken into account at an early stage of the work.

The liaison organization shall accept the policy based on the ISO/IEC Directives concerning copyright (see 2.13), whether owned by the liaison organization or by other parties. The statement on copyright policy will be provided to the liaison organization with an invitation to make an explicit statement as to its acceptability. The liaison organization is not entitled to charge a fee for documents submitted.

A liaison organization shall be willing to make a contribution to the technical work of ISO or IEC as appropriate. A liaison organization shall have a sufficient degree of representativity within its defined area of competence within a sector or subsector of the relevant technical or industrial field.

A liaison organization shall agree to ISO/IEC procedures, including IPR (see 2.13).

Liaison organizations shall accept the requirements of 2.14 on patent rights.

Technical committees and subcommittees shall review all their liaison arrangements on a regular basis, at least every 2 years, or at every committee meeting.

1.17.2 Different categories of liaisons (Category A, B and C)

The categories of liaisons are:

- **Category A:** Organizations that make an effective contribution to the work of the technical committee or subcommittee for questions dealt with by this technical committee or

subcommittee. Such organizations are given access to all relevant documentation and are invited to meetings. They may nominate experts to participate in a WG (see 1.12.1).

- **Category B:** Organizations that have indicated a wish to be kept informed of the work of the technical committee or subcommittee. Such organizations are given access to reports on the work of a technical committee or subcommittee.

NOTE Category B is reserved for inter-governmental organizations.

- **Category C:** Organizations that make a technical contribution to and participate actively only in a specific working group.

The procedure for the establishment of liaisons is:

- The organization wishing to create a liaison shall send an application liaison form to the office of the CEO with copies to the technical committee or subcommittee officers and IEC CO Technical Officer or ISO CS Technical Programme Manager:
 - ISO application liaison form is available [here](#)
 - IEC application liaison form is available [here](#)

NOTE Invariably the organization will have been in contact with the technical committee or subcommittee officers prior to submitting its application and in these cases the technical committee or subcommittee officers should ensure that the organization is aware of their obligations as given in clauses 1.17.1 i.e. copyright, agreeing to ISO/IEC procedures including IPR, and patent rights.

- The office of the CEO will confirm that the eligibility criteria have been fulfilled and then consult with the National Body where the organization making the application has its headquarters.
- In case of objection from the National Body where the organization making the application has its headquarters, the matter will be referred to the technical management board for decision.
- If there is no objection from the National Body where the organization making the application has its headquarters, the application will be sent to the technical committee or subcommittee secretary with a request to circulate it for vote.

1.17.3 Acceptance (Category A, B and C liaisons)

Agreement to establish category A, B and C liaisons requires approval of the application by two-thirds of the P-members voting.

Committees are urged to seek out the participation of all parties at the beginning of the development of a work item. Where a request for category C liaison is submitted late in the development stage of a particular work item, the P-members will consider the value that can be added by the organization in question despite its late involvement in the working group.

In IEC Category A or B liaisons are established by the Chief Executive Officer in consultation with the secretariat of the technical committee or subcommittee 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.

1.17.4 Eligibility

1.17.4.1 At the technical committee/subcommittee level (Category A and B liaisons)

When an organization applies for a liaison with a technical committee/subcommittee, the office of the CEO will check with the National Body in the country in which the organization is located. If the National Body does not agree that the eligibility criteria have been met, the matter will be referred to the TMB to define the eligibility.

The office of the CEO will also ensure that the organization meets the following eligibility criteria:

- it is not-for-profit;
- is a legal entity – the office of the CEO will request a copy of its statutes;
- is membership-based and open to members worldwide or over a broad region;
- through its activities and membership demonstrates that it has the competence and expertise to contribute to the development of International Standards or the authority to promote their implementation; and
- has a process for stakeholder engagement and consensus decision-making to develop the input it provides (in ISO, see Guidance for ISO liaison organizations – Engaging stakeholders and building consensus www.iso.org/iso/guidance_liaison-organizations.pdf).

1.17.4.2 At the working group level (Category C liaisons)

When an organization applies for a liaison with a working group, the office of the CEO will check with the National Body in the country in which the organization is located and will ensure that the organization meets the following eligibility criteria:

- it is not-for-profit;
- through its activities and membership demonstrates that it has the competence and expertise to contribute to the development of International Standards or the authority to promote their implementation; and
- has a process for stakeholder engagement and consensus decision-making to develop the input it provides (in ISO, see Guidance for ISO liaison organizations – Engaging stakeholders and building consensus www.iso.org/iso/guidance_liaison-organizations.pdf).

This can include for example manufacturer associations, commercial associations, industrial consortia, user groups and professional and scientific societies. Liaison organizations shall be multinational (in their objectives and standards development activities) with individual, company or country membership and may be permanent or transient in nature.

1.17.5 Rights and obligations

1.17.6 At the technical committee/subcommittee level (Category A and B liaisons)

Technical committees and subcommittees shall seek the full and, if possible, formal backing of the organizations having liaison status for each document in which the latter is interested.

Any comments from liaison organizations should be given the same treatment as comments from National Bodies. It should not be assumed that refusal by a liaison organization to provide its full backing is a sustained opposition. Where such objections are considered sustained oppositions, committees are invited to refer to clause 2.5.6 for further guidance.

1.17.7 At the working group level (Category C liaisons)

Category C liaison organizations have the right to participate as full members in a working group, maintenance team or project team (see 1.12.1) but not as project leaders or convenors.

Category C liaison experts act as the official representative of the organization by which they are appointed. They may only attend committee plenary meetings if expressly invited by the committee to attend. If they are invited by the committee to attend, they may only attend as observers.

1.17.8 Carrying over liaisons when a project committee is converted into a technical committee or a subcommittee

When a project committee is converted to a technical committee or a subcommittee, the new technical committee or subcommittee shall pass a resolution confirming which category A and

B liaisons are carried over. Approval of the resolution requires a 2/3 majority of P-members voting.

Table 1 – Liaison categories

Category	A	B	C
Purpose	To make an effective contribution to the work of the committee.	To be kept informed of the work of the committee.	To make a technical contribution to drafting standards in a Working Group.
Eligibility	1) Not for profit 2) Legal entity 3) Membership based (worldwide or over a broad region) 4) Relevant competence and expertise 5) Process for stakeholder engagement and consensus decision-making (See clause 1.17.4.1 for full details)	<u>Intergovernmental Organizations only</u> 6) Not for profit 7) Legal entity 8) Membership based (worldwide or over a broad region) 9) Relevant competence and expertise 10) Process for stakeholder engagement and consensus decision-making (See clause 1.17.4.1 for full details)	11) Not for profit 12) Relevant competence and expertise 13) Process for stakeholder engagement and consensus decision-making (See clause 1.17.4 for full details)
Level	Committee	Committee	Working Group
Participation	Participate in committee meetings, access to documents, may appoint experts to WGs and these experts may serve as convenors or Project Leaders.	To be kept informed of the work only (access to documents).	Full participation as a member of the WG (but cannot be convenor or Project Leader).
Rights and obligations	No voting rights, but can comment (comments are given the same treatment as comments from National Bodies). Can propose new work items (see clause 1.17.5.1).	No voting rights, but can comment (comments are given the same treatment as comments from National Bodies). Cannot propose new work items.	Experts can attend committee meetings if expressly invited by the committee, but only as observers. Cannot propose new work items.

2 Development of International Standards

2.1 The project approach

2.1.1 General

The primary duty of a technical committee or subcommittee is the development and maintenance of International Standards. However, committees are also strongly encouraged to consider publication of intermediate deliverables as described in Clause 3.

International Standards shall be developed on the basis of a project approach as described below.

2.1.2 Strategic business plan

Each technical committee shall prepare a strategic business plan for its own specific field of activity,

- a) taking into account the business environment in which it is developing its work programme;
- b) indicating those areas of the work programme which are expanding, those which have been completed, and those nearing completion or in steady progress, and those which have not progressed and should be cancelled (see also 2.1.9);
- c) evaluating revision work needed (see also the respective Supplements to the ISO/IEC Directives);
- d) giving a prospective view on emerging needs.

The strategic business plan shall be formally agreed upon by the technical committee and be included in its report for review and approval by the technical management board on a regular basis.

2.1.3 Project stages

2.1.3.1 Table 1 shows the sequence of project stages through which the technical work is developed, and gives the name of the document associated with each project stage. The development of Technical Specifications, Technical Reports and Publicly Available Specifications is described in Clause 3.

Table 2 – Project stages and associated documents

Project stage	Associated document	
	Name	Abbreviation
Preliminary stage	Preliminary work item	PWI
Proposal stage	New work item proposal ^a	NP
Preparatory stage	Working draft(s) ^a	WD
Committee stage	Committee draft(s) ^a	CD
Enquiry stage	Enquiry draft ^b	ISO/DIS IEC/CDV
Approval stage	final draft International Standard ^c	FDIS
Publication stage	International Standard	ISO, IEC or ISO/IEC
^a These stages may be omitted, as described in Annex F.		
^b Draft International Standard in ISO, committee draft for vote in IEC.		
^c May be omitted (see 2.6.4).		

2.1.3.2 F.1 illustrates the steps leading to publication of an International Standard.

2.1.3.3 The ISO and IEC Supplements to the ISO/IEC Directives give a matrix presentation of the project stages, with a numerical designation of associated sub-stages.

2.1.4 Project description and acceptance

A project is any work intended to lead to the issue of a new, amended or revised International Standard. A project may subsequently be subdivided (see also 2.1.5.4).

A project shall be undertaken only if a proposal has been accepted in accordance with the relevant procedures (see 2.3 for proposals for new work items, and the respective Supplements to the ISO/IEC Directives for review and maintenance of existing International Standards).

2.1.5 Programme of work

2.1.5.1 The programme of work of a technical committee or subcommittee comprises all projects allocated to that technical committee or subcommittee, including maintenance of published standards.

2.1.5.2 In establishing its programme of work, each technical committee or subcommittee shall consider sectoral planning requirements as well as requests for International Standards initiated by sources outside the technical committee, i.e. other technical committees, advisory groups of the technical management board, policy level committees and organizations outside ISO and IEC (see also 2.1.2).

2.1.5.3 Projects shall be within the agreed scope of the technical committee. Their selection shall be subject to close scrutiny in accordance with the policy objectives and resources of ISO and IEC (see also Annex C).

2.1.5.4 Each project in the programme of work shall be given a number (see IEC Supplements to the ISO/IEC Directives for document numbering at the IEC) and shall be retained in the programme of work under that number until the work on that project is completed or its cancellation has been agreed upon. During the development of the project, the Committee may decide to subdivide its number if it is subsequently found necessary to subdivide the project itself. The subdivisions of the work shall lie fully within the scope of the original project; otherwise, a new work item proposal shall be made. The original project shall be cancelled after submission.

2.1.5.5 The programme of work shall indicate, if appropriate, the subcommittee and/or working group to which each project is allocated.

2.1.5.6 The agreed programme of work of a new technical committee shall be submitted to the technical management board for approval.

2.1.6 Target dates

The Committee shall establish, for each project on its programme of work, target dates for the completion of each of the following steps:

- circulation of the first working draft (in the event that only an outline of a working document has been provided by the proposer of the new work item proposal – see 2.3);
- circulation of the committee draft ballot (if any);
- submission of the enquiry draft;
- submission of the final draft International Standard;
- publication (in agreement with the office of the CEO).

These target dates shall correspond to the shortest possible development times to produce International Standards rapidly and shall be reported to the office of the CEO, which distributes the information to all National Bodies. For establishment of target dates, see the respective Supplements to the ISO/IEC Directives.

In establishing target dates, the relationships between projects shall be taken into account. Priority shall be given to those projects intended to lead to International Standards upon which other International Standards will depend for their implementation. The highest priority shall be given to those projects having a significant effect on international trade and recognized as such by the technical management board.

The technical management board may also instruct the secretariat of the technical committee or subcommittee concerned to submit the latest available draft to the office of the CEO for publication as a Technical Specification (see 3.1).

All target dates shall be kept under continuous review and amended as necessary, and shall be clearly indicated in the programme of work. Revised target dates shall be notified to the technical management board. The technical management board will cancel all work items which have been on the work programme for more than 5 years and have not reached the approval stage (see 2.7).

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.

2.1.7 Project management

The secretariat of the technical committee or subcommittee is responsible for the management of all projects in the programme of work of that technical committee or subcommittee, including monitoring of their progress against the agreed target dates.

If target dates (see 2.1.6) are not met and there is insufficient support for the work (that is, the acceptance requirements for new work given in 2.3.5 are no longer met), the committee responsible shall cancel the work item.

2.1.8 Project leader

For the development of each project, a project leader (the WG convenor, a designated expert or, if appropriate, the secretary) shall be appointed by the Committee, taking into account the project leader nomination made by the proposer of the new work item proposal (see 2.3.4). A change of project leader for an active project shall be approved by the committee. It shall be ascertained that the project leader will have access to appropriate resources for carrying out the development work. The project leader shall act in a purely international capacity, divesting him or herself of a national point of view. The project leader should be prepared to act as consultant, when required, regarding technical matters arising at the proposal stage through to the publication stage (see 2.5 to 2.8).

The secretariat shall communicate the name and address of the project leader, with identification of the project concerned, to the office of the CEO.

2.1.9 Progress control

Periodical progress reports to the technical committee shall be made by its subcommittees and working groups (see also ISO and IEC Supplements to the ISO/IEC Directives). Meetings between their secretariats will assist in controlling the progress.

The office of the CEO shall monitor the progress of all work and shall report periodically to the technical management board. For this purpose, the office of the CEO shall receive copies of documents as indicated in the ISO and IEC Supplements to the ISO/IEC Directives.

2.2 Preliminary stage

2.2.1 Technical committees or subcommittees may introduce into their work programmes, by a simple majority vote of their P-members, preliminary work items (for example, corresponding to subjects dealing with emerging technologies), which are not yet sufficiently mature for processing to further stages and for which no target dates can be established.

Such items may include, for example, those listed in the strategic business plan, particularly as given under 2.1.2 d) giving a prospective view on emerging needs.

2.2.2 All preliminary work items shall be registered into the programme of work.

2.2.3 All preliminary work items shall be subject to regular review by the committee. The committee shall evaluate the market relevance and resources required for all such items.

All preliminary work items that have not progressed to the proposal stage in the IEC by the expiration date given by the committee and in ISO within 3 years will be automatically cancelled from the programme of work.

2.2.4 This stage can be used for the elaboration of a new work item proposal (see 2.3) and the development of an initial draft.

2.2.5 Before progressing to the preparatory stage, all such items shall be subject to approval in accordance with the procedures described in 2.3.

2.3 Proposal stage

2.3.1 A new work item proposal (NP) is a proposal for:

- a new standard;
- a new part of an existing standard;
- a Technical Specification (see 3.1) or a Publicly Available Specification (see 3.2).

2.3.2 A new work item proposal within the scope of an existing technical committee or subcommittee may be made in the respective organization by

- a National Body;
- the secretariat of that technical committee or subcommittee;
- another technical committee or subcommittee;
- an organization in category A liaison;
- the technical management board or one of its advisory groups;
- the Chief Executive Officer.

2.3.3 Where both an ISO and an IEC technical committee are concerned, the Chief Executive Officers shall arrange for the necessary coordination (see also Annex B).

2.3.4 Each new work item proposal shall be presented using the appropriate form, and shall be fully justified and properly documented (see Annex C).

The proposers of the new work item proposal shall

- make every effort to provide a first working draft for discussion, or shall at least provide an outline of such a working draft;
- nominate a project leader.

The form shall be submitted to the office of the CEO or to the secretariat of the relevant committee for proposals within the scope of an existing committee.

The office of the CEO or the relevant committee chair and secretariat shall ensure that the proposal is properly developed in accordance with ISO and IEC requirements (see Annex C) and provides sufficient information to support informed decision making by National Bodies.

The office of the CEO or the relevant committee chair and secretariat shall also assess the relationship of the proposal to existing work, and may consult interested parties, including the technical management board or committees conducting related existing work. If necessary, an ad hoc group may be established to examine the proposal. Any review of proposals should not exceed 2 weeks.

In all cases, the office of the CEO or the relevant committee chair and secretariat may also add comments and recommendations to the proposal form.

See Annex K for new work item proposals for project committees.

Copies of the completed form shall be circulated to the members of the technical committee or subcommittee for P-member ballot and to the O-members and liaison members for information.

The proposed date of availability of the publication shall be indicated on the form.

A decision upon a new work item proposal shall be taken by correspondence.

Votes shall be returned within 12 weeks.

The committee may decide on a case-by-case basis by way of a resolution to shorten the voting period for new work item proposals to 8 weeks.

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 Acceptance requires

- a) approval of the work item by a 2/3 majority of the P-members of the technical committees or subcommittees voting – abstentions are excluded when the votes are counted; and
- b) a commitment to participate actively in the development of the project, i.e. to make an effective contribution at the preparatory stage, by nominating technical experts and by commenting on working drafts, by at least 4 P-members in committees with 16 or fewer P-members, and at least 5 P-members in committees with 17 or more P-members; only P-members having also approved the inclusion of the work item in the programme of work (see a)) will be taken into account when making this tally. If experts are not nominated on the form accompanying an approval vote, then the National Body's commitment to active

participation will not be registered and considered when determining if the approval criteria have been met on this ballot.

Individual committees may increase this minimum requirement of nominated experts.

In cases, where it can be documented that the industry and/or technical knowledge exists only with a very small number of P-members, then the committee may request permission from the technical management board to proceed with fewer than 4 or 5 nominated technical experts.

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 Report, nominate further experts they consider will contribute effectively to the work, without resubmitting the new work item proposal for ballot.

2.3.6 Once a new work item proposal is accepted, it shall be registered in the programme of work of the relevant technical committee or subcommittee as a new project with the appropriate priority. The agreed target dates (see 2.1.6) shall be indicated on the appropriate form.

The voting results will be reported to the ISO Central Secretariat (using Form 6) or the IEC Central Office (using Form RVN) within 4 weeks after the close of the ballot.

2.3.7 The inclusion of the project in the programme of work concludes the proposal stage.

2.4 Preparatory stage

2.4.1 The preparatory stage covers the preparation of a working draft (WD) conforming to the ISO/IEC Directives, Part 2.

2.4.2 When a new project is accepted the project leader shall work with the experts nominated by the P-members during the approval (see 2.3.5 a)).

2.4.3 The secretariat may propose to the technical committee or subcommittee, either at a meeting or by correspondence, to create a working group the convenor of which will normally be the project leader.

Such a working group shall be set up by the technical committee or subcommittee, which shall define the task(s) and set the target date(s) for submission of draft(s) to the technical committee or subcommittee (see also 1.12). The working group convenor shall ensure that the work undertaken remains within the scope of the balloted work item.

If there is consensus that a scope requires expansion or significant technical changes, this shall be confirmed by committee decision with a two-thirds majority.

2.4.4 In responding to the proposal to set up a working group those P-members having agreed to participate actively (see 2.3.5 a)) shall each confirm their technical expert(s). Other P-members or A- or C- liaison organizations may also nominate expert(s).

2.4.5 The project leader is responsible for the development of the project and will normally convene and chair any meetings of the working group. S/he may invite a member of the working group to act as its secretary.

2.4.6 Every possible effort shall be made to prepare both a French and an English version of the text in order to avoid delays in the later stages of the development of the project.

If a trilingual (English - French - Russian) standard is to be prepared, this provision should include the Russian version.

2.4.7 For time limits relating to this stage, see 2.1.6.

2.4.8 The preparatory stage ends when a working draft is available for circulation to the members of the technical committee or subcommittee as a first committee draft (CD) and is registered by the office of the CEO. The committee may also decide to publish the final working draft as a PAS (see 3.2) to respond particular market needs.

2.5 Committee stage

2.5.1 The committee stage is the principal stage at which comments from National Bodies are taken into consideration, with a view to reaching consensus on the technical content. National bodies shall therefore carefully study the texts of committee drafts and submit all pertinent comments at this stage.

2.5.2 As soon as it is available, a committee draft shall be circulated to all P-members and O-members of the technical committee or subcommittee for consideration, with a clear indication of the latest date for submission of replies.

A period of 8, 12 or 16 weeks as agreed by the technical committee or subcommittee shall be available for National Bodies to comment.

Comments shall be sent for preparation of the compilation of comments, in accordance with the instructions given.

2.5.3 No more than 4 weeks after the closing date for submission of replies, the secretariat shall prepare the compilation of comments and arrange for its circulation to all P-members and O-members of the technical committee or subcommittee. When preparing this compilation, the secretariat shall indicate its proposal, made in consultation with the chair of the technical committee or subcommittee and, if necessary, the project leader, for proceeding with the project, either

- a) to discuss the committee draft and comments at the next meeting, or
- b) to circulate a revised committee draft for consideration, or
- c) to register the committee draft for the enquiry stage (see 2.6).

In the case of b) and c), the secretariat shall indicate in the compilation of comments the action taken on each of the comments received. This shall be made available to all P-members, if necessary by the circulation of a revised compilation of comments, no later than in parallel with the submission of a revised CD for consideration by the committee (case b) or simultaneously with the submission of the finalized version of the draft to the office of the CEO for registration for the enquiry stage (case c).

Committees are required to respond to all comments received.

If, within 8 weeks from the date of dispatch, 2 or more P-members disagree with proposal b) or c) of the secretariat, the committee draft shall be discussed at a meeting (see 4.2.1.3).

2.5.4 If a committee draft is considered at a meeting but agreement on it is not reached on that occasion, a further committee draft incorporating decisions taken at the meeting shall be distributed within 12 weeks for consideration. A period of 8, 12 or 16 weeks as agreed by the technical committee or subcommittee shall be available to National Bodies to comment on the draft and on any subsequent versions.

2.5.5 Consideration of successive drafts shall continue until consensus of the P-members of the technical committee or subcommittee has been obtained or a decision to abandon or defer the project has been made.

2.5.6 The decision to circulate an enquiry draft (see 2.6.1) shall be taken on the basis of the consensus principle.

It is the responsibility of the chair of the technical committee or subcommittee, in consultation with the secretary of his/her committee and, if necessary, the project leader, to judge whether there is sufficient support bearing in mind the definition of consensus given in ISO/IEC Guide 2:2004.

"consensus: General agreement, characterized by the absence of sustained opposition to substantial issues by any important part of the concerned interests and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments.

NOTE Consensus need not imply unanimity."

The following applies to the definition of consensus:

In the process of reaching consensus, many different points of views will be expressed and addressed as the document evolves. However, "sustained oppositions" are views expressed at minuted meetings of committee, working group (WG) or other groups (e.g. task forces, advisory groups, etc.) and which are maintained by an important part of the concerned interest and which are incompatible with the committee consensus. The notion of "concerned interest(s)" will vary depending on the dynamics of the committee and shall therefore be determined by the committee leadership on a case by case basis. The concept of sustained opposition is not applicable in the context of National Body votes on CD, DIS or FDIS since these are subject to the applicable voting rules.

Those expressing sustained oppositions have a right to be heard and the following approach is recommended when a sustained opposition is declared:

- The leadership shall first assess whether the opposition can be considered a "sustained opposition", i.e. whether it has been sustained by an important part of the concerned interest. If this is not the case, the leadership will register the opposition (i.e. in the minutes, records, etc.) and continue to lead the work on the document.
- If the leadership determines that there is a sustained opposition, it is required to try and resolve it in good faith. However, a sustained opposition is not akin to a right to veto. The obligation to address the sustained oppositions does not imply an obligation to successfully resolve them.

The responsibility for assessing whether or not consensus has been reached rests entirely with the leadership. This includes assessing whether there is sustained opposition or whether any sustained opposition can be resolved without compromising the existing level of consensus on the rest of the document. In such cases, the leadership will register the opposition and continue the work.

Those parties with sustained oppositions may avail themselves of appeals mechanisms as detailed in Clause 5.

In case of doubt concerning consensus, approval by a two-thirds majority of the P-members of the technical committee or subcommittee voting may be deemed to be sufficient for the committee draft to be accepted for registration as an enquiry draft; however every attempt shall be made to resolve negative votes.

The secretariat of the technical committee or subcommittee responsible for the committee draft shall ensure that the enquiry draft fully embodies decisions taken either at meetings or by correspondence.

2.5.7 When consensus has been reached in a technical committee or subcommittee, its secretariat shall submit the finalized version of the draft in electronic form suitable for distribution

to the national members for enquiry (2.6.1), to the office of the CEO (with a copy to the technical committee secretariat in the case of a subcommittee) within a maximum of 16 weeks.

2.5.8 For time limits relating to this stage, see 2.1.6.

2.5.9 The committee stage ends when all technical issues have been resolved and a committee draft is accepted for circulation as an enquiry draft and is registered by the office of the CEO. Texts that do not conform to the ISO/IEC Directives, Part 2 shall be returned to the secretariat with a request for correction before they are registered.

2.5.10 If the technical issues cannot all be resolved within the appropriate time limits, Committees may wish to consider publishing an intermediate deliverable in the form of a Technical Specification (see 3.1) pending agreement on an International Standard.

2.6 Enquiry stage

2.6.1 At the enquiry stage, the enquiry draft (DIS in ISO, CDV in IEC) shall be circulated by the office of the CEO to all National Bodies for a 12-week vote.

For policy on the use of languages, see Annex E.

National bodies shall be advised of the date by which completed ballots are to be received by the office of the CEO.

At the end of the voting period, the chair and secretariat of the Committee will have access to the results of the voting together with any comments received, for further speedy action.

The stability date shall be noted in the foreword.

2.6.2 Votes submitted by National Bodies shall be explicit: positive, negative, or abstention.

A positive vote may be accompanied by editorial or technical comments, on the understanding that the secretary, in consultation with the chair of the technical committee or subcommittee and project leader, will decide how to deal with them.

If a National Body finds an enquiry draft unacceptable, it shall vote negatively and state the technical reasons. It may indicate that the acceptance of specified technical modifications will change its negative vote to one of approval, but it shall not cast an affirmative vote which is conditional on the acceptance of modifications.

2.6.3 An enquiry draft is approved if

- a) a two-thirds majority of the votes cast by the P-members of the technical committee or subcommittee 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, as well as negative votes not accompanied by technical reasons.

Comments received after the normal voting period are submitted to the technical committee or subcommittee secretariat for consideration at the time of the next review of the International Standard.

2.6.4 On receipt of the results of the voting and any comments, the chair of the technical committee or subcommittee, in cooperation with its secretariat and the project leader, and in consultation with the office of the CEO, shall take one of the following courses of action:

- a) when the approval criteria of are met, and no technical changes are to be included, to proceed directly to publication (see 2.8), or
- b) when the approval criteria of 2.6.3 are met, but technical changes are to be included, to register the enquiry draft, as modified, as a final draft International Standard,
- c) when the approval criteria of 2.6.3 are not met:
 - 1) to circulate a revised enquiry draft for voting (see 2.6.1), or
 - 2) NOTE A revised enquiry draft will be circulated for a voting period of 8 weeks, which may be extended up to 12 weeks at the request of one or more P-members of the committee concerned.to circulate a revised committee draft for comments, or
 - 3) to discuss the enquiry draft and comments at the next meeting, or
 - 4) to propose the publication of a revised draft as a TS or PAS, or
 - 5) to propose the cancellation of the project.

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

2.6.5 Not later than 12 weeks after the end of the voting period, a full report shall be prepared by the secretariat of the technical committee or subcommittee and circulated by the office of the CEO to the National Bodies. The report shall

- a) show the result of the voting;
- b) state the decision of the chair of the technical committee or subcommittee;
- c) reproduce the text of the comments received; and
- d) include the observations of the secretariat of the technical committee or subcommittee on each of the comments submitted.

Every attempt shall be made to resolve negative votes.

If, within 8 weeks from the date of dispatch, two or more P-members disagree with decision 2.6.4 c)1) or 2.6.4 c)2) of the chair, the draft shall be discussed at a meeting (see 4.2.1.3).

Committees are required to respond to all comments received.

2.6.6 When the chair has taken the decision to proceed to the approval stage (see 2.7) or publication stage (see 2.8), the secretariat of the technical committee or subcommittee shall prepare, within a maximum of 16 weeks after the end of the voting period and with the assistance of its editing committee, a final text and send it to the office of the CEO for preparation and circulation of the final draft International Standard.

The secretariat shall provide the office of the CEO with the text in a revisable electronic format and also in a format which permits validation of the revisable form.

Texts that do not conform to the ISO/IEC Directives, Part 2 shall be returned to the secretariat with a request for correction before they are registered.

2.6.7 For time limits relating to this stage, see 2.1.6.

2.6.8 The enquiry stage ends with the registration, by the office of the CEO, of the text for circulation as a final draft International Standard or publication as an International Standard, in the case of 2.6.4 a) and b).

2.7 Approval stage

2.7.1 At the approval stage, the final draft International Standard (FDIS) shall be distributed by the office of the CEO within 12 weeks to all National Bodies for a 8-week vote (6-weeks in IEC).

National bodies shall be advised of the date by which ballots are to be received by the office of the CEO.

2.7.2 Votes submitted by National Bodies shall be explicit: positive, negative, or abstention.

A National Body may submit comments on any FDIS vote.

If a National Body finds a final draft International Standard unacceptable, it shall vote negatively and state the technical reasons. It shall not cast an affirmative vote that is conditional on the acceptance of modifications.

Proposals for the correction of obvious errors associated with a positive vote should be sent directly to the technical committee or subcommittee 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.

2.7.3 A final draft International Standard having been circulated for voting is approved if

- a) a two-thirds majority of the votes cast by the P-members of the technical committee or subcommittee 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, as well as negative votes not accompanied by technical reasons.

2.7.4 The secretariat of the technical committee or subcommittee has the responsibility of bringing any errors that may have been introduced in the preparation of the draft to the attention of the office of the CEO by the end of the voting period; further editorial or technical amendments are not acceptable at this stage.

2.7.5 All comments received will be retained for the next review and will be recorded on the voting form as "noted for future consideration". However, the Secretary along with the office of the CEO may seek to resolve obvious editorial errors. Technical changes to an approved FDIS are not allowed.

At the end of the voting period, the result of voting, indicating either the formal approval by National Bodies to issue the International Standard or formal rejection of the final draft International Standard, are available to all National Bodies.

2.7.6 If the final draft International Standard has been approved in accordance with the conditions of 2.7.3, it shall proceed to the publication stage (see 2.8).

2.7.7 If the final draft International Standard is not approved in accordance with the conditions in 2.7.3, the document shall be referred back to the technical committee or

subcommittee concerned for reconsideration in the light of the technical reasons submitted in support of the negative votes.

The committee shall decide to:

- resubmit a modified draft as a committee draft, enquiry draft or, in ISO and JTC 1, final draft International Standard, or
- publish a Technical Specification or a Publicly Available Specification (see 3.1 and 3.2), or
- cancel the project.

2.7.8 The approval stage ends with the circulation of the voting report (see 2.7.5) stating that the FDIS has been approved for publication as an International Standard, with the publication of a Technical Specification (see 3.1.1), or with the document being referred back to the committee.

2.8 Publication stage

2.8.1 Within 6 weeks, the office of the CEO shall correct any errors indicated and validated by the secretariat of the technical committee or subcommittee, and publish and distribute the International Standard.

2.8.2 The publication stage ends with the publication of the International Standard.

2.9 Maintenance of deliverables

The procedures for the maintenance of deliverables are given in the respective Supplements to the ISO/IEC Directives.

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 technical committee or subcommittee 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 shall 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

2.10.1 General

A published International Standard may subsequently be modified by the publication of

- a technical corrigendum (in IEC only);
- a corrected version;
- an amendment; or
- a revision (as part of the maintenance procedure in 2.9).

NOTE In case of revision a new edition of the International Standard will be issued.

2.10.2 Corrections

A correction is only issued to correct an error or ambiguity inadvertently introduced either in drafting or in publishing and which could lead to incorrect or unsafe application of the publication.

Corrections are not issued to update information that has become outdated since publication.

Suspected errors shall be brought to the attention of the secretariat of the technical committee or subcommittee concerned. After confirmation by the secretariat and chair, if necessary in consultation with the project leader and P-members of the technical committee or subcommittee,

the secretariat shall submit to the office of the CEO a proposal for correction, with an explanation of the need to do so.

The Chief Executive Officer shall decide, in consultation with the secretariat of the technical committee or subcommittee, and bearing in mind both the financial consequences to the organization and the interests of users of the publication, whether to publish a technical corrigendum (in IEC only) and/or a corrected version of the existing edition of the publication. The secretariat of the committee will then inform the members of the committee of the outcome.

The corrections are mentioned in the Foreword of the corrected version.

2.10.3 Amendments

An amendment alters and/or adds to previously agreed technical provisions in an existing International Standard. An amendment is considered as a partial revision: the rest of the International Standard is not open for comments.

An amendment is normally published as a separate document, the edition of the International Standard affected remaining in use.

The procedure for developing and publishing an amendment shall be as described in 2.3 (ISO and JTC 1), or the review and maintenance procedures (see IEC Supplement) and 2.4, 2.5, 2.6 (draft amendment, DAM), 2.7 (final draft amendment, FDAM) and 2.8.

At the approval stage (2.7), the Chief Executive Officer shall decide, in consultation with the secretariat of the technical committee or subcommittee, and bearing in mind both the financial consequences to the organization and the interests of users of the International Standard, whether to publish an amendment or a new edition of the International Standard, incorporating the amendment (see also 2.10.4).

NOTE Where it is foreseen that there will be frequent *additions* to the provisions of an International Standard, the possibility should be borne in mind at the outset of developing these additions as a series of parts (see ISO/IEC Directives, Part 2).

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

Consolidated versions are prepared by the IEC Central Office 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 Avoidance of proliferation of modifications

No more than 2 separate documents in the form of amendments shall be published modifying a current International Standard. The development of a third such document shall result in publication of a new edition of the International Standard.

2.10.5 Interpretation sheets

2.10.5.1 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.

2.10.5.2 Proposal stage

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

- the secretariat of the technical committee or subcommittee 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 technical committee or subcommittee which is responsible for the relevant standard.

The Chair and secretary of the technical committee or subcommittee 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 technical committee or subcommittee shall inform the secretariat of the scheme of its conclusions, including whether the committee endorses the Decision as being compatible with the standard.

2.10.5.3 Preparatory stage

The secretary of the technical committee or subcommittee 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 technical committee or subcommittee 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 technical committee or subcommittee.

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

2.10.5.4 Approval process

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

2.10.5.4.1 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:

- 1) two-thirds majority of the votes cast by P-members of the committee are in favour, and
- 2) 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.

2.10.5.4.2 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.

2.10.5.5 Publication of interpretation sheets

The draft, when approved, shall be issued by the Central Office 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 .../
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EXAMPLE: TC 61/Publication 60335-2-9(1986) Third edition/I-SH 01.

2.10.5.6 Review

Every 3 years, the Technical 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

When a technical committee or subcommittee has developed a standard that will require frequent modification, it may decide that a maintenance agency is required. Rules concerning the designation of maintenance agencies are given in Annex G.

2.12 Registration authorities

When a technical committee or subcommittee has developed a standard that includes registration provisions, a registration authority is required. Rules concerning the designation of registration authorities are given in Annex H.

2.13 Copyright

The copyright for all drafts and International Standards and other publications belongs to ISO, IEC or ISO and IEC, respectively as represented by the office of the CEO.

The content of, for example, an International Standard may originate from a number of sources, including existing national standards, articles published in scientific or trade journals, original research and development work, descriptions of commercialized products, etc. These sources may be subject to one or more rights.

In ISO and IEC, there is an understanding that original material contributed to become a part of an ISO, IEC or ISO/IEC publication can be copied and distributed within the ISO and/or IEC systems (as relevant) as part of the consensus building process, this being without prejudice to the rights of the original copyright owner to exploit the original text elsewhere. Where material is already subject to copyright, the right should be granted to ISO and/or IEC to reproduce and circulate the material. This is frequently done without recourse to a written agreement, or at most to a simple written statement of acceptance. Where contributors wish a formal signed agreement concerning copyright of any submissions they make to ISO and/or IEC, such requests shall be addressed to ISO Central Secretariat or the IEC Central Office, respectively.

Attention is drawn to the fact that the respective members of ISO and IEC have the right to adopt and re-publish any respective ISO and/or IEC standard as their national standard. Similar forms of endorsement do or may exist (for example, with regional standardization organizations).

2.14 Reference to patented items (see also Annex I)

2.14.1 If, in exceptional situations, technical reasons justify such a step, there is no objection in principle to preparing a deliverable in terms which include the use of items covered by patent rights – defined as patents, utility models and other statutory rights based on inventions, including any published applications for any of the foregoing – even if the terms of the deliverable are such that there are no alternative means of compliance. The rules given below shall be applied.

2.14.2 If technical reasons justify the preparation of a deliverable in terms which include the use of items covered by patent rights, the following procedures shall be complied with:

- a) The proposer of a proposal for a deliverable shall draw the attention of the committee to any patent rights of which the proposer is aware and considers to cover any item of the proposal. Any party involved in the preparation of a deliverable shall draw the attention of the committee to any patent rights of which it becomes aware during any stage in the development of the deliverable.
- b) If the proposal is accepted on technical grounds, the proposer shall ask any holder of such identified patent rights for a statement that the holder would be willing to negotiate worldwide licences under his/her rights with applicants throughout the world on reasonable and non-discriminatory terms and conditions. Such negotiations are left to the parties concerned and are performed outside ISO and/or IEC. A record of the right holder's statement shall be placed in the registry of the ISO Central Secretariat or IEC Central Office as appropriate. If the right holder does not provide such a statement, the committee concerned shall not proceed with inclusion of an item covered by a patent right in the deliverable without authorization from ISO Council or IEC Council Board as appropriate.
- c) A deliverable shall not be published until the statements of the holders of all identified patent rights have been received unless the council board concerned gives authorization.

2.14.3 Should it be revealed after publication of a deliverable that licences under patent rights, which appear to cover items included in the deliverable, cannot be obtained under reasonable and non-discriminatory terms and conditions, the deliverable shall be referred back to the relevant committee for further consideration.

3 Development of other deliverables

3.1 Technical Specifications

Technical Specifications may be prepared and published under the following circumstances and conditions.

3.1.1 When the subject in question is still under development or where for any other reason there is the future but not immediate possibility of an agreement to publish an International Standard, the technical committee or subcommittee may decide, by following the procedure set out in 2.3, that the publication of a Technical Specification would be appropriate. The procedure for preparation of such a Technical Specification shall be as set out in 2.4 and 2.5. The decision to publish the resulting document as a Technical Specification shall require a two-thirds majority vote of the P-members voting of the technical committee or subcommittee. A Technical Specification may contain normative provisions.

No technical changes are allowed on approved draft Technical Specifications.

In ISO, when the required support cannot be obtained for a final draft International Standard to pass the approval stage (see 2.7), or in case of doubt concerning consensus, the technical committee or subcommittee may decide, by a two-thirds majority vote of P-members voting, that the document should be published in the form of a Technical Specification.

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

3.1.2 When the P-members of a technical committee or subcommittee have agreed upon the publication of a Technical Specification, the draft specification shall be submitted electronically by the secretariat of the technical committee or subcommittee to the office of the CEO within 16 weeks for publication. Competing technical specifications offering different technical solutions are possible provided that they do not conflict with existing International Standards.

3.1.3 Technical Specifications shall be subject to review by the Committee not later than 3 years after their publication. The aim of such review shall be to re-examine the situation which resulted in the publication of a Technical Specification and if possible to achieve the agreement necessary for the publication of an International Standard to replace the Technical Specification. In IEC, the date for this review is based on the stability date which shall be agreed in advance of the publication of the Technical Specification (review date). Withdrawal of a Technical Specification is decided by the committee.

3.2 Publicly Available Specifications (PAS)

3.2.1 A PAS may be an intermediate specification, published prior to the development of a full International Standard, or, in IEC may be a "dual logo" publication published in collaboration with an external organization. It is a document not fulfilling the requirements for a standard. A PAS is a normative document.

3.2.2 A proposal for submission of a PAS may be made by the Secretariat, an A-liaison or by any P-member of the committee. In IEC, a C-liaison may also submit a PAS (see 1.17).

The submission of a PAS can be made using:

- a) a draft originating from an existing, approved project for the development of an International Standard prior to the circulation of the enquiry draft (CDV);
- b) a proposal for a PAS where there is no existing approved project. In this case, it may be either submitted directly for approval, noting that for subsequent transformation into either a TS or IS, it shall go via the new work item proposal procedure or for immediate transformation of the PAS into another normative document by the parallel circulation of the PAS and a new work item proposal (see Annex SB).
- c) In cases where the committee wishes to improve the quality or completeness of the content of a PAS, the text may be circulated in advance of the formal PAS process, as a DC document.

3.2.3 The PAS is published after verification of the presentation and checking that there is no conflict with existing International Standards by the committee concerned and following simple majority approval of the P-members voting of the committee concerned. Competing PAS offering different technical solutions are possible provided that they do not conflict with existing International Standards.

The wording “Pre-standard” may be included on the cover and title pages at the request of the technical committee or subcommittee. 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.

3.2.4 A PAS shall remain valid for an initial maximum period of 3 years in ISO and 2 years in IEC. The validity may be extended for a single period up to a maximum of 3 in ISO and 2 years in IEC. During the validity period, withdrawal of a PAS is decided by the committee. At the end of the validity period, the PAS shall be transformed with or without change into another type of normative document, or shall be automatically withdrawn.

3.3 Technical Reports

3.3.1 When a technical committee or subcommittee has collected data of a different kind from that which is normally published as an International Standard (this may include, for example, data obtained from a survey carried out among the National Bodies, data on work in other international organizations or data on the “state of the art” in relation to standards of National Bodies on a particular subject), the technical committee or subcommittee may decide, by a simple majority vote of P-members voting, to request the Chief Executive Officer to publish such data in the form of a Technical Report. The document shall be entirely informative in nature and shall not contain matter implying that it is normative. It shall clearly explain its relationship to normative aspects of the subject which are, or will be, dealt with in International Standards related to the subject. The Chief Executive Officer, if necessary in consultation with the technical management board, shall decide whether to publish the document as a Technical Report.

No technical changes are allowed on approved draft Technical Reports.

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

3.3.2 When the P-members of a technical committee or subcommittee have agreed upon the publication of a Technical Report, the draft report shall be submitted electronically by the secretariat of the technical committee or subcommittee to the Chief Executive Officer within 16 weeks for publication.

3.3.3 It is recommended that Technical Reports are regularly reviewed by the committee responsible, to ensure that they remain valid. Withdrawal of a Technical Report is decided by the technical committee or subcommittee responsible.

In ISO, Technical Reports are not subject to a review process.

4 Meetings

4.1 General

National Bodies are reminded that they are not permitted to charge delegates/ experts any sort of participation fee; nor require accommodations at specific hotels or hotel rates for any meetings of technical committees, subcommittees, working groups, maintenance and project teams. The basic meeting facilities shall be funded entirely by resources from a National Body and/or **voluntary** sponsors. For more information in IEC, see Meeting Guide (www.iec.ch/members_experts/refdocs/iec/IEC_Meeting_Guide_2012.pdf) and for ISO see, Annex SF for further details.

4.1.1 Technical committees and subcommittees shall use current electronic means to carry out their work (for example, email, groupware and teleconferencing) wherever possible. A meeting of a technical committee or subcommittee should be convened only when it is necessary to discuss committee drafts (CD) or other matters of substance which cannot be settled by other means.

4.1.2 The technical committee secretariat should look ahead with a view to drawing up, in consultation with the office of the CEO, a planned minimum 2-year programme of meetings of the technical committee and its subcommittees and, if possible, its working groups, taking account of the programme of work.

4.1.3 In planning meetings, account should be taken of the possible advantage of grouping meetings of technical committees and subcommittees dealing with related subjects, in order to improve communication and to limit the burden of attendance at meetings by delegates who participate in several technical committees or subcommittees.

4.1.4 In planning meetings, account should also be taken of the advantages for the speedy preparation of drafts of holding a meeting of the editing committee immediately after the meeting of the technical committee or subcommittee and at the same place.

4.2 Procedure for calling a meeting

4.2.1 Technical committee and subcommittee meetings

4.2.1.1 The date and place of a meeting shall be subject to an agreement between the chair and the secretariat of the technical committee or subcommittee concerned, the Chief Executive Officer and the National Body acting as host. In the case of a subcommittee meeting, the subcommittee secretariat shall first consult with the secretariat of the parent technical committee in order to ensure coordination of meetings (see also 4.1.3).

4.2.1.2 A National Body wishing to act as host for a particular meeting shall contact the Chief Executive Officer and the technical committee or subcommittee secretariat concerned.

The National Body shall first ascertain that there are no restrictions imposed by its country to the entry of representatives of any P-member of the technical committee or subcommittee for the purpose of attending the meeting.

The hosting organizations are advised to verify and provide information on access means to meeting facilities. As per clause 4.2.1.3, a document describing logistics for the meeting shall be circulated. As well as location and transport information, it should provide details of the accessibility of meeting facilities.

During the planning process, there should be a request for notification of specific accessibility requirements. The hosting body should make its best efforts to satisfy these requirements.

4.2.1.3 The secretariat shall ensure that arrangements are made for the agenda and logistical information to be circulated by the office of the CEO (in the IEC) or by the secretariat with a copy to the office of the CEO (in ISO) at the latest 16 weeks before the date of the meeting.

NOTE All new work item proposals must be approved by correspondence (committee internal ballot – CIB) see 2.3.4.

Only those committee drafts for which the compilation of comments will be available at least 6 weeks before the meeting shall be included on the agenda and be eligible for discussion at the meeting.

Any other working documents, including compilations of comments on drafts to be discussed at the meeting, shall be distributed not less than 6 weeks in advance of the meeting.

The agenda shall clearly state the starting and estimated finishing times.

In the event of meetings over running the estimated finishing time, the Chair shall ensure that the P-members are willing to take voting decisions. However if P-members leave, they may request the Chair not to take any further voting decisions.

4.2.2 Working group meetings

4.2.2.1 Working groups shall use current electronic means to carry out their work (for example, email, groupware and teleconferencing) wherever possible. For a fully remote meeting, the advance notice shall be made available a minimum of 4 weeks in advance of the meeting. When a physical meeting needs to be held, notification by the convenor of the meetings of a working group shall be sent to its members and to the secretariat of the parent committee, at least 6 weeks in advance of the meeting.

The Working Group leadership should ensure that everything reasonable is done to enable experts to actively participate.

4.2.2.2 If a working group meeting is to be held in conjunction with a meeting of the parent committee, the convenor shall coordinate arrangements with the secretariat of the parent committee. In particular it shall be ensured that the working group members receive all general information for the meeting, which is sent to delegates to the meeting of the parent committee.

4.2.2.3 Either the WG (or PT/MT/AC in IEC) Leader or the Secretary of the relevant committee shall notify National Body Secretariats of any WG (or PT/MT/AC in IEC) meeting held in their country.

4.3 Languages at meetings

While the official languages are English, French and Russian, meetings are conducted in English by default.

The National Body for the Russian Federation provides all interpretation and translation into or from the Russian language.

The chair and secretariat are responsible for dealing with the question of language at a meeting in a manner acceptable to the participants following the general rules of ISO or IEC, as appropriate. (See also Annex E.)

4.4 Cancellation of meetings

Every possible effort shall be made to avoid cancellation or postponement of a meeting once it has been convened. Nevertheless, if the agenda and basic documents are not available within the time required by 4.2.1.3, then the Chief Executive Officer has the right to cancel the meeting.

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

5.1.1 National bodies have the right of appeal

- a) to the parent technical committee on a decision of a subcommittee;
- b) to the technical management board on a decision of a technical committee;
- c) to the council board on a decision of the technical management board,

within 12 weeks in ISO and 8 weeks in IEC of the decision in question.

The decision of the council board on any case of appeal is final.

5.1.2 A P-member of a technical committee or subcommittee may appeal against any action, or inaction, on the part of the technical committee or subcommittee, when the P-member considers that such action or inaction is

- a) not in accordance with
 - the Statutes and Rules of Procedure;
 - the ISO/IEC Directives; or
- b) not in the best interests of international trade and commerce, or such public factors as safety, health or environment.

5.1.3 Matters under appeal may be either technical or administrative in nature.

Appeals on decisions concerning new work item proposals, committee drafts, enquiry drafts and final draft International Standards are only eligible for consideration if

- questions of principle are involved, or
- the contents of a draft may be detrimental to the reputation of ISO or IEC.

5.1.4 All appeals shall be fully documented to support the P-member's concern.

5.2 Appeal against a subcommittee decision

5.2.1 The documented appeal shall be submitted by the P-member to the secretariat of the parent technical committee, with a copy to the Chief Executive Officer.

5.2.2 Upon receipt, the secretariat of the parent technical committee shall advise all its P-members of the appeal and take immediate action, by correspondence or at a meeting, to consider and decide on the appeal, consulting the Chief Executive Officer in the process.

5.2.3 If the technical committee supports its subcommittee, then the P-member which initiated the appeal may either

- accept the technical committee decision, or
- appeal against it.

5.3 Appeal against a technical committee decision

5.3.1 Appeals against a technical committee decision may be of 2 kinds:

- an appeal arising out of 5.2.3 above, or
- an appeal against an original decision of a technical committee.

5.3.2 The documented appeal shall, in all cases, be submitted to the Chief Executive Officer, with a copy to the chair and secretariat of the technical committee.

5.3.3 The Chief Executive Officer shall, following whatever consultations s/he deems appropriate, refer the appeal together with his/her comments to the technical management board within 4 weeks after receipt of the appeal.

5.3.4 The technical management board shall decide whether an appeal shall be further processed or not. If the decision is in favour of proceeding, the chair of the technical management board shall form a conciliation panel.

The conciliation panel shall hear the appeal within 12 weeks and attempt to resolve the difference of opinion as soon as practicable. The conciliation panel shall give a final report within 12 weeks. If the conciliation panel is unsuccessful in resolving the difference of opinion, this shall be reported to the Chief Executive Officer, together with recommendations on how the matter should be settled.

5.3.5 The Chief Executive Officer, on receipt of the report of the conciliation panel, shall inform the technical management board, which will make its decision.

5.4 Appeal against a technical management board decision

An appeal against a decision of the technical management board shall be submitted to the Chief Executive Officer with full documentation on all stages of the case.

The Chief Executive Officer shall refer the appeal together with his/her comments to the members of the council board within 4 weeks after receipt of the appeal.

The council board shall make its decision within 12 weeks.

5.5 Progress of work during an appeal process

When an appeal is against a decision respecting work in progress, the work shall be continued, up to and including the approval stage (see 2.7).

Annex A (normative)

Guides

A.1 Introduction

In addition to International Standards, Technical Specifications, Publicly Available Specifications and Technical Reports prepared by technical committees, ISO and IEC publish Guides on matters related to international standardization. Guides shall be drafted in accordance with the ISO/IEC Directives, Part 2.

Guides shall not be prepared by Committees. They may be prepared by an ISO Policy Development Committee, an IEC Advisory Committee or Strategic Group, an ISO group reporting to the ISO technical management board, or an ISO/IEC Joint Coordination Group. These bodies are referred to below as the "Committee or Group responsible for the project".

The procedure for preparation and publication of a Guide is as described below.

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)

A.2 Proposal stage

The ISO and/or IEC technical management board will approve proposals for new Guides or revisions of Guides and decide on the secretariat and composition of the Committee or Group responsible for the project.

Once a project is approved by the ISO and/or IEC technical management board, the secretariat of the Committee or Group responsible for the project shall ensure that the appropriate interests in ISO and IEC are informed.

A.3 Preparatory stage

The Committee or Group responsible for the project shall ensure that the appropriate interests in ISO and IEC have the opportunity to be represented during the preparation of the working draft.

A.4 Committee stage

Once a working draft is available for circulation as a committee draft, the secretariat of the Committee or Group responsible for the project shall send it to the parent committee or ISO and/or IEC technical management board for vote, comments and to approve its advancement to the Enquiry stage.

A.5 Enquiry stage

A.5.1 The office of the CEOs shall circulate the English text of the revised draft Guide to all National Bodies for an 8-week period for translation into French and other languages and for preparation prior to 12-week vote.

A.5.2 The draft Guide is approved for publication as a Guide if not more than one-quarter of the votes cast are negative, abstentions being excluded when the votes are counted.

In the case of ISO/IEC Guides, the draft shall be submitted for approval to the National Bodies of both ISO and IEC. The National Bodies of both organizations need to approve the document if it is to be published as an ISO/IEC Guide.

If this condition is satisfied for only one of the organizations, ISO or IEC, the Guide may be published under the name of the approving organization only, unless the Committee or Group responsible for the project decides to apply the procedure set out in A.5.3.

A.5.3 If a draft Guide is not approved, or if it is approved with comments the acceptance of which would improve consensus, the chair of the Committee or Group responsible for the project may decide to submit an amended draft for a 8-week vote. The conditions for acceptance of the amended draft are the same as in A.5.2.

A.6 Publication stage

The publication stage shall be the responsibility of the office of the CEO of the organization to which the Committee or Group responsible for the project belongs.

In the case of a Joint ISO/IEC Group, the responsibility shall be decided by agreement between the Chief Executive Officers.

A.7 Withdrawal of a Guide

The Committee or Group responsible for the Guide shall be responsible for deciding if the Guide shall be withdrawn. The formal withdrawal shall be ratified by the technical management board (TMB) in accordance with its normal procedures.

Annex B (normative)

ISO/IEC procedures for liaison and work allocation

B.1 Introduction

By the ISO/IEC Agreement of 1976², ISO and IEC together form a system for international standardization as a whole. For this system to operate efficiently, the following procedures are agreed for coordination and allocation of work between the Committees of both organizations.

B.2 General considerations

The allocation of work between ISO and IEC is based on the agreed principle that all questions relating to international standardization in the electrical and electronic engineering fields are reserved to IEC, the other fields being reserved to ISO and that allocation of responsibility for matters of international standardization where the relative contribution of electrical and non-electrical technologies is not immediately evident will be settled by mutual agreement between the organizations.

Questions of coordination and work allocation may arise when establishing a new ISO or IEC technical committee, or as a result of the activities of an existing technical committee.

The following levels of coordination and work allocation agreement are available. Matters should be raised at the next higher level only after all attempts to resolve them at the lower levels have failed.

- a) **Formal liaisons** between ISO and IEC committees for normal inter-committee cooperation.
- b) **Organizational consultations**, including technical experts and representatives of the Chief Executive Officers, for cases where technical coordination may have an effect on the future activities of the organizations in a larger sense than the point under consideration.
- c) Decisions on work allocation
 - by the technical management boards or, if necessary,
 - the ISO/IEC Joint Technical Advisory Board (JTAB).

Questions affecting both ISO and IEC, on which it has not proved possible to obtain a common decision by the ISO Technical Management Board and the IEC Standardization Management Board, are referred to the ISO/IEC Joint Technical Advisory Board (JTAB) for decision (see 1.3.1).

B.3 Establishing new technical committees

Whenever a proposal to establish a new technical committee is made to the National Bodies of ISO or of IEC respectively, the proposal shall also be submitted to the other organization requesting comment and/or agreement. As a result of these consultations, two cases may arise:

- a) the opinion is unanimous that the work should be carried out in one of the organizations;
- b) opinions are divided.

In case a), formal action may then be taken to establish the new technical committee according to the unanimous opinion.

² ISO Council resolutions 49/1976 and 50/1976 and IEC Administrative Circular No. 13/1977.

In case b), a meeting of experts in the field concerned shall be arranged with representatives of the Chief Executive Officers with a view to reaching a satisfactory agreement for allocation of the work (i.e. organizational level). If agreement is reached at this level, formal action may be taken by the appropriate organization to implement the agreement.

In the case of disagreement after these consultations, the matter may be referred by either organization to the ISO/IEC Joint Technical Advisory Board (JTAB).

B.4 Coordinating and allocating work between ISO and IEC technical committees

B.4.1 Formal liaison at committee level

Most coordination needs arising between individual ISO and IEC committees are successfully dealt with through formal technical liaison arrangements. These arrangements, when requested by either organization, shall be honoured by the other organization. Requests for formal liaison arrangements are controlled by the offices of the CEOs. The requesting organization shall specify the mode of cooperation (see B.4.2.2).

B.4.2 Details of agreement

B.4.2.1 Continual efforts shall be made to minimize the overlap areas between IEC and ISO by entrusting areas of work to one of the two organizations.

For areas of work so entrusted, IEC and ISO shall agree through the JTAB on how the views and interests of the other organization are to be fully taken into account.

B.4.2.2 Five working modes of cooperation have been established, as follows:

Mode 1 – Informative relation

One organization is fully entrusted with a specific work area and keeps the other fully informed of all progress.

Mode 2 – Contributive relation

One organization should take the lead of the work and the other should make written contributions where considered appropriate during the progress of this work. This relation also includes the exchange of full information.

Mode 3 – Subcontracting relation

One organization is fully entrusted with the realization of the work on an identified item, but due to specialization of the other, a part of the work is subcontracted and that part is prepared under the responsibility of the second organization. Necessary arrangements shall be made to guarantee the correct integration of the resulting subcontracted work into the main part of the programme. The enquiry and approval stages are handled by the organization being the main contractor for the standardization task.

Mode 4 – Collaborative relation

One organization takes the lead in the activities, but the work sessions and meetings receive liaison representative from the other. Such liaison representatives should have the right to intervene in the debate but have no right to vote. The full flow of information is oriented through this liaison.

Mode 5 – Integrated liaison

Joint Working Groups and Joint Technical Committees ensure integrated meetings for handling together the realization of standards under a principle of total equality of participation.

Joint Working Groups between technical committees of the two organizations shall operate in accordance with 1.12.6.

Any change to the mode of cooperation shall be by mutual agreement.

B.4.2.3 The allocation of work between IEC and ISO for potentially overlapping areas will be set out as required in schedules or programmes which, when agreed by the relevant parties, will form addenda to this agreement.

A consequence of this agreement is that the parties agree to cross-refer to the relevant standards of the other in the respective competent fields of interest.

When the standard being referred to is updated, it is the responsibility of the body making the reference to take care of the updating of the reference where appropriate.

B.4.2.4 For work for which one organization has assumed responsibility and for which there will be subcontracting of work to the other, the fullest account shall be taken of the interests participating in the subcontracted work in defining the objectives of that work.

B.4.2.5 The necessary procedures for enquiry and approval shall be realized by the organization entrusted with a particular standardization task, except as otherwise agreed by the two technical management boards.

B.4.2.6 For standards developed under the Mode 5 – Integrated liaison, the committee, enquiry and approval stages shall be carried out in parallel in both ISO and IEC in accordance with the rules of the organization with the administrative lead. The committee/organization with the administrative responsibility for the project shall submit drafts for the committee, enquiry and approval stages to the other organization two weeks prior to the circulation date.

B.4.2.7 When the enquiry draft has not fulfilled the approval criteria (see 2.6.3) in one of the organizations, then:

- the officers of the committees involved in the joint working group may select one of options given in 2.6.4 c) or
- in exceptional circumstances, if agreed between the officers of the ISO and IEC committees involved in the joint working group and the offices of the CEO, the project may proceed as a single logo standard of the organization in which the enquiry draft was approved. The joint working group is automatically disbanded.

B.4.2.8 If the final draft International Standard is not approved in accordance with the conditions in 2.7.3 then:

- the committees involved in the joint working group may select one of the options given in 2.7.7, noting that in IEC the circulation of a second final draft International Standard is not allowed and will require a derogation of the TMB or
- in exceptional circumstances, if agreed between the officers of the ISO and IEC committees involved in the joint working group and the offices of the CEO, the standard may be published as a single logo standard of the organization in which the final draft International Standard was approved. The joint working group is automatically disbanded.

B.4.2.9 Standards developed under the Mode 5 – Integrated liaison via a joint working group between ISO and IEC are published by the organization of the committee having administrative responsibility. That organization assigns the reference number of the standard and owns the

copyright of the standard. The standard carries the logo of both organizations and may be sold by both organizations. The foreword of the International Standard will identify all the committees responsible for the development. For those standards where the committee with the administrative responsibility is in the IEC, then the foreword will also give the ISO voting results. ISO-lead documents are assigned numbers from 1 to 59999. IEC-lead documents are assigned numbers from 60000 to 79999. In the case of multi-part standards, some parts being under ISO responsibility and some being under IEC responsibility, a number in the 80000 series is assigned (e.g. ISO 80000-1, IEC 80000-6).

B.4.2.10 The maintenance procedures to be used for standards developed under the Mode 5 – Integrated liaison will be those currently applied in the organization which has the committee with the administrative responsibility.

B.4.2.11 If there is a reason, during the development of the project, to change from one mode of operation to another, a recommendation shall be made by both technical committees concerned and submitted to the two technical management boards for information.

B.4.3 Cooperation of secretariats

The secretariats of the technical committees/subcommittees from the two organizations concerned shall cooperate on the implementation of this agreement. There shall be a complete information flow on on-going work and availability on demand to each other of working documents, in accordance with normal procedures.

Annex C

(normative)

Justification of proposals for the establishment of standards

C.1 General

C.1.1 Because of the large financial resources and manpower involved and the necessity to allocate these according to the needs, it is important that any standardization activity begin by identifying the needs, determining the aims of the standard(s) to be prepared and the interests that may be affected. This will, moreover, help to ensure that the standards produced will cover appropriately the aspects required and be market relevant for the affected sectors. Any new activity shall therefore be reasonably justified before it is begun.

C.1.2 It is understood that, whatever conclusions may be drawn on the basis of the annex, a prerequisite of any new work to be commenced would be a clear indication of the readiness of a sufficient number of relevant interested parties to allocate necessary manpower, funds and to take an active part in the work.

C.1.3 This annex sets out rules for proposing and justifying new work, so that proposals will offer to others the clearest possible idea of the purposes and extent of the work, in order to ensure that standardization resources are really allocated by the parties concerned and are used to the best effect.

C.1.4 This annex does not contain rules of procedure for implementing and monitoring the guidelines contained in it, nor does it deal with the administrative mechanism which should be established to this effect.

C.1.5 This annex is addressed primarily to the proposer of any kind of new work to be started but may serve as a tool for those who will analyse such a proposal or comment on it, as well as for the body responsible for taking a decision on the proposal.

C.2 Terms and definitions

C.2.1

proposal for new work

proposal for a new field of technical activity or for a new work item

C.2.2

proposal for a new field of technical activity

proposal for the preparation of (a) standard(s) in a field that is not covered by an existing committee (such as a technical committee, subcommittee or project committee) of the organization to which the proposal is made

C.2.3

proposal for a new work item

proposal for the preparation of a standard or a series of related standards in the field covered by an existing committee (such as a technical committee) of the organization to which the proposal is made

C.3 General principles

C.3.1 Any proposal for new work shall lie within the scope of the organization to which it is submitted.

NOTE For example, the objects of ISO are laid down in its Statutes and of IEC in Article 2 of its Statutes.

C.3.2 The documentation justifying new work in ISO and IEC shall make a substantial case for the market relevance of the proposal.

C.3.3 The documentation justifying new work in ISO and IEC shall provide solid information as a foundation for informed ISO or IEC National Body voting.

C.3.4 Within the ISO and IEC systems, the onus is considered to be placed on the proposer to provide the proper documentation to support principles C.3.2 and C.3.3 stated above.

C.4 Elements to be clarified when proposing a new field of technical activity or a new work item

C.4.1 Proposals for new fields of technical activity and new work items shall include the following fields of information (C.4.2 to C.4.13).

C.4.2 Title

The title shall indicate clearly yet concisely the new field of technical activity or the new work item which the proposal is intended to cover.

EXAMPLE 1 (proposal for a new technical activity) "Machine tools".

EXAMPLE 2 (proposal for a new work item) "Electrotechnical products – Basic environmental testing procedures".

C.4.3 Scope

C.4.3.1 For new fields of technical activity

The scope shall precisely define the limits of the field of activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned.

EXAMPLE "Standardization of all machine tools for the working of metal, wood and plastics, operating by removal of material or by pressure".

C.4.3.2 For new work items

The scope shall give a clear indication of the coverage of the proposed new work item and, if necessary for clarity, exclusions shall be stated.

EXAMPLE 1

This standard lists a series of environmental test procedures, and their severities, designed to assess the ability of electrotechnical products to perform under expected conditions of service.

Although primarily intended for such applications, this standard may be used in other fields where desired.

Other environmental tests, specific to the individual types of specimen, may be included in the relevant specifications.

EXAMPLE 2

Standardization in the field of fisheries and aquaculture, including, but not limited to, terminology, technical specifications for equipment and for their operation, characterization of aquaculture sites and maintenance of appropriate physical, chemical and biological conditions, environmental monitoring, data reporting, traceability and waste disposal.

Excluded:

- methods of analysis of food products (covered by ISO/TC 34);
- personal protective clothing (covered by ISO/TC 94);
- environmental monitoring (covered by ISO/TC 207).

C.4.4 Proposed initial programme of work (for proposals for new fields of technical activity only)

C.4.4.1 The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall, therefore, show the relationship between the subjects proposed.

C.4.4.2 Each item on the programme of work shall be defined by both the subject and aspect(s) to be standardized (for products, for example, the items would be the types of products, characteristics, other requirements, data to be supplied, test methods, etc.).

C.4.4.3 Supplementary justification may be combined with particular items in the programme of work.

C.4.4.4 The proposed programme of work shall also suggest priorities and target dates for new work items (when a series of standards is proposed, priorities shall be suggested).

C.4.5 Indication(s) of the preferred type or types of deliverable(s) to be produced

In the case of proposals for new fields of technical activity, this may be provided under C.4.4.

C.4.6 A listing of relevant existing documents at the international, regional and national levels

Any known relevant documents (such as standards and regulations) shall be listed, regardless of their source and should be accompanied by an indication of their significance.

C.4.7 Relation to and impact on existing work

C.4.7.1 A statement shall be provided regarding any relation or impact the proposed work may have on existing work, especially existing ISO and IEC deliverables. The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized.

C.4.7.2 If seemingly similar or related work is already in the scope of other committees of the organization or in other organizations, the proposed scope shall distinguish between the proposed work and the other work.

C.4.7.3 The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.

C.4.8 Relevant country participation

C.4.8.1 For proposals for new fields of technical activity, a listing of relevant countries should be provided where the subject of the proposal is important to their national commercial interests.

C.4.8.2 For proposals for new work item within existing committees, a listing of relevant countries should be provided which are not already P-members of the committee, but for whom the subject of the proposal is important to their national commercial interests.

C.4.9 Cooperation and liaison

C.4.9.1 A list of relevant external international organizations or internal parties (other than ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable(s) shall be provided.

C.4.9.2 In order to avoid conflict with, or duplication of efforts of, other bodies, it is important to indicate all points of possible conflict or overlap.

C.4.9.3 The result of any communication with other interested bodies shall also be included.

C.4.10 Affected stakeholders

A simple and concise statement shall be provided identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) and how they will each benefit from or be impacted by the proposed deliverable(s).

C.4.11 Base document (for proposals for new work items only)

C.4.11.1 When the proposer considers that an existing well-established document may be acceptable as a standard (with or without amendments) this shall be indicated with appropriate justification and a copy attached to the proposal.

C.4.11.2 All proposals for new work items shall include an attached existing document to serve as an initial basis for the ISO or IEC deliverable or a proposed outline or table of contents.

C.4.11.3 If an existing document is attached that is copyrighted or includes copyrighted content, the proposer shall ensure that appropriate permissions have been granted in writing for ISO or IEC to use that copyrighted content.

C.4.12 Leadership commitment

C.4.12.1 In the case of a proposal for a new field of technical activity, the proposer shall indicate whether his/her organization is prepared to undertake the secretariat work required.

C.4.12.2 In the case of a proposal for new work item, the proposer shall also nominate a project leader.

C.4.13 Purpose and justification

C.4.13.1 The purpose and justification of the standard to be prepared shall be made clear and the need for standardization of each aspect (such as characteristics) to be included in the standard shall be justified.

C.4.13.2 If a series of new work items is proposed the purpose and the justification of which is common, a common proposal may be drafted including all elements to be clarified and enumerating the titles and scopes of each individual item.

C.4.13.3 Please note that the items listed in the bullet points below represent a menu of suggestions or ideas for possible documentation to support the purpose and justification of proposals. Proposers should consider these suggestions, but they are not limited to them, nor are they required to comply strictly with them. What is most important is that proposers develop and provide purpose and justification information that is most relevant to their proposals and that makes a substantial business case for the market relevance and need of their proposals. Thorough, well-developed and robust purpose and justification documentation will lead to more

informed consideration of proposals and ultimately their possible success in the ISO and IEC systems.

- A simple and concise statement describing the business, technological, societal or environmental issue that the proposal seeks to address, preferably linked to the Strategic Business Plan of the concerned ISO or IEC committee.
- Documentation on relevant global metrics that demonstrate the extent or magnitude of the economic, technological, societal or environmental issue, or the new market. This may include an estimate of the potential sales of the resulting standard(s) as an indicator of potential usage and global relevance.
- Technological benefit – a simple and concise statement describing the technological impact of the proposal to support coherence in systems and emerging technologies, convergence of merging technologies, interoperability, resolution of competing technologies, future innovation, etc.
- Economic benefit – a simple and concise statement describing the potential of the proposal to remove barriers to trade, improve international market access, support public procurement, improve business efficiency for a broad range of enterprises including small and medium sized ones, and/or result in a flexible, cost-effective means of complying with international and regional rules/conventions, etc. A simple cost/benefit analysis relating the cost of producing the deliverable(s) to the expected economic benefit to businesses worldwide may also be helpful.
- Societal benefit(s) – a simple and concise statement describing any societal benefits expected from the proposed deliverable(s).
- Environmental benefit(s) – a simple and concise statement describing any environmental or wider sustainability benefits expected from the proposed deliverable(s).
- A simple and concise statement clearly describing the intended use(s) of the proposed deliverable(s), for example, whether the deliverable is intended as requirements to support conformity assessment or only as guidance or recommended best practices; whether the deliverable is a management system standard; whether the deliverable is intended for use or reference in technical regulation; whether the deliverable is intended to be used to support legal cases in relation to international treaties and agreements.
- A simple and concise statement of metrics for the committee to track in order to assess the impact of the published standard over time to achieve the benefits to stakeholders documented under C.4.10 above.
- A statement assessing the prospect of the resulting deliverable(s) being compliant with, for the IEC, the IEC Global Relevance Policy:
www.iec.ch/members_experts/refdocs/ac_cl/AC_200817e_AC.pdf and for ISO, with ISO's Global Relevance Policy
www.iso.org/iso/home/standards_development/governance_of_technical_work.htm and the ISO/TMB recommendations (see the Note below) regarding sustainable development and sustainability, where relevant.

NOTE For ISO, the ISO/TMB confirmed the following recommendations: 1) When a committee (in any sector) develops a standard dealing with sustainability/sustainable development the standard must remain within the context of the committee's scope of work; 2) The committee should also notify the TMB with the title and scope as early as possible; 3) The committee undertaking such work should clarify its intentions in the Introduction of the specific standard(s); 4) The most widely used definition of sustainable development is the one from the UN Brundtland committee on sustainable development: development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

- A statement assessing the proposal's compliance with the Principles for developing ISO and IEC Standards related to or supporting public policy initiatives (for ISO see Annex SO in the Consolidated ISO Supplement and for IEC and ISO see *Using and referencing ISO and IEC standards to support public policy*: www.iso.org/sites/policy) and the possible relation of the resulting deliverable(s) to public policy, including a statement regarding the potential for easier market access due to conformity with appropriate legislation.

Annex D (normative)

Resources of secretariats and qualifications of secretaries

D.1 Terms and definitions

D.1.1

secretariat

National Body to which has been assigned, by mutual agreement, the responsibility for providing technical and administrative services to a technical committee or subcommittee

D.1.2

secretary

individual appointed by the secretariat to manage the technical and administrative services provided

D.1.3

assistant secretary

individual appointed by the secretariat to assist the secretary for the management of the technical and administrative services provided

Note to entry One or more assistant secretaries may be appointed by the secretariat to have specific secretariat roles.

D.2 Resources of a secretariat

A National Body to which a secretariat has been assigned shall recognize that, no matter what arrangements it makes in its country to provide the required services, it is the National Body itself that is ultimately responsible for the proper functioning of the secretariat. National bodies undertaking secretariat functions shall become party to the ISO Service Agreement or IEC Basic Agreement, as appropriate.

The secretariat shall therefore have adequate administrative and financial means or backing to ensure:

- a) facilities for word-processing in English and/or French, for providing texts electronically, and for any necessary reproduction of documents;
- b) preparation of adequate technical illustrations;
- c) identification and use, with translation where necessary, of documents received in the official languages;
- d) updating and continuous supervision of the structure of the committee and its subsidiary bodies, if any;
- e) reception and prompt dispatch of correspondence and documents;
- f) adequate communication facilities by telephone, telefax and electronic mail;
- g) access to the Internet;
- h) arrangements and facilities for translation, interpretation and services during meetings, in collaboration with the host National Body, as required;
- i) attendance of the secretary at any meetings requiring his/her presence, including technical committee and/or subcommittee meetings, editing committee meetings, working group meetings, and consultations with the chair when necessary;
- j) access by the secretary to basic International Standards (see the ISO/IEC Directives, Part 2, on "Reference Documents and sources for drafting") and to International Standards, national standards and/or related documents in the field under consideration;

- k) access by the secretary, when necessary, to experts capable of advising on technical issues in the field of the committee.

Whilst the Chief Executive Officer endeavours to send his/her representative to the first meeting of a technical committee, to meetings of technical committees with new secretariats, and to any technical committee or subcommittee meeting where such presence is desirable for solving problems, the office of the CEO cannot undertake to carry out the work for a secretariat, on a permanent or temporary basis.

D.3 Requirements of a secretary

The individual appointed as secretary shall

- a) have sufficient knowledge of English and/or French;
- b) be familiar with the *Statutes and rules of procedure*, as appropriate, and with the ISO/IEC Directives (see the respective Supplements to the ISO/IEC Directives);
- c) be in a position to advise the committee and any subsidiary bodies on any point of procedure or drafting, after consultation with the office of the CEO if necessary;
- d) be aware of any council board or technical management board decision regarding the activities of the technical committees in general and of the committee for which s/he is responsible in particular;
- e) be a good organizer and have training in and ability for technical and administrative work, in order to organize and conduct the work of the committee and to promote active participation on the part of committee members and subsidiary bodies, if any;
- f) be familiar with the documentation supplied by the offices of CEO, in particular the use of electronic tools and services.

It is recommended that newly appointed secretaries of technical committees should make an early visit to the office of the CEO in Geneva in order to discuss procedures and working methods with the staff concerned.

D.4 Requirements of an assistant secretary

The individual(s) appointed as assistant secretary shall

- a) have a defined role in supporting the secretary and this role shall be defined by the secretariat;
- b) possess the knowledge and skills necessary for this defined role, ideally equal to those identified in D.3, but may be a subset of these requirements depending upon the role assigned;
- c) have the equivalent authority as the secretary in the performance of the duties associated with the defined role;
- d) be appointed taking into consideration increasing the gender and geographic diversity of the management team.

Annex E (normative)

General policy on the use of languages

E.1 Expressing and communicating ideas in an international environment

At the international level, it is common practice to publish deliverables in at least two languages. There are a number of reasons why it is advantageous to use two languages, for example:

- greater clarity and accuracy of meaning can be achieved by expressing a given concept in two languages which have different grammar and syntax;
- if consensus is reached on the basis of a text drafted in only one language, difficulties may arise when it comes to putting that text into another language. Some questions may have to be rediscussed, and this can cause delay if the text originally agreed upon has to be altered. Subsequent drafting into a second language of a text already approved in the first language often brings to light difficulties of expression that could have been avoided if both versions had been prepared at the same time and then amended together;
- to ensure that international meetings will be as productive as possible, it is important for the agreements reached to be utterly devoid of ambiguity, and there has to be no risk that these agreements can be called back into question because of misunderstandings of a linguistic nature;
- the use of two languages chosen from two linguistic groups widens the number of prospective delegates who might be appointed to attend the meetings;
- it becomes easier to express a concept properly in other languages if there are already two perfectly harmonized versions.

E.2 The use of languages in the technical work

The official languages are English, French and Russian.

The work of the technical committees and the correspondence are in English by default.

For the purposes of the above, the National Body for the Russian Federation provides all interpretation and translation into and from the Russian language.

In IEC, a definitive language of development for each deliverable shall be designated in the Foreword. Specific exceptions apply to the IEC and/or database standards.

E.3 International Standards

International Standards are published by the ISO and IEC in English and in French (and sometimes in multilingual editions also including Russian and other languages, especially in cases of terminology). These versions of a given International Standard are equivalent, and each is regarded as being an original-language version.

It is advantageous for the technical content of a standard to be expressed in both English and French from the outset of the drafting procedure, so that these two versions will be studied, amended and adopted at the same time and their linguistic equivalence will be ensured at all times. (See also the ISO/IEC Directives, Part 2, clause on "Language versions").

This may be done

- by the secretariat or, under the latter's responsibility, with outside assistance, or
- by the editing committee of the responsible technical committee or subcommittee, or

- by National Bodies whose national language is English or French and under an agreement concluded between those National Bodies and the secretariat concerned.

When it is decided to publish a multilingual International Standard (a vocabulary, for example), the National Body for the Russian Federation takes charge of the Russian portion of the text; similarly, when it is decided to publish an International Standard containing terms or material in languages other than the official languages, the National Bodies whose national languages are involved are responsible for selecting the terms or for drafting the portions of text which are to be in those languages.

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 Central Office 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 Central Office 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 Central Office 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.

E.4 Other publications developed by technical committees

Other publications may be issued in one official language only.

E.5 Documents for Committee meetings

E.5.1 Drafts and documents referred to the agenda

The documents prepared and circulated prior to a meeting are the following.

a) Draft agendas

Draft agendas are prepared and distributed in the language(s) of the meeting (English by default) by the responsible secretariats.

b) Committee drafts referred to in the agenda

It is desirable that versions of the committee drafts referred to in the agenda will be available for the meeting in the language(s) of the meeting (English by default).

Enquiry drafts shall be available in English and French. The ISO Council or IEC Standardization Management Board guidelines shall be applied where one of the language versions is not available in due time.

Other documents (sundry proposals, comments, etc.) relating to agenda items may be prepared in only one language (English or French).

E.5.2 Documents prepared and circulated during a meeting

The documents prepared and circulated during a meeting are the following.

a) Resolutions adopted during the meeting

An ad hoc drafting committee may be formed at the beginning of each meeting to support the secretary in the drafting and/or reviewing of resolutions. Whenever possible, it should include one or more delegates of English and/or French mother tongue.

b) Brief minutes, if any, prepared after each session

If such minutes are prepared, they shall be drafted in English or French and preferably in both with, if necessary, the assistance of the ad hoc drafting committee.

E.5.3 Documents prepared and circulated after a meeting

After each technical committee or subcommittee meeting, the secretariat concerned shall draft a report of the meeting, which may be in only one language (English or French) and which includes, as annex, the full text of the resolutions adopted, preferably in both English and French.

E.6 Documents prepared in languages other than English or French

National bodies whose national language is neither English nor French may translate any documents circulated by secretariats into their own national language in order to facilitate the study of those documents by the experts of their country or to assist the delegates they have appointed to attend the meetings of the Committees.

If one language is common to two or more National Bodies, one of them may at any time take the initiative of translating technical documents into that language and of providing copies to other National Bodies in the same linguistic group.

The terms of the above two paragraphs may be applied by the secretariats for their own needs.

E.7 Technical meetings

E.7.1 Purpose

The purpose of technical meetings is to achieve as full agreement as possible on the various agenda items and every effort shall be made to ensure that all delegates understand one another.

E.7.2 Interpretation of debates into English and French

Although the basic documents may be available in both English and French, it has to be determined according to the case whether interpretation of statements expressed in one language should be given in the other language

- by a volunteer delegate,
- by a staff member from the secretariat or host National Body, or
- by an adequately qualified interpreter.

Care should also be taken that delegates who have neither English nor French as mother tongue can follow the meeting to a sufficient extent.

It is impractical to specify rules concerning the necessity of interpreting the debates at technical meetings. It is essential, of course that all delegates should be able to follow the discussions, but it may not be altogether essential to have a word-for-word interpretation of each statement made.

In view of the foregoing, and except in special cases where interpretation may not be necessary, the following practice is considered appropriate:

- a) for meetings where procedural decisions are expected to be taken, brief interpretation may be provided by a member of the secretariat or a volunteer delegate;
- b) at working group meetings, the members should, whenever possible, arrange between themselves for any necessary interpretation on the initiative and under the authority of the convenor of the working group.

To enable the secretariat responsible for a meeting to make any necessary arrangements for interpretation, the secretariat should be informed, at the same time as it is notified of attendance at the meeting, of the languages in which the delegates are able to express themselves and of any aid which delegates might be able to provide in the matter of interpretation.

In those cases where a meeting is conducted mainly in one language, the following practice should be adopted as far as is practicable in order to assist delegates having the other language:

- a) the decision taken on one subject should be announced in both languages before passing to the next subject;
- b) whenever a change to an existing text is approved in one language, time should be allowed for delegates to consider the effect of this change on the other language version;
- c) a summary of what has been said should be provided in the other language if a delegate so requests.

E.7.3 Interpretation into English and French of statements made in other languages

When at a meeting of a technical committee or a subcommittee a participant wishes, in view of exceptional circumstances, to speak in any language other than English or French, the chair of the session shall be entitled to authorize this, for the session in question, provided that a means of interpretation has been secured.

In order to give all experts an equal opportunity to express their views at meetings of Committees, a very flexible application of this provision is recommended.

Annex F (normative)

Options for development of a project

F.1 Simplified diagram of options

Project stage	Normal procedure	Draft submitted with proposal	"Fast-track procedure" ^a	Technical Specification ^b	Technical Report ^c	Publicly Available Specification ^d
Proposal stage (see 2.3)	Acceptance of proposal	Acceptance of proposal	Acceptance of proposal ^a	Acceptance of proposal		Acceptance of Proposal ^g
Preparatory stage (see 2.4)	Preparation of working draft	<i>Study by working group^e</i>		Preparation of draft		Preparation of draft
Committee stage (see 2.5)	Development and acceptance of committee draft	<i>Development and acceptance of committee^e</i>		Acceptance of draft	Acceptance of draft	Acceptance of draft
Enquiry stage (see 2.6 and in IEC, IEC Supplement E.3.1)	Development and acceptance of enquiry draft	Development and acceptance of enquiry draft				
Approval stage (see 2.7)	<i>Approval of FDIS^f</i>	<i>Approval^f</i>	<i>Approval^f</i>			
Publication stage (see 2.8)	Publication of International Standard	Publication of International Standard	Publication of International Standard	Publication of Technical Specification	Publication of Technical Report	Publication of PAS

Stages in *italics*, enclosed by dotted circles may be omitted.

^a See F.2.

^b See 3.1.

^c See 3.3.

^d See 3.2.

^e According to the result of the vote on the new work item proposal, both the preparatory stage and the committee stage may be omitted.

^f May be omitted if approval criteria of 2.6.3 are met and no technical changes are to be included

^g See ISO and IEC Supplements for details on proposals for PAS.

F.2 "Fast-track procedure"

F.2.1 Proposals to apply the fast-track procedure may be made as follows.

F.2.1.1 The Committee Secretariat, any P-member or category A liaison organization of a concerned technical committee or subcommittee may propose that an **existing standard from any source** be submitted for vote as an enquiry draft. The proposer shall obtain the agreement of the originating organization before making a proposal. The criteria for proposing an existing standard for the fast-track procedure are a matter for each proposer to decide.

F.2.1.2 An international standardizing body recognized by the ISO or IEC council board may propose that a **standard developed by that body** be submitted for vote as a final draft International Standard.

F.2.1.3 An organization having entered into a formal technical agreement with ISO or IEC may propose, in agreement with the appropriate technical committee or subcommittee, that a **draft standard developed by that organization** be submitted for vote as an enquiry draft within that technical committee or subcommittee.

F.2.2 The proposal shall be received by the Chief Executive Officer, who shall take the following actions:

- a) settle the copyright and/or trademark situation with the organization having originated the proposed document, so that it can be freely copied and distributed to National Bodies without restriction, and advise the organization that the ISO/IEC intellectual property policies shall apply to the proposed document, see in particular 2.13 and 2.14;
- b) for cases F.2.1.1 and F.2.1.3, assess in consultation with the relevant secretariats which technical committee/subcommittee is competent for the subject covered by the proposed document. In cases where a relevant committee is identified, the proposal, with rationale for using the Fast-Track route, shall be circulated for awareness to the committee prior to the enquiry vote. Where no technical committee exists competent to deal with the subject of the document in question, the Chief Executive Officer shall refer the proposal to the technical management board, which may request the Chief Executive Officer to submit the document to the enquiry stage and to establish an ad hoc group to deal with matters subsequently arising;
- c) ascertain that there is no evident contradiction with other International Standards;
- d) distribute the proposed document as an enquiry draft (F.2.1.1 and F.2.1.3) in accordance with 2.6.1, or as a final draft International Standard (case F.2.1.2) in accordance with 2.7.1, indicating (in cases F.2.1.1 and F.2.1.3) the technical committee/subcommittee to the domain of which the proposed document belongs.

F.2.3 The period for voting and the conditions for approval shall be as specified in 2.6 for an enquiry draft and 2.7 for a final draft International Standard. In the case where no technical committee is involved, the condition for approval of a final draft International Standard is that not more than one-quarter of the total number of votes cast are negative.

F.2.4 If, for an enquiry draft, the conditions of approval are met, the draft standard shall progress in accordance with 2.6.4. If not, the proposal has failed and any further action shall be decided upon by the technical committee/subcommittee to which the document was attributed in accordance with F.2.2 b).

If, for a final draft International Standard, the conditions of approval are met, the document shall progress to the publication stage (2.8). If not, the proposal has failed and any further action shall be decided upon by the technical committee/subcommittee to which the FDIS was attributed in accordance with F.2.2 b), or by discussion between the originating organization and the office of the CEO if no technical committee was involved.

If the standard is published, its maintenance shall be handled by the technical committee/subcommittee to which the document was attributed in accordance with F.2.2 b), or, if no technical committee was involved, the approval procedure set out above shall be repeated if the originating organization decides that changes to the standard are required.

Annex G (normative)

Maintenance agencies

G.1 A technical committee or subcommittee developing an International Standard that will require a maintenance agency shall inform the Chief Executive Officer at an early stage in order that an ISO/TMB or IEC Council Board decision may be taken in advance of the publication of the International Standard.

G.2 The ISO/TMB or IEC Council Board designates maintenance agencies in connection with International Standards, including appointment of their members, on the proposal of the technical committee concerned.

G.3 The secretariat of a maintenance agency should be attributed wherever possible to the secretariat of the technical committee or subcommittee that has prepared the International Standard.

G.4 The Chief Executive Officer shall be responsible for contacts with external organizations associated with the work of a maintenance agency.

G.5 The rules of procedure of maintenance agencies shall be subject to ISO/TMB or IEC Council Board approval and any requested delegation of authority in connection with the updating of the International Standard or the issuing of amendments shall be specifically authorized by the ISO/TMB or IEC Council Board.

G.6 Any charges for services provided by a maintenance agency shall be authorized by the council board.

Annex H **(normative)**

Registration Authority (“RA”) Policy

H.1 Scope

H.1.1 A number of International Standards developed by ISO and IEC technical committees require the assignment of unique Registration Elements and describe the methodology for the assignment of these Elements. The Registration Elements themselves are not part of the standard but are assigned by an appointed RA, who also maintains an accurate register of the Registration Elements that have been assigned. The RA is a competent body with the requisite infrastructure that ensures the effective allocation of these Registration Elements and any other RA responsibilities that are described in the RA Standard. These bodies are designated by ISO or IEC to serve as the sole RA for particular standards, which creates a de facto monopoly situation.

H.1.2 A technical committee or subcommittee developing an International Standard that will require a registration authority shall inform the Chief Executive Officer at an early stage, in order to permit any necessary negotiations and to allow the technical management board to take a decision in advance of the publication of the International Standard.

H.1.3 The technical management board designates registration authorities in connection with International Standards on the proposal of the technical committee concerned.

H.1.4 Registration authorities should be qualified and internationally acceptable bodies; if there is no such organization available, such tasks may be conferred upon the office of the CEO by decision of the technical management board.

H.1.5 Registration authorities should be required to indicate clearly in their operations that they have been designated by ISO or IEC (for example, by including appropriate wording in the letterhead of the designated body).

H.1.6 Registration functions undertaken by the registration authority under the provisions of the relevant International Standard shall require no financial contribution from ISO or IEC or their members. This would not preclude, however, the charging for services provided by the registration authority if duly authorized by the council board.

H.2 Compliance

Where the office of the CEO becomes aware of an RA Standard under development or under revision that has not followed this Policy, it shall stop the publication process to allow time to implement this Policy before the RA Standard is published. For this reason, committees are encouraged to make the ISO Technical Program Manager (TPM) or the IEC Technical Officer aware of a project requiring an RA as early in the development process as possible to avoid delays in publication.

H.3 Definitions

H.3.1 RA Standard: A standard for which an RA is providing the Registration Services.

H.3.2 Registration Services or RA Services: Services provided by the RA in the implementation of the RA Standard and which shall be described in the RA Standard.

H.3.3 Registration Authority (“RA”): Entity appointed by ISO or IEC to fulfil the Registration Services in an RA Standard.

H.3.4 Registration Agencies: Third parties (e.g. national or regional sub-entities) to which the RA may delegate some aspects of the Registration Services. Even when delegated to Registration Agencies, the Registration Services remain under the overall responsibility of the RA.

H.3.5 Registration Authority Agreement (“RAA”): Agreement based on the RAA template signed by the RA and the ISO Secretary-General on behalf of ISO or the IEC General Secretary on behalf of IEC, which details the functions, roles and legal obligations of the parties involved.

H.3.6 Registration Elements: Unique identifiers or identifier code components, the methodology for which is described in the RA Standard but which themselves are not part of the RA Standard.

H.3.7 Technical Programme Manager (TPM): Individual within ISO/CS assigned to work with a given committee.

H.3.8 Technical Officer (TO): Individual within IEC/CO assigned to work with a given committee.

H.4 Procedure

H.4.1 Chronology

This Policy addresses the various aspects of an RA in the order of the life cycle of a typical RA noting that some stages may be done in parallel. Each stage is addressed as follows:

- Declaring the need for an RA (H.4.2)
- Drafting an RA Standard (H.4.3)
- Selecting an RA (H.4.4)
- Appointing an RA (H.4.5)
- Signing an RAA (H.4.6)
- Implementing an RA Standard (H.4.7)
 - Role of the RA (H.4.7.1)
 - Role of the committee (H.4.7.2)
 - Role of the office of the CEO (H.4.7.3)
- Terminating an RA (H.4.8)

H.4.2 Declaring the need for an RA

A committee shall determine that an RA is required for a standard as soon as the draft is sufficiently mature to make this decision, whether this is during the creation of a new standard or the revision of an existing standard involving material changes to its implementation. The committee confirms its decision that a standard needs an RA for its implementation by way of a resolution.

The committee secretariat completes the RA Confirmation (“RAC”) Form and submits it to the TPM or TO as soon as the resolution is approved.

H.4.3 Drafting an RA Standard

The following shall be included in all RA Standards:

- A description of the identification scheme or the mechanism for generating unique Registration Elements.
- A description of the Registration Services, and the responsibilities of the RA.
- The link to the page on iso.org or iec.ch where ISO and IEC publish the name and contact information of the RA for a given RA Standard. The page on iso.org or iec.ch shall provide a link to the RA's website which will contain more information on the Registration Services available.

The following **shall not be** included in RA Standards:

- In accordance with clause 4 of the ISO/IEC Directives, Part 2, contractual or other legal aspects.
- Procedures concerning the provision of the Registration Services (e.g. a Handbook made available by the RA).
- The name of the RA. Instead, a link to the ISO or IEC website shall be provided (see above).
- References to the selection or reappointment process for the RA.
- Details about any Registration Agencies. In case of delegation of Registration Services by the RA to third parties (e.g. Registration Agencies) as agreed under the RAA, the RA Standard may mention the fact that some aspects of the Registration Services have been delegated.

The TPM or TO is responsible for coordinating with the committee to ensure that the appropriate text is included in the RA Standard. Any questions about what should be included in the RA Standard are to be addressed to the TPM or TO.

H.4.4 Selecting an RA

The selection process of the RA applies to new RA Standards and existing RA Standards.

In the case of revisions, the committee shall review and decide whether the existing RA should continue or if a selection process should be launched to select additional RA candidates. In their review, the committee shall consider the changes being made to the RA Standard, particularly with regard to the responsibilities of the RA, and the goal of optimizing the implementation of the RA Standards. The decision to launch a selection process should be supported by a rationale. The committee shall confirm its decision by resolution.

The committee shall establish a process so that an RA can be appointed or re-appointed before publication of the RA Standard. It is important that each draft of the RA Standard contains details about the nature of the Registration Services needed and that these are shared with any current or prospective RA candidates.

The committee establishes the criteria for the application process and selection of the RA and confirms these by resolution. The minimum criteria for the selection process shall be:

- **Selection criteria** – these must be clearly explained and with sufficient details for possible RA candidates to assess their ability to meet the criteria and apply on this basis. Included in the selection criteria shall be the requirement that the prospective RA candidates provide the following information in writing:
 - Proof (e.g. Statutes) that it is a legal entity which means that is an organization formed under the laws of a jurisdiction and that it is therefore subject to governance related rules.
 - Expression of willingness to take responsibility for the Registration Services.
 - Confirmation that the RA is technically and financially able to carry out the RA Services described in the RA Standard and the RAA on an international level, including for

example, a financial plan for funding the expected volume of registrations, a list of employees or third parties and their applicable background and skills, and description of the physical facilities available to the RA to accomplish the work, demonstrated financial capacity to meet liability exposure for performing the services.

- Documentation and examples, where relevant, of the candidate RA's experience in the respective community of practice.
 - Confirmation of whether it intends to delegate part of the Registration Services to Registration Agencies.
 - Confirmation of whether it will charge fees for the RA Services and, if it charges fees, confirmation that any such fees will be on a cost recovery basis.
 - Expression of willingness to sign and execute an RAA, the ISO/IEC RAA template for which shall be shared with RA candidates.
- **Public call for RA candidates** – committees shall take the appropriate steps needed to post the call for competent RA applicants to as broad a market as possible, also targeting possible organizations by inviting them to apply. The relative weighting of each evaluation criterion shall be published in the public call. Details of the Registration Services shall be made available to any current RA and any prospective RA candidates.
 - **Evaluation** – Prospective RA candidates shall provide their responses in writing. The committee (or a subset thereof) shall determine the relative weight to be given to each selection criterion and shall evaluate the prospective RA candidates accordingly.
 - **Record-keeping** – the committee secretariat shall keep records of all documents in the selection process, including the call for candidates, applications, evaluation, decision, etc.
 - **Professionalism** – the selection process should be conducted in a professional manner, adhering to the principle of discretion amongst those involved.

The committee shall then confirm to the TMB its recommendation for appointment of the organization selected to be the RA via a resolution.

H.4.5 Appointing an RA

The information that is provided by the committee in the RAC (see H.4.2 above) is needed to launch the TMB ballot appointing the RA, as well as the ISO or IEC Council ballot if the RA intends to charge fees. RA may charge fees for the Registration Services if authorized by the ISO or IEC Council, and as long as the basis of charging fees is strictly on a cost recovery basis. In the case of revisions, approval from the TMB or ISO or IEC Council is not needed if the committee decides that the same RA should continue (see H.4.4) and the required authorization to charge fees has already been given.

In the case of JTC 1 RA Standards, a copy of the RAC Form shall be provided to both IEC and ISO since RA appointments must all be confirmed by the IEC/SMB and ISO/TMB (and Council Boards) where fees are charged.

H.4.6 Signing an RAA

A signed RAA must have been executed using the latest RAA template before an RA Standard is published (including revisions). In the case of revisions, the process to sign the RAA should begin at the time of the launch of the review process or the committee decision to launch a revision to ensure the timely signature of the RAA and to avoid delays in publication.

Only after the TMB (and Council if fees are charged) has appointed the RA (and in the case of JTC 1 RA Standards, involving the IEC) can the RAA be signed. Signing an RAA based on the ISO/IEC template is mandatory for all RAs. The RAA shall be signed before publication of a new or revised RA Standard. If an RAA is not signed, the new or revised RA Standard shall not be published.

To ensure consistency and equality of treatment between the different RAs, any requested deviations from the RAA template which ISO or IEC considers to be significant in nature shall be submitted to the TMB for approval.

H.4.7 Implementing an RA Standard

H.4.7.1 Role of the RA

The RA provides the Registration Services by:

- providing the Registration Services described in the RA Standard, and
- respecting the provisions of the RAA.

H.4.7.2 Role of the committee

Although RAAs are signed by the RA and by the office of the CEO, the signature of a RAA by the office of the CEO binds all components in the ISO or IEC systems, including ISO or IEC members and ISO or IEC committees. The central role is played by committees. In addition to declaring the need for an RA Standard (H.4.2), drafting the RA Standard (H.4.3) and selecting an RA (H.4.4) for both new and revised RA Standards, the committee has the main responsibility for oversight of the RA as follows:

- **Answering questions:** The committee must be available to the RA to answer questions about the RA Standard and clarify any expectations regarding its role in implementing the RA Standard.
- **Assessing RA's annual reports:** The RAA requires the RA to provide the committee with annual reports by the date specified by the committee. The committee shall ensure that these annual reports are provided on time and read them.

The RA's annual report is to be divided in two parts:

The first part addresses the operational aspects of the RA as directly related to the RA Services. The committee, ISO or IEC may request information about the activities of the RA that are not related to the RA Services if there is reason to believe that these are interfering with the RA Services. At a minimum this first part of the RA report shall confirm:

- That the RA is fulfilling the RA Services described in the RA Standard.
- Compliance with the signed RAA by the Registration Agencies designated by the RA.
- That the RA is meeting user needs and providing users with guidance, as needed.

The second part of the RA report provides information about any complaints received from users of the RA Standard regarding, for example: fees, access to and use of data and/or information produced during the implementation of the RA Standard, as well as accuracy of the data and/or information. This part shall indicate whether any of the complaints remain outstanding at the time of the RA report and the efforts underway to resolve them.

- **Monitoring:** In addition to the annual RA report, the committee shall also analyse any feedback it receives from industry and users of the RA Standard. Based on all of these elements (RA report and other feedback), the committee shall report to the office of the CEO (see below).
- **Reporting to the office of the CEO:** At least once per year and based on the information collected under **Monitoring** above, the committee shall provide a report to the responsible TPM or TO using the Annual Committee Report ("ACR") Form. The purpose of such reports is to confirm that the RA operates in accordance with the RAA or to raise any concerns (concerns can include: RA not meeting industry or user needs, complaints about the quality of the Registration Services, etc.). Such reports shall be provided at least annually to the responsible TPM or TO or more frequently if the committee deems it necessary. The TPM or TO may also ask for ad hoc reports. If the report identifies concerns, it shall include the planned **Corrective measures** (see below) needed to address these concerns.
- **Dispute resolution:** The obligations of RAs to address complaints are contained in the RAA template. The role of the committee (and the office of the CEO) is limited to advising the RA of any complaints it receives about the RA Services and supporting the RA in its addressing

of the dispute. The committee shall not assume responsibility for the dispute or become the appellate body for disputes between the RA and users of the RA Standard as this may inadvertently give the impression that ISO or IEC is responsible for the Registration Services.

- **Corrective measures:**

- By the RA: the RA is responsible for implementing any corrective measures that are within its area of responsibility, which would include the Registration Services and the provisions described in the RAA.
- By the committee: the committee is responsible for recommending possible corrective measures such as: revising the RA Standard, providing advice and guidance to the RA, carrying out audits or recommending the termination of the RAA to the office of the CEO in severe cases.
- By the office of the CEO: the corrective measures that fall within the responsibility of the office of the CEO (e.g. updating or overseeing the RAA) will be coordinated by the TPM or the TO. The TPM or the TO may also recommend corrective measures.

- **Maintenance of records:** The committee shall maintain and archive all key communications and documentation (e.g. correspondence between the RA and the committee regarding complaints) until at least five years after either termination of the RAA or withdrawal of the RA Standard. The committee secretariat is responsible for ensuring that these are maintained in a separate folder on e-committees in ISO or on the collaboration platform in IEC.

The committee may create an advisory subgroup, with the appropriate terms of reference, [often referred to as a Registration Management Group ("RMG")] in order to help them with the above. Committees (either directly or through the RMG) shall not participate or get involved in providing the Registration Services except in the supervisory roles specified in this subclause.

H.4.7.3 Role of the office of the CEO

The committee's interface with the office of the CEO is through the responsible TPM or TO. The role of the TPM or the TO includes:

- Identification of RA Standards during the development process if not done by the committee.
- Providing guidance and advice for the drafting of RA Standards.
- Training committees on this RA Policy.
- Coordination with committees to ensure compliance with the RA Policies, quality of RA Services, appropriate handling of complaints, addressing industry and users' needs, including addressing the concerns raised in the annual reports provided by committees (using the ACR Form) and recommending and assisting in the implementation of any corrective measures (see H.4.7.2).
- Maintenance of records in relation to his or her involvement.

H.4.8 Termination of an RA

Termination of RAs could occur when 1) an RAA has expired and the RA or ISO or IEC has given the required notice of its intent not to renew it, or 2) the RAA is terminated for cause, or 3) the RAA was terminated by mutual consent, or 4) the RA Standard is withdrawn, or 5) the RAA goes into bankruptcy, liquidation or dissolution.

When an RA has been given notice of non-renewal or termination, the committee should exercise particular oversight to ensure that RA Services are maintained during the notice period and change-over phase.

Unless the RA Standard is withdrawn, the process detailed in H.4.4 above should be followed in the selection of a replacement RA unless the committee has identified an alternative RA candidate that meets the selection criteria in H.4.4 and going through the selection process for additional RA candidates would cause unacceptable disruption in the RA Services.

Annex I (normative)

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

The latest edition of the Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC are available on the ISO website through the following link (including the forms in Word or Excel formats):

www.iso.org/iso/home/standards_development/governance_of_technical_work/patents.htm

They are also available on the IEC website through the following link:

www.iec.ch/members_experts/tools/patents/patent_policy.htm

Annex J (normative)

Formulating scopes of Committees

J.1 Introduction

The scope of a technical committee or subcommittee is a statement precisely defining the limits of the work of that committee. As such it has a number of functions:

- it assists those with queries and proposals relating to a field of work to locate the appropriate committee;
- it prevents overlapping the work programmes of two or more ISO and/or IEC committees;
- it can also help guard against moving outside the field of activities authorized by the parent committee.

J.2 Formulation of scopes

Basic rules for the formulation of scopes of Committees are given in 1.5.10.

The order of the elements of a scope shall be:

- basic scope;
- in the ISO, horizontal functions, where applicable;
- in the IEC, horizontal and/or group safety functions where applicable;
- exclusions (if any);
- notes (if any).

J.3 Basic scope

Scopes of technical committees shall not refer to the general aims of international standardization or repeat the principles that govern the work of all technical committees.

In exceptional cases, explanatory material may be included if considered important to the understanding of the scope of the committee. Such material shall be in the form of "Notes".

J.4 Exclusions

Should it be necessary to specify that certain topics are outside the scope of the technical committee, these shall be listed and be introduced by the words "Excluded ..."

Exclusions shall be clearly specified.

Where the exclusions are within the scope of one or more other existing ISO or IEC technical committees, these committees shall also be identified.

EXAMPLE 1 "Excluded: Those ... covered by ISO/TC ...".

EXAMPLE 2 "Excluded: Standardization for specific items in the field of ... (ISO/TC ...), ... (IEC/TC ...), etc.".

It is *not* necessary to mention self-evident exclusions.

EXAMPLE 3 "Excluded: Products covered by other ISO or IEC technical committees".

EXAMPLE 4 "Excluded: ... Specifications for electrical equipment and apparatus, which fall within the scope of IEC committees".

J.5 Scopes of committees related to products

Scopes of committees related to products shall clearly *indicate the field, application area or market sector* which they intend to cover, in order to easily ascertain whether a particular product is, or is not, within that field, application area or market sector.

EXAMPLE 1 "Standardization of ... and ... used in ...".

EXAMPLE 2 "Standardization of materials, components and equipment for construction and operation of ... and ... as well as equipment used in the servicing and maintenance of ...".

The limits of the scope can be defined by *indicating the purpose* of the products, or by *characterizing* the products.

The scope *should not enumerate the types* of product covered by the committee since to do so might suggest that other types can be, or are, standardized by other committees. However, if this is the intention, then it is preferable to list those items which are excluded from the scope.

The *enumeration of aspects* such as terminology, technical requirements, methods of sampling, test methods, designation, marking, packaging, dimensions, etc. suggests a restriction in the scope to those particular aspects, and that other aspects may be standardized by other committees. The aspects of the products to be standardized should therefore not be included in the scope unless it is intended that the scope is limited to those particular aspects.

If the scope makes no mention of any aspect, this means that the subject *in its entirety* is covered by the committee.

NOTE The coverage does not necessarily mean the need for preparing a standard. It only means that standards on any aspect, if needed, will be prepared by that committee and no other.

An example of unnecessary enumeration of aspects is as follows:

EXAMPLE 3 "Standardization of classification, terminology, sampling, physical, chemical or other test methods, specifications, etc.".

Mention of priorities, whether referring to type of product or aspect, shall not appear in the scope since these will be indicated in the programme of work.

J.6 Scopes of committees not related to products

If the scope of a committee is intended to be limited to *certain aspects* which are unrelated, or only indirectly related to products, the scope shall only indicate the aspect to be covered (e.g. safety colours and signs, non-destructive testing, water quality).

The term *terminology* as a possible aspect of standardization should not be mentioned unless this aspect is the only task to be dealt with by the committee. If this is not the case, the mention of terminology is superfluous since this aspect is a logical part of any standardization activity.

Annex K (normative)

Project committees

K.1 Proposal stage

A new work item proposal not falling within the scope of an existing technical committee shall be presented using the appropriate form and fully justified (see 2.3.4) by one of the bodies authorized to make new work item proposals (see 2.3.2).

The office of the CEO may decide to return the proposal to the proposer for further development before circulation for voting. In this case, the proposer shall make the changes suggested or provide justification for not making the changes. If the proposer does not make the changes and requests that its proposal be circulated for voting as originally presented, the technical management board will decide on appropriate action. This could include blocking the proposal until the changes are made or accepting that it be balloted as received.

In all cases, the office of the CEO may also include comments and recommendations to the proposal form.

For details relating to justification of the proposal, see Annex C.

It shall be submitted to the secretariat of the technical management board which shall arrange for it to be submitted to all National Bodies for voting.

Proposers are also encouraged to indicate the date of the first meeting of the project committee (see K.3).

If the proposal was not submitted by a National Body, the submission to the National Bodies shall include a call for offers to assume the secretariat of a project committee.

Votes shall be returned within 12 weeks.

Acceptance requires:

- approval by a 2/3 majority of the National Bodies voting;
- a commitment to participate actively by at least five National Bodies that approved the new work item proposal and nominated technical experts.

K.2 Establishment of a project committee

The technical management board shall review the results of voting on the new work item proposal and if the approval criteria are met, shall establish a project committee (the reference number shall be the next available number in the technical committee/project committee sequence).

The secretariat of the project committee shall be allocated to the National Body that submitted the proposal, or the technical management board shall decide on the allocation amongst the offers received if the proposal did not originate from a National Body.

National bodies that approved the new work item proposal and nominated (a) technical expert(s) shall be registered as P-members of the project committee. National bodies that approved the new work item proposal but did not make a commitment to participate actively shall be registered as O-members. National bodies that voted negatively, but nevertheless indicated that they would participate actively if the new work item was approved, shall be registered as P-members. National bodies voting negatively without indicating a wish to participate shall be registered as O-members.

The office of the CEO shall announce to the National Bodies the establishment of the project committee and its membership.

National bodies will be invited to confirm/change their membership status by informing the office of the CEO.

The secretariat will contact any potential liaison organizations identified in the new work item proposal or in National Body comments thereon and will invite them to indicate whether they have an interest in the work and, if so, which category of liaison they would be interested in. Requests for liaison will be processed according to the existing procedures.

K.3 First meeting of a project committee

The procedure for calling a project committee meeting shall be carried out in accordance with Clause 4, with the exception that a six weeks' notice period may be used if the date of the first meeting was communicated at the time of submission of the proposal.

The chair of the project committee shall be the project leader nominated in the new work item proposal or shall be nominated by the secretariat if no project leader was nominated in the new work item proposal.

The first meeting shall confirm the scope of the new work item. In case revision is necessary (for purposes of clarification but not extension of the scope), the revised scope shall be submitted to the technical management board for approval. It shall also confirm the project plan and in ISO the development track and decide on any substructures needed to carry out the work.

If it is determined that the project needs to be subdivided to produce two or more publications, this is possible provided that the subdivisions of the work lie fully within the scope of the original new work item proposal. If not, a new work item will need to be prepared for consideration by the technical management board.

NOTE Project committees are exempted from the requirement to establish a strategic business plan.

K.4 Preparatory stage

The preparatory stage shall be carried out in accordance with 2.4.

K.5 Committee, enquiry, approval and publication stages

The committee, enquiry, approval and publication stages shall be carried out in accordance with 2.5 to 2.8.

K.6 Disbanding of a project committee

Once the standard(s) is/are published, the project committee shall be disbanded.

K.7 Maintenance of standard(s) prepared by a project committee

The National Body which held the secretariat shall assume responsibility for the maintenance of the standard(s) according to the procedures given in 2.9 unless the project committee has been transformed into a technical committee (see 1.10) in which case the technical committee shall be given the responsibility for the maintenance of the standard.

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

L.1 Obligations of National Bodies

National Bodies are responsible for ensuring that candidates for leadership positions (i.e. chairs, convenors, and secretaries) meet the requirements contained in L.3. National Bodies are also responsible for ensuring that any gaps in skills or knowledge of the selected leaders, as well as experts, are identified and filled through ongoing training.

L.2 Resources available to fill gaps in skills or knowledge

A number of resources are available to help National Bodies fill any identified gaps in skills or knowledge:

- Training and other materials are available from the office of the CEO to ensure the effectiveness of the various roles in conducting/attending meetings, including understanding key concepts.
- To help train experts, it may be useful to schedule committee pre-sessions and information on existing resources before or in conjunction with committee plenaries.
- The support of the Technical Programme Manager or Technical Officer, particularly in the case of new committees, is available to train leaders and experts. In the case of new committees, the Technical Programme Manager or Technical Officer should attend the first meeting to provide an overall introduction of ISO or IEC and its processes.
- In ISO Exchange programmes could also be organized between National Bodies or with the office of the CEO. National Bodies may also wish to consider twinning.
- The services of an external facilitator for coaching and training could be considered as one of the options to assist the committee leadership to develop specific skills, such as the skills needed to run effective meetings, general leadership skills, etc.

L.3 Selection criteria for people leading the technical work

L.3.1 Chairs and convenors

L.3.1.1 Competencies and attributes of good chairs and convenors:

- existing role and good reputation in the sector
- relevant professional experience with previous experience of chairmanship
- lead and inspire delegates and experts from the sector towards consensus
- understand the international nature of standardization work and its resulting benefits
- commit time and resources to their role
- develop solutions through innovative and creative thinking in a consensus environment
- act proactively and communicate diplomatically
- foster and value cooperation with other ISO and IEC Committees and partners including those from regulatory bodies
- act in a purely international capacity

L.3.1.2 Job specification for chairs and convenors:

- lead meetings effectively with a view to reaching agreement and to ensure that positions and decisions are clearly understood

- ensure that all positions and views (at meetings and by correspondence) are given equal treatment
- manage projects according to agreed target dates in accordance with the project plan from preparation to completion
- work to ensure that a full range of technical competence is available to the group
- be fully knowledgeable of the subject and market needs
- propose decisions to progress or to stop work on the basis of its market or global relevance
- have basic knowledge of ISO or IEC and its procedures

L.3.1.3 Additionally – chairs of committees are required to:

- take responsibility for the overall management of the committee, including any subcommittees and working groups
- advise the TMB on important matters relating to the Committee
- ensure that the policy and strategic decisions of the TMB are implemented by the Committee
- think strategically to promote ISO's and IEC's work in the sector

L.3.1.4 Additionally – convenors of working groups are required to:

- have appropriate knowledge and capabilities in using MS Word based drafting tools and the ISO or IEC web-based applications, including the required use of ISO or IEC applications for communications and document sharing, in order to support the working group's work

L.3.1.5 Supporting information

The following information should be considered by the National Bodies in the nominations for chairs and convenors:

- current role in the sector
- education
- professional career
- leadership experience
- similar activities
- language skills

L.3.2 Secretaries and secretariats

L.3.2.1 Selection of secretaries and secretariats

The success of a Committee or working group is dependent on its secretariat and secretary (or convenor of a WG in case there is no secretary). The following list is based on the ISO/IEC Directives and shows the tasks expected to be performed in these roles. National Bodies should use this list when appointing organizations and professionals as secretariats and secretaries.

L.3.2.2 Good documents

Preparing drafts for the committee or working group, arranging for their distribution and the treatment of the comments received. In the case of committee secretaries, preparing of drafts, text and figures for circulation by the office of the CEO for enquiry and final draft International Standards or for publication. Fulfilling the office of the CEO submission requirements of such documents when sending them.

L.3.2.3 Excellent project management

Assisting in the establishment of priorities and target dates for each project. Notifying the names of all working group convenors and project leaders to the office of the CEO. Initiating ballots.

Proposing proactive solutions for projects that are running significantly overtime, and/or which appear to lack sufficient support.

L.3.2.4 Well prepared meetings

Establishing the agenda and arranging for its distribution as well as the distribution of all documents on the agenda, including reports of working groups, and indicating all other documents which are necessary for discussion during the meeting. Recording the decisions taken in a meeting and making these decisions available in writing for confirmation in the meeting. Preparing the minutes of meetings to be circulated within 4 weeks after the meeting.

L.3.2.5 Good advice on ISO and IEC processes

Providing advice to the chair, project leaders, and convenors on the ISO/IEC Directives and in particular the procedures associated with the progression of projects. Contacting any subcommittees and working group regarding their activities.

L.3.2.6 Connecting and networking

Working in close liaison with the chair of the committee or convenor of the working group. Maintaining close contact with the office of the CEO and with the members of the committee or working group regarding its activities. Maintaining close contact with the secretary of any parent committee.

L.3.2.7 Proactive follow up of actions

Ensuring that all actions agreed at meetings or by correspondence are completed on time and in a transparent manner.

L.3.2.8 Good with IT

Have appropriate knowledge and capabilities in using MS Word based drafting tools and the ISO or IEC web-based applications, including the required use of ISO or IEC applications for communications and document sharing, in order to support the committee's work.

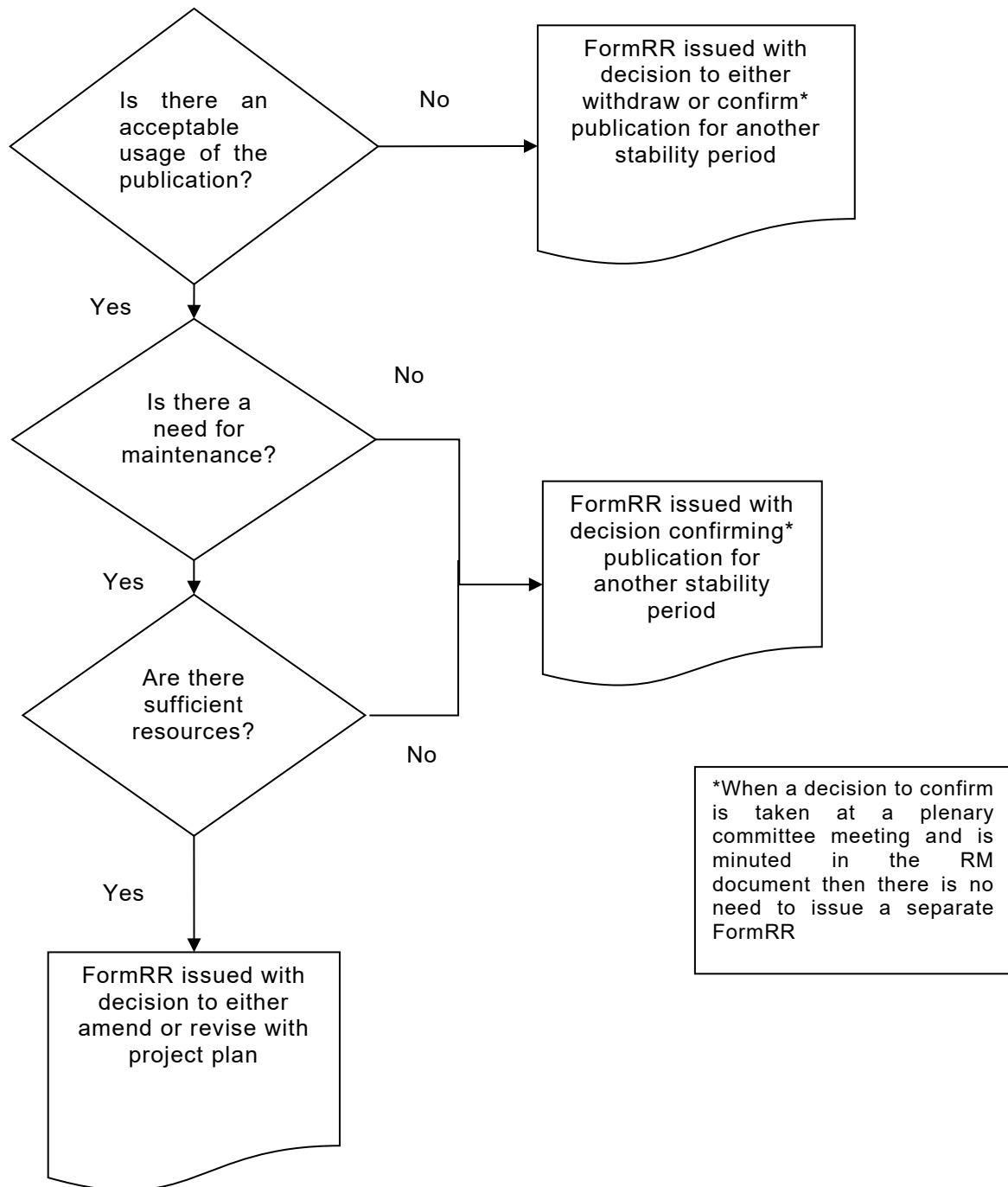
L.3.2.9 Supporting information

The following information should be considered by the National Body when appointing secretaries:

- education
- professional career
- experience in standardization work
- participation in training programmes on standardization
- experience with ISO's or IEC's IT tools and IT infrastructure
- language skills

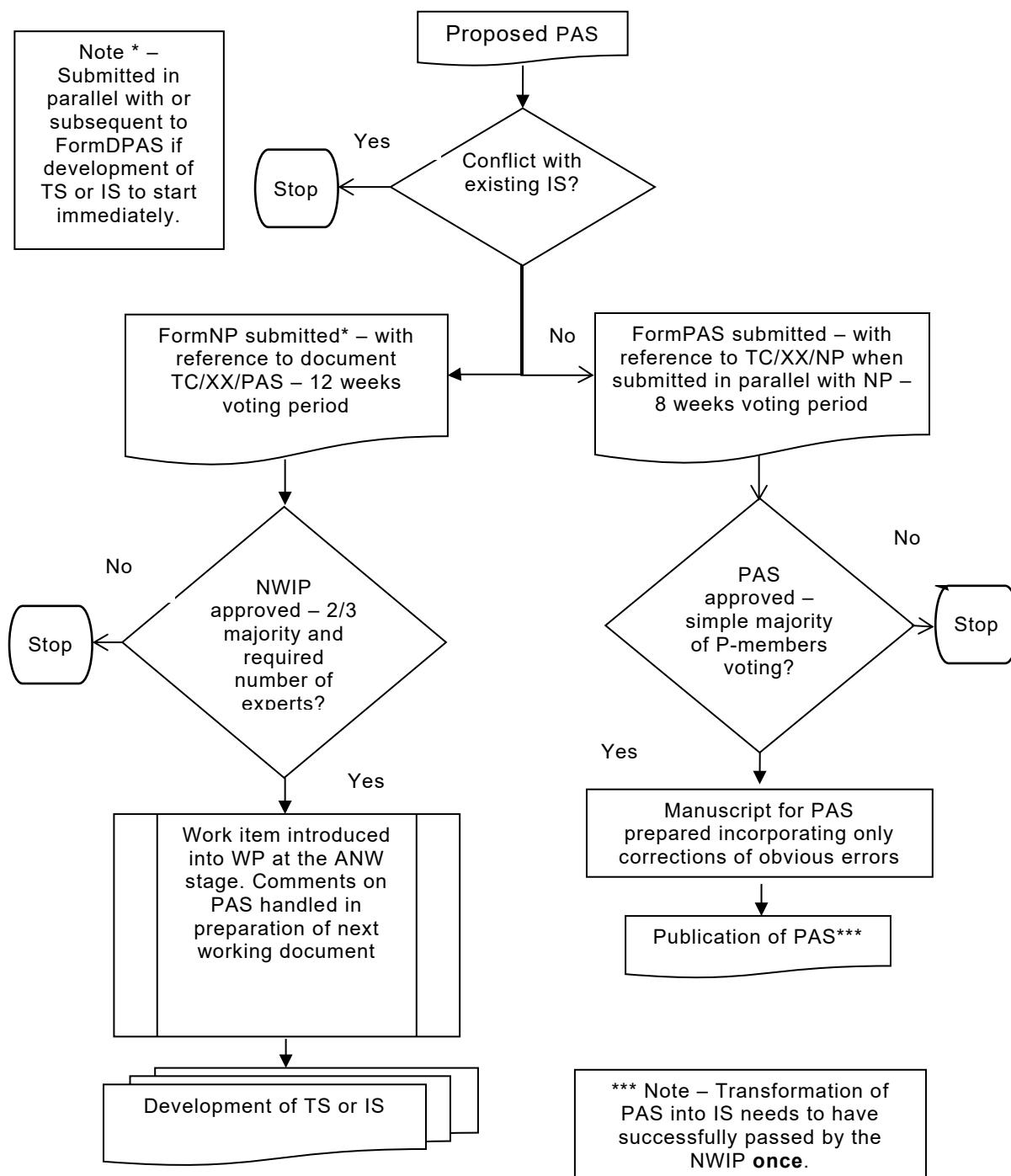
Annex SA (normative)

Review process – flow chart



Annex SB (normative)

PAS procedures – flow chart



SB.1 Procedure

SB.1.1 The basic principles of a PAS is prior to being entered into the WP for the purposes of the development of a TS or IS;

- there is a separation of the NWIP and PAS approval procedures;
- after approval of a PAS, there is only the correction of obvious errors prior to publication.

The new workflow to be used for the publication of a PAS coupled with the immediate start of the development of a TS or IS is given in the previous page.

In the above case, there will be the simultaneous circulation of:

- the FormNP with a voting period of 12-weeks. Under the section entitled “Preparatory work” there should be reference to the draft circulated with the FormDPAS. Comments on this draft should be made using the normal NP voting and commenting procedures. The normal NWIP approval criteria will be applied;
- the FormDPAS with a voting period of 8-weeks with the draft attached. Approval criterion for a PAS – simple majority of P-members voting approve.

Depending on the results of vote one of the following options will be selected:

NP	PAS	Action
Approved	Approved	<ul style="list-style-type: none"> • WI item entered into the WP. Comments on PAS draft used for the development of the next working document. • PAS published immediately* after approval with only corrections of obvious errors.
Approved	Rejected	<ul style="list-style-type: none"> • WI item entered into WP. Comments on PAS draft used for the development of the next working document.
Rejected	Approved	<ul style="list-style-type: none"> • PAS published immediately after approval with only correction of obvious errors. • If there is a need to transform the PAS into a TS or IS, then it must successfully pass the NWIP procedures.
Rejected	Rejected	<ul style="list-style-type: none"> • None

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 technical committee or subcommittee, 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 technical committee or subcommittee, 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 Central Office, 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:

- 1) *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;
- 2) *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 technical committees or subcommittees 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, technical committees or subcommittees 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 technical committees or subcommittees, to produce a separate standard containing additional conformity assessment requirements, against the following criteria:

- 1) 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.
- 2) 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).
- 3) A market need for such a standard shall be identified and there shall be no existing standard that includes the relevant requirements.
- 4) The technical committee or subcommittee 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 Central Office.

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

Technical committees and subcommittees 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

DOCUMENTS	PARTY(IES) CONCERNED									
	Proposal initiator	TC or SC secretariat	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)		★				■				
		○	●	○	○	★ ¹⁾				○
Comments		○	★	☆	☆	●				
Compilation of comments + proposal		★				●				○
		○	●	○	○	★ ¹⁾				○
Reaction to proposal		○	☆			●				
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					1) For a SC, a copy is also sent to Chair and secretariat of the TC for information					
● Recipient for action					○ Recipient for information					
■ Recipient for registration action					☆ Optional action					

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	Standard- ization Management Board	President, Vice- President and Council 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

STAGE	SUB-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:

- 1) a number, indicating the technical committee or subcommittee for which the document is primarily intended;
- 2) the serial number of the document with respect to the committee;
- 3) a mnemonic indicating the type of document³.

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 Central Office at the time of circulation of the document, based on the register of all documents kept by the Central Office

SI.2 Allocation of project number

When a new project is registered by the Central Office (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.

³ 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 Technical Committee area. The system gives the possibility to create and upload new documents and classify them in folders by Technical Committee and Subcommittee. 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 technical committee or subcommittee.

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 technical committee (or subcommittee, etc.), 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)

Forms relating to standards development

FORM NTC	Proposal for a new field of technical activity
FORM VTC	Vote on proposal for a new field of technical activity
FORM NSC	Decision to establish a subcommittee
FORM NP	New work item proposal
FORM RVN	Result of voting on new work item proposal
FORM CD	Cover page of committee draft
FORM CC	Compilation of comments on committee draft
FORM Comments	Annex for compilation of comments
FORM CDV	Cover page of committee draft for vote
FORM RVC	Result of voting on CDV, DTS or DTR
FORM FDIS	Cover page of final draft International Standard (FDIS)
FORM RVD	Report of voting on FDIS
FORM DTS	Cover page of draft Technical Specification
FORM DPAS	Cover page of draft Publicly Available Specification (PAS)
FORM RVDPAS	Report of voting on a draft PAS
FORM DTR	Cover page of draft Technical Report
FORM RR	Review report
FORM RSMB	Report to the Standardization Management Board
FORM SBP	Strategic Business Plan

All forms are available on the IEC web site at

www.iec.ch/standardsdev/resources/docpreparation/forms_templates.

Annex SK
(normative)**Rules for terminology work****SK.1 Scope**

Annex SK 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 SK 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.

SK.2 Drafting and presentation of the International Electrotechnical Vocabulary**SK.2.1 Introduction**

Clause SK.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.

SK.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.

SK.2.3 Content and structure of the IEV

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

Table SK.3 – 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 SK.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, <i>Electromagnetism</i> , 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 SK.3.1):

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

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

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

- the definition of the concept (see SK.3.1.4);
- optionally non-verbal representations, examples and notes to the definition (see SK.3.1.5 to SK.3.1.7);
- optionally the source (see SK.3.1.8);

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

The rule "one concept–one definition" shall be applied⁴.

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 SK.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 SK.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 SK.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).

⁴ IEC TC 1 is gradually applying this rule to the legacy content in the Electropedia.

SK.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**.

SK.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 SK.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

SK.3 Drafting and presentation of terminological entries

SK.3.1 Elements of the terminological entries

SK.3.1.1 IEV number

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

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

SK.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 SK.2.4).

EXAMPLE 1

<p>112-02-05</p> <p>m</p> <p>metre meter, US</p> <p>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</p> <p>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).</p> <p>[SOURCE: CGPM]</p> <p>mètre, m</p> <p>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</p> <p>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).</p> <p>[SOURCE: CGPM]</p>
--

EXAMPLE 2

<p>131-12-28</p> <p>R_m R</p> <p>reluctance</p> <p>for a reluctant element, quotient of the magnetic tension \mathcal{V}_m by the magnetic flux Φ</p> $R_m = \frac{\mathcal{V}_m}{\Phi}$ <p>Note 1 to entry: The reluctance is the reciprocal of the permeance.</p> <p>Note 2 to entry: The coherent SI unit of reluctance is henry to the power minus one, H^{-1}.</p> <p>réluctance, f</p> <p>pour un élément réluctant, quotient de la tension magnétique \mathcal{V}_m par le flux magnétique Φ</p> $R_m = \frac{\mathcal{V}_m}{\Phi}$ <p>Note 1 à l'article: La réluctance est l'inverse de la perméance.</p> <p>Note 2 à l'article: L'unité SI cohérente de réluctance est le henry à la puissance moins un, H^{-1}.</p>

SK.3.1.3 Terms

SK.3.1.3.1 General

As mentioned in SK.2.3, each concept is designated in each language by a preferred term (called the "entry term"), and possibly synonyms (see SK.3.1.3.4) and abbreviated forms (see SK.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 SK.3.1.3.5.6);
- grammatical information (see SK.3.1.3.6.2);
- national variant (see SK.3.1.3.4.2 and SK.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)].

SK.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.

SK.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

<p>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.</p> <p>.....</p> <p>DÉCONSEILLÉ: intensité, f</p> <p>carré de la norme du champ électrique d'une onde électromagnétique en un point</p> <p>Note 1 à l'article: Cette grandeur est proportionnelle à l'éclairement énergétique ou à la puissance surfacique.</p> <p>⋮</p> <p>ar المجال شدة</p> <p>de</p> <p>ABGELEHNT: Intensität, f</p> <p>⋮</p>	
--	--

SK.3.1.3.4 Synonyms

SK.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 SK.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 SK.2.3).

Meanwhile, bearing in mind the aim of the IEV (see SK.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 SK.3.1.3.5.1). One synonym may be rated as preferred; all others shall be rated as admitted or deprecated (see SK.3.1.3.4.4).

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

SK.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 SK.3.1.3.6.3).

EXAMPLE

earthing inductor grounding inductor, US

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

SK.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 SK.3.1.3.5.7).

SK.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 SK.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 SK.3.1.7).

SK.3.1.3.5 Presentation of terms and synonyms

SK.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 SK.3.3.2 and SK.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

SK.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).

SK.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	surfactive , adj
	density of density , <for flux or current> areic , <for flux or current> adj	densité de ... , f surfactive , <flux ou courant>adj
	over... relay	relais à maximum de ... , m

SK.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 SK.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

SK.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

$\Delta f = \text{div grad } f$

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.

SK.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 SK.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 transducer>

transfer curve, <of a transducer>

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>

SK.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

SK.3.1.3.5.8 Deprecated synonyms

Deprecated synonyms (see SK.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.

SK.3.1.3.6 Attributes to the terms

SK.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 SK.5.

SK.3.1.3.6.2 Grammatical information

The gender (m, f, m/f or n) shall be indicated if applicable for the language (see SK.5). The number (sg or pl) and word class⁵ (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).

⁵ The IECV 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

SK.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 SK.3.1.3.4.2 and SK.5.

SK.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>

SK.3.1.4 Definitions

SK.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

SK.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 SK.3.1.3.6.2). In the case

where a term is an adjective and a noun (see SK.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

v

velocity

vector quantity $v = dr / dt$, where *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 SK.3.1.5).

EXAMPLE 2

131-12-29

A

perméance, f

pour un élément réactant, quotient du flux magnétique Φ par la tension magnétique V_m

$$A = \frac{\Phi}{V_m}$$

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

SK.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 SK.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 <i>conductivity</i> (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 <i>conductivity</i> of an electrolyte
Term defined in another document:	tie stick <i>hand stick</i> (IEC 60743:2001, 2.5.2) used to bind or unbind a conductor to or from an insulator

SK.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.

SK.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.

SK.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.

SK.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

<p>395-01-02 u unified atomic mass unit $1\text{ u} = 1,660\ 54 \times 10^{-27}\text{ kg}$</p>

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

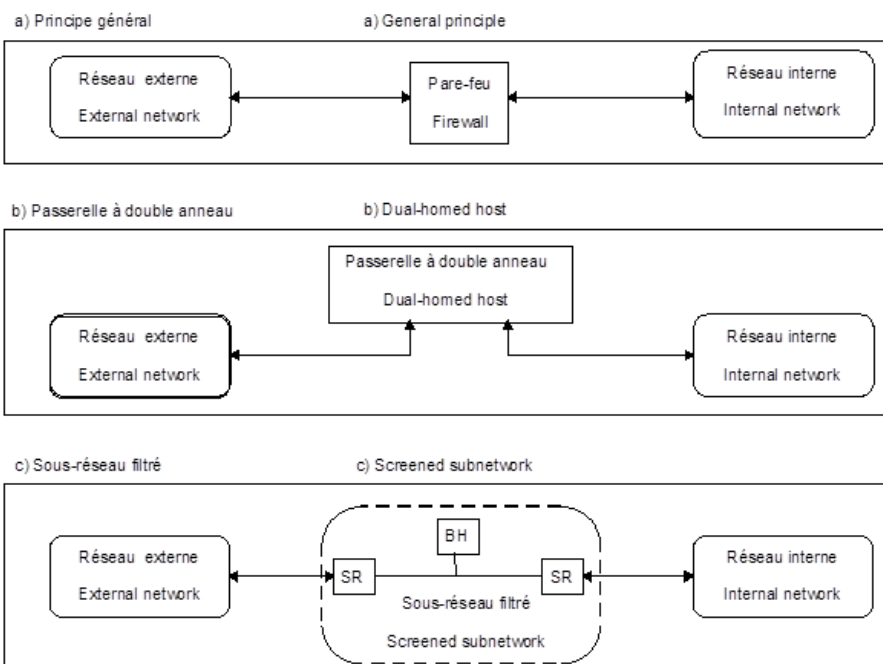
SEE: Figure 1.

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:

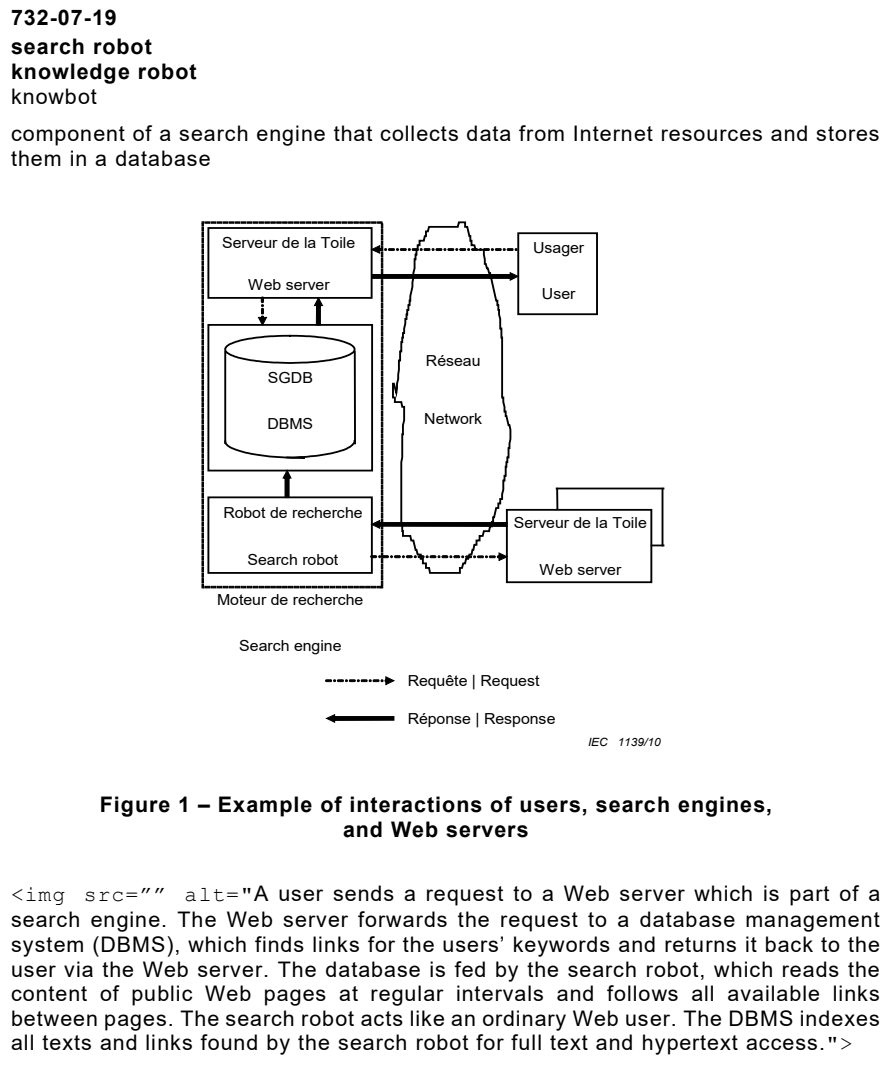


IEC 1137/10

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



SK.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]

SK.3.1.7 Notes to entry**SK.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 SK.3.1.3.5.5 and example 1 in SK.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 SK.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

$$R_m = \frac{V_m}{\Phi}$$

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 SK.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 SK.3.1.4.3 and SK.3.1.4.5 are also applicable to the terms used in notes to entry.

SK.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 SK.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.

SK.3.1.8 Sources

Where the same concept is used in more than one subject field, follow the rules in SK.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 SK.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 SK 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]

SK.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.

SK.3.3 Structure and layout of IEV documents

SK.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.

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

As mentioned in SK.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 SK.3.3.1.

The arrangement of these elements within each “block” is given in Figure SK.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 SK.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 SK.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 SK.1 – Arrangements of the elements within a block (all elements shown)

SK.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.

SK.4 Procedures for the preparation of the IEV parts

SK.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.

SK.4.2 Database procedure

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

SK.4.3 Development of projects (New work)

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

SK.4.3.1 Proposal (NP) stage

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

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.

SK.4.3.2 Preparatory stage

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

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”⁶ in the source field (see SK.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 SK.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 Central Office, 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 SK.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.

SK.4.3.3 Committee (CD) stage

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

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;
 - a Central Office Technical Officer.

⁶ 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.

- b) 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 SK.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).

- c) 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 Central Office by the secretary of IEC/TC 1, with the request that the draft be distributed as an enquiry draft (CDV) (see SK.4.3.4).
- d) 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).

SK.4.3.4 Enquiry (CDV) stage

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

SK.4.3.5 Approval (FDIS) stage

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

In order to expedite the publication process, and unless the secretariat of IEC/TC 1 informs IEC Central Office that the FDIS is likely to be rejected (in which case the Central Office shall wait until the end of the voting period), at the same time as the FDIS is distributed, the IEC Central Office 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 Central Office:

	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 Central Office.

SK.4.3.6 Publication stage

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

The task of the translations into Russian and additional IEV languages is dealt with in SK.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 Central Office, is then ensured in parallel:

- by the IEC Central Office;
- 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 Central Office without consultation of the National Committee concerned (this is valid in particular for possible corrigenda).

SK.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.

SK.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.

SK.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 SK.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 Central Office to circulate a formal enquiry to the National Committees.

SK.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).

SK.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 SK.4.3, SK.4.4 or SK.4.5 are applicable.

SK.5 List of data categories and attributes

Data category	Applicability	Subclause	ISO 10241-1:2011	Examples	
				English	French
IEV number	Mandatory	SK.3.1.1	6.1	Standard: 3.1	IEV: 161-01-22
Letter symbols	If applicable	SK.3.1.2	6.3	R_m	m
Preferred terms, synonyms and abbreviated forms	In the order of preference	SK.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	SK.3.1.3.4.4, SK.3.1.3.5.8	6.2	DEPRECATED: pulse width modulation	DÉCONSEILLÉ: vecteur-colonne, m
Specific use of the term	If needed	SK.3.1.3.5.5	–	Laplacian , <of a scalar field>	rang , <d'un harmonique> m
National variant	If needed	SK.3.1.3.4.2, SK.3.1.3.6.3	6.2.3.5	grounding inductor , US	unité de traitement , f CA
Grammatical information: – gender – number – usage information – word class	Mandatory (if applicable for the language) If needed If needed Mandatory ^a	SK.3.1.3.6.2	6.2.3	 eddy currents, pl deci, <prefix> subset transient, noun transient, adj automate, verb	 diaphragme, m courants de Foucault, m pl déci, <préfixe> sous-ensemble, m transitoire, nom transitoire, adj automatiser, verbe
Non-verbal representation	If needed	SK.3.1.5	6.5	SEE: Figure 1	VOIR: Figure 1
Example	If needed	SK.3.1.6	6.6	EXAMPLE BALP, KID, FROP.	EXEMPLE BALP, KID, FROP.
Note to entry	If needed	SK.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	SK.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 SL (normative)

Procedures for the maintenance of the IEC standards in database format

SL.1 Introduction

This Annex of the IEC Supplement to the ISO/IEC Directives describes procedures for the maintenance of any international standard consisting of “collections of items” managed in a database. This may include graphical symbols of all kinds, sets of definitions, sets of dimensions, dictionaries of data element types with associated classification schema and other standards in which collections of objects require maintenance (addition or amendment) on a continual basis. Therefore, neither separate new work item proposals (NP) nor review reports (RR) are required.

Supplementary procedural information, requirements or criteria that apply to particular standards database(s) can be described in separate document(s) within the domain of the responsible technical committee or subcommittee. These supplementary documents should not be in conflict with the ISO/IEC directives.

SL.2 Procedures

SL.2.1 Overview

The procedures described in this document are based on the use of a web-accessible database and electronic communication. The prescribed throughput time for maintenance/validation can only be achieved by means of electronic communication.

The procedures are in three parts: firstly the preliminaries, followed by either the normal database procedure or the extended database procedure.

Figure SL.1 provides an overview of the procedures.

SL.2.2 Preliminaries

This is the initial part of the maintenance procedures that shall be completed for every Change Request (CR) and consists of the following stages.

Initiation of Change Request (CR)

Entering of a CR with the required information in a web-accessible database by an authorized person or body also referred to as “proposer”.

Preparation for evaluation

Preparation by the secretary of the committee to ensure that all mandatory entries of the CR are appropriately filled in and that any associated graphics is of a quality sufficient for evaluation, although it need not have final quality.

NOTE 1 More detailed rules applicable to a specific standard can be provided by the committee in charge of the standard.

If required, a Maintenance Team (MT) may be set up to assist the secretary in the preparation activities. When established, the MT has a one to one relation to a “database-based standard” (referred to in the procedure as “database standard”) and consists of members with expertise to assist the secretary in managing the maintenance of this database standard.

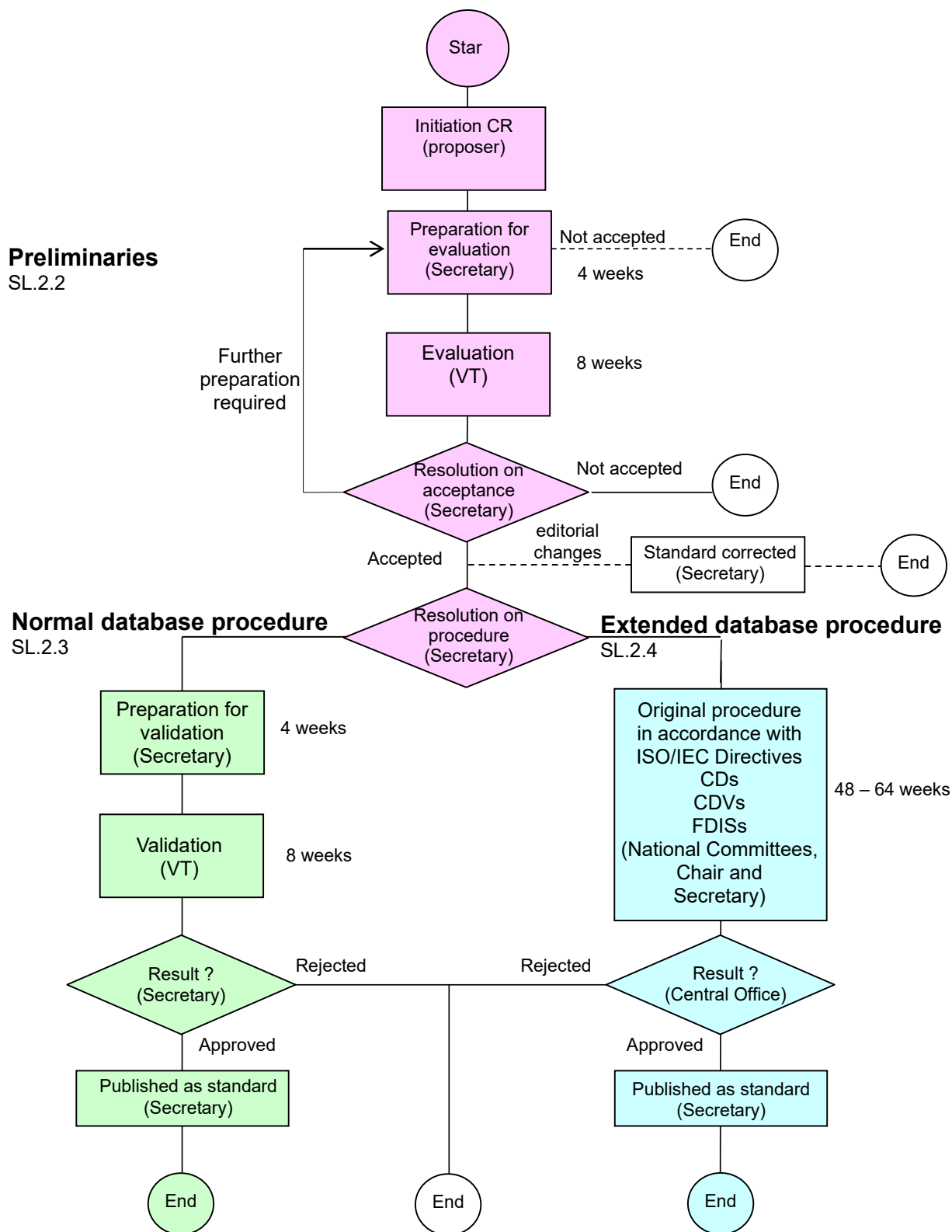


Figure SL.1 – Overview of the procedures

NOTE 2 The time required for preparation work should normally not exceed 4 weeks, but might exceptionally be longer if the original proposal is not mature enough. In such a case the preparation is comparable to “stage 0” work and the time has to be counted from final agreement with the proposer.

Evaluation of the CR

Action by the Validation Team (VT) to determine whether the CR is within the scope of the database and valid for further work or should be rejected.

When the quality of the information provided at the preparation stage is satisfactory, the status level of the CR is changed to *for evaluation* and the VT is informed (with copies to the proposer and possibly other relevant TCs) and asked by the secretary to make an evaluation and to comment.

The commenting is comparable to the commenting on a CD.

The evaluation of the CR should be completed within 8 weeks.

Resolution

Observation by the committee secretary on the comments and general opinions of the members of the VT followed by the conclusion whether the CR should be

- continued with the *normal database procedure*, or
- continued with the *extended database procedure*, or
- improved and *re-evaluated*, or
- *rejected* altogether.

NOTE 3 The entry of a new item in the database is not to be seen as “new work”, but rather as part of the continuous maintenance of the existing collection. Therefore, to arrive at a conclusion, a simple majority of the submitted votes can be used at the evaluation stage, applying the choice between continuation/rejection as well as between normal/extended procedure.

NOTE 4 If the original CR references many items, and if some of these might be acceptable for continuation with the normal database 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 status level already achieved.

SL.2.3 The normal database procedure

The normal database procedure is faster than the extended procedure as described in SL.2.4 and relies on the use of the Validation Team (VT) acting on behalf of the National Committees for the final voting on proposals.

The normal database procedure is typically applicable for changes to existing items and for new items within the boundaries of the existing domain of the database or in cases where there is an urgent need for standardization.

NOTE 1 More detailed rules applicable to a specific standard can be provided by the committee in charge of the standard.

Figure SL.2 shows a process map of this procedure.

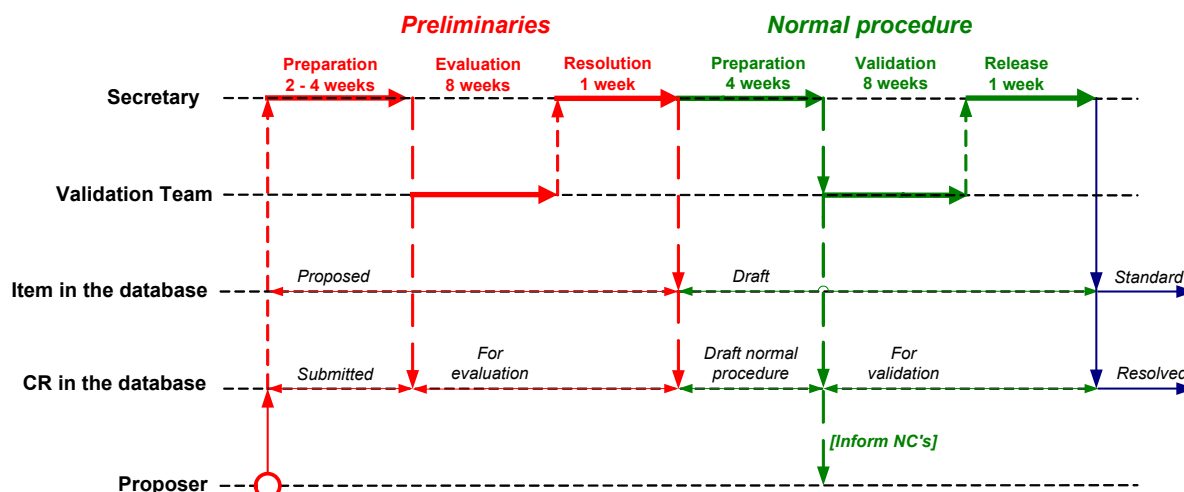


Figure SL.2 – Process map of the normal database procedure including preliminaries

Preparation for validation

The committee secretary revises the proposal in line with the comments received during the evaluation stage and checks that the item(s) associated with the CR are, after possible changes still sufficiently and properly described, within the scope of the database and consistent with items already existing in the database. If required, corrections are made. For this, the secretary might seek assistance from the Maintenance Team (MT) or from other internal or external experts. This preparation should be carried out within 4 weeks.

Validation

When the quality of the information is satisfactory, the status level of the Change Request (CR) is changed to *for validation*, and the Validation Team (VT) called to vote by the secretary, with copies to the proposer, the P-members of the committee and possibly other relevant TCs. Voting should be completed within 8 weeks.

If the proposed item(s) are accepted, the status level of the item(s) is changed to *standard*. If they are not accepted, then the reason(s) are noted in the remark and the status level of the item(s) is set to *rejected*.

The criteria applied are the same as those for the voting on a normal FDIS. Abstention from voting means that the vote is not counted.

NOTE 2 The rules for the obligation for P-members to vote are also the same as for a normal FDIS, which in consequence means that P-members have an obligation to appoint delegates to the Validation Team.

After setting the final status levels for the items and noting the reasons, the status level of the change request is set to *resolved*, and the procedure is finished (maximum 2 weeks).

With the normal database procedure it is possible for proposals to be approved within approximately 24 weeks.

Report to the technical committee/subcommittee

The committee secretary summarizes the set of items approved in accordance with the normal database procedure in a report to the committee plenary meeting. At the plenary meeting all items standardized since the previous plenary meeting are presented.

SL.2.4 Extended database procedure

The extended database procedure respects all stages of the procedure described in the ISO/IEC Directives for the approval of standards as printed documents, the *original procedure*. The procedure involves the National Committees in the traditional way in which the different project stages are introduced by formal documents/messages to the National Committees. However, as with the normal procedure, the information in the database is considered as the original source of information.

NOTE 1 Such a formal document consists of the appropriate document cover page with a title referring to the relevant Change Request. Although not necessary, it might be helpful during a changeover period, to attach printouts from the database to these documents. This includes the printout of the Change Request and of all relevant items.

It is expected that, in the majority of cases, the normal database procedure will be followed and that the extended database procedure will only be rarely required.

The extended procedure is described below including all stages and associated throughput times. It is possible that there could be comments against an item, so that the CD or CDV stage might need to be repeated (as described in the ISO/IEC Directives, Part 1).

Figure SL.3 shows a "process map" with the different roles indicated along the vertical axis. This diagram highlights the flow, and indicates clearly when the different roles have to be active.

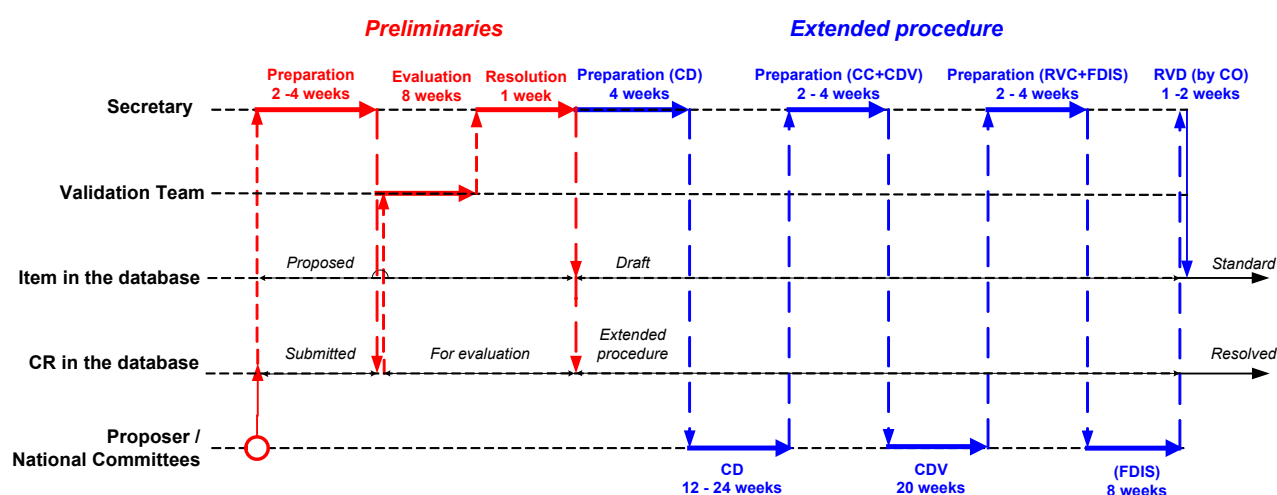


Figure SL.3 – Process map of the extended database procedure including preliminaries

A short description of each of the stages of the extended procedure is given below:

Preparation (CD)

In the Preparation (CD) stage, the committee secretary checks that the item(s) contained in the CR are sufficiently and properly described, and that comments received during the evaluation stage have been adequately reflected. Consequently, it should be checked that the item(s) are within the scope of the database and consistent with items already existing in the database. If required, corrections are made. The secretary might in this work seek assistance from the Maintenance Team (MT) or from other internal or external experts. The preparation (CD) stage should be carried out within 4 weeks.

CD

When the proposed item(s) are sufficiently well prepared, the secretary issues a formal CD document to the National Committees, informing them that the CR is available for commenting on the CD stage, within the normal time frame for CDs. Comments are to be submitted in the normal way (16, 12 or 8 weeks according to the ISO/IEC Directives, Part 1).

Preparation (CC + CDV)

The comments are compiled and made available as an ordinary compilation of comments (published on the web server). The item and its associated information are prepared for the CDV stage, taking note of the comments (maximum 4 weeks).

CDV

When sufficiently prepared, the secretary issues a formal CDV document to the National Committees that the item is available for commenting and voting for acceptance as an FDIS, within the normal time frame for a CDV (20 weeks according to the ISO/IEC Directives, Part 1).

Preparation (RVC + FDIS)

The comments are compiled and the votes counted and made available as an ordinary compilation of comments and result of voting on a CDV. The item and its associated information are prepared for the FDIS stage, taking note of possible purely editorial comments (maximum 4 weeks).

NOTE 2 If the CDV is unanimously approved, the contained items may be published directly after the preparation and circulation of the RVC, without circulation of an FDIS, in accordance with the original procedure.

FDIS

The secretary issues a formal FDIS document to the National Committees, that the item is available for voting for approval as an International Standard (IS), within the normal time frame for a FDIS (8 weeks according to the ISO/IEC Directives, Part 1).

NOTE 3 In accordance with the present IEC rules the FDIS stage might be omitted if the CDV is unanimously approved.

RVD

A voting report is prepared and published. If proposed item(s) are accepted, the status level of the item(s) is changed to *standard*. If they are not accepted, then the reason(s) are noted in the remark and the status level of the item(s) is set to *rejected*.

After completing setting the final status levels for the items and the reasons are noted, the status level of the change request is set to *resolved*, and the procedure is finished (maximum 2 weeks). With the extended database procedure it is possible for proposals to be approved within 60 weeks up to a maximum of 79 weeks.

SL.2.5 Editorial changes to an existing item

Proposed changes to an item that affect neither its use nor semantics (i.e. editorial changes) only require going through the Preliminaries (as described in SL.2.2). It is not required to continue with either the normal or the extended procedure. At the end of the preliminaries the change is either accepted or rejected without validation.

More specific criteria on which changes are classified as editorial changes can differ, dependent on standard, and are described in separate document(s) within the domain of the responsible committee.

After a positive resolution, the committee secretary will make the changes to the existing standard item. The status level of the Change Request is set to *resolved* and the work is finished.

If not accepted, then the reason(s) are noted in the remark, the status level of the Change Request is set to *resolved* and the work is finished.

SL.2.6 Regular maintenance of the entire standard

In addition to the continuous maintenance of the standard described above, a comprehensive review of the database contents carried out by the Maintenance Team at regular intervals may be necessary. For such reviews the concept as defined elsewhere in the ISO/IEC Directives is relevant.

The resulting proposal from such a work is to be entered formally into the database as one or many change requests and then each change request is dealt with according to the normal or extended database procedure as appropriate.

SL.2.7 Appeals

If, at any time after acceptance of an item as *standard*, a National Committee is dissatisfied with the result of the validation process on an item, it may bring forward a change request with a proposal for an amendment to the item which will re-open consideration of it under the procedures described above.

SL.3 Terms for general use

SL.3.1 original procedure

traditional standardization procedure for standard publications as described in the ISO/IEC Directives and IEC Supplement relying on the circulation of documents to the National Committees

SL.3.2 normal database procedure

standardization procedure making use of a *Validation Team* and a **workflow around a database** for information sharing (as specified in this document).

NOTE The normal database procedure is used for validation of new items and of item combinations that are within the boundary of existing rules.

SL.3.3 extended database procedure

standardization procedure with stages and time frames as specified in the *original procedure*, but implemented as a **workflow around a database** for information sharing (as specified in this document)

SL.3.4 Maintenance Team

group of experts that has the task in the *original procedure* at specified maintenance cycles to carry out revisions of existing international standards. In the *normal database procedure* and the *extended database procedure* the Maintenance Team can be called upon by the committee secretary to deliver support at specified maintenance cycles and for the purpose of preparatory work in connection with a (single) Change Request.

SL.3.5

Validation Team

permanent, “executive”, group of experts appointed by and acting as delegates on behalf of their National Committees to execute evaluation and validation of Change Requests and to vote for their release as part of a database standard

NOTE 1 All P-members have the right and duty to appoint an own member of the team. The Validation Team evaluates proposals and votes, in the *normal database procedure*, on *items* on behalf of their National Committees. The Validation Team reports to the technical committee or subcommittee.

NOTE 2 The described procedure asks for very short response times from the Validation Team members. Therefore, the National Committees should appoint one or more deputies that can take over the task when the ordinary one for any reason is absent (travel, business, etc.).

NOTE 3 It is up to the National Committee to decide for how long time a member should be appointed, and also to organize the possible supporting network of experts on National level.

NOTE 4 The secretariat manages the Validation Team.

SL.3.6

proposer

person (or body) authorized to submit a Change Request

NOTE 1 There can be many proposers.

NOTE 2 The required limited write access to the database is password protected, and authorization will only be granted to persons appointed by the National Committees. Proposers have to be personally authorized and should, in connection with this authorization, get the required information and training.

SL.3.7

database standard [database-based standard]

standard in database format for which the valid form of publication is a publicly accessible database, containing the standardized *items*

NOTE 1 The content of the database standard is normally possible to retrieve by using different search criteria.

NOTE 2 The management and documentation of the standardization process is normally also part of the database.

SL.3.8

item (of a database standard)

separately managed part of a database standard, documented in accordance with a structure common to the specific standard

NOTE Typical examples of items are: symbols (graphical or letter), terms, data element types, data sheets.

SL.4 Terms for status levels for Change Requests

SL.4.1

Submitted

status level of the Change Request from the moment of its registration and identification in the database, until the committee secretary has finished the preparation for evaluation stage

SL.4.2

For evaluation

status level of the Change Request in the evaluation stage until a resolution has been reached on how to proceed following the preliminaries

NOTE The transition to *For evaluation* is from *Submitted*.

SL.4.3

Draft normal procedure

status level of the Change Request in the preparation for the validation stage as part of the *normal database procedure* until the preparation is completed

SL.4.4

For validation

status level of the Change Request in the validation stage as part of the *normal database procedure* until the validation is completed

NOTE The transition to *For validation* is from *For evaluation*.

SL.4.5

Extended procedure

status level of the Change Request from the moment that the *extended database procedure* is followed until the completion of that procedure

NOTE The transition to *Extended procedure* is from *For evaluation*.

SL.4.6

Resolved

status level of the Change Request after completion of the *normal-* or *extended database procedure*, or after initial rejection

SL.4.7

For testing

status level of a Change Request used for testing purposes

NOTE A Change Request *For testing*, is normally deleted after intended use (leaving a “hole” in the identity number series).

SL.5 Terms for status levels for items (i.e. graphical symbols, DETs, etc.)

SL.5.1

Proposed

status level of a new *item* from its registration and identification in the database, until it has been accepted for work and a resolution has been reached on how to proceed following the preliminaries

SL.5.2

Draft

status level of a new *item* that has been accepted for work following the preliminaries with either the *normal-* or *extended database procedure*, until the moment a decision has been taken on whether or not it is to be part of the standard

NOTE The transition to *Draft* is from *Proposed*.

SL.5.3

Standard

status level of a new *item* that has been released for use as part of the standard

NOTE The transition to *Standard* is from *Draft*.

SL.5.4

Obsolete – reference only

status level of an *item* that is no longer part of the standard, irrespective of reason

NOTE The transition to *Obsolete – reference only* is from *Standard*. On the item page a note or a reference to a replacing item further indicates the reason for obsolescence.

SL.5.5

Rejected

status of an *item* that has been entered into the database as part of a Change Request, but has not been approved to be part of the standard

NOTE The transition to *Rejected* is either from *Proposed* or from *Draft*.

SL.5.6

For test purposes only

status of an *item* being tested

NOTE An item *For test purposes only*, is normally deleted after intended use (leaving a “gap” in the identity number series).

Annex SM (normative)

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

SM.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.

SM.2 Membership

SM.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](#).

SM.3 Chair and Vice-Chair

SM.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.

SM.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.

SM.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.

SM.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.

SM.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.

SM.4 Plenary Assembly

SM.4.1 Constitution

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

SM.4.2 Terms of reference

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

- 1) to elect (ratify) the Chair and Vice-Chair of the CISPR;
- 2) to allocate the Secretariat of the CISPR;
- 3) to appoint (ratify) Chairs of subcommittees;
- 4) to allocate Secretariats of subcommittees;
- 5) to approve changes in membership of the CISPR;
- 6) to modify, as necessary, the structure and organization of the CISPR;
- 7) to consider matters of policy and general interest referred to it by the Steering Committee;
- 8) to consider technical matters as requested by National Committees and Member Bodies, the Chair of the CISPR or Chairs of the subcommittees.

SM.4.3 Setting CISPR Policy

SM.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 Sub-Committees 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.

SM.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:

- 1) a two-thirds majority of the votes cast by CISPR P-members vote are in favour and 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, Sub-Committees should adopt the policy when developing new publications or amendments to existing publications.

If a CISPR Sub-Committee does not apply a policy which has been adopted at CISPR level, then the Secretary of the Sub-Committee 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.

SM.5 Steering Committee

SM.5.1 Constitution

The Steering Committee shall consist of the following:

- 1) the Chair of the CISPR (to be Chair of the Steering Committee);
- 2) the Vice-Chair of the CISPR;
- 3) the Chairs of all CISPR subcommittees;
- 4) the immediate past Chair of the CISPR;
- 5) the Chief Executive Officer of the IEC;
- 6) the Secretariat of the CISPR;
- 7) additional members as co-opted by the Chair of the CISPR;
- 8) 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;
- 9) a representative of each liaison body;
- 10) the conveners of those Working Groups which report directly to the Steering Committee (when required).

SM.6 Terms of reference

The responsibilities of the Steering Committee are as follows:

- 1) To approve the CISPR Strategic Business Plan.
- 2) To assist and advise the Chair of the CISPR in the conduct of the affairs of the CISPR.
- 3) To maintain contact with all work in progress in the CISPR.
- 4) To give guidance and assistance to those carrying out the work of the CISPR.
- 5) To consider progress reports from subcommittees, and from Working Groups which report directly to the Steering Committee.

- 6) To advise the Chair of the CISPR as to the arrangements to be made for meetings of the CISPR.
- 7) To refer new objects of study to a subcommittee when the terms of reference do not directly apply.
- 8) To set up Working Groups reporting to the Steering Committee.
- 9) To coordinate and direct the work between sub committees on common issues.

SM.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.

SM.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 SN
(normative)**Deviations of TC 100's procedures and
organizational structures from the ISO/IEC Directives****SN.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.

SN.2 Terms and definitions**SN.2.1****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

SN.2.2**Technical Area****TA**

area of related technologies for which standardization is needed

SN.2.3**Technical Area Manager****TAM**

individual managing the activities of a TA

SN.3 Structure and organization

SN.3.1 TC Structure

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

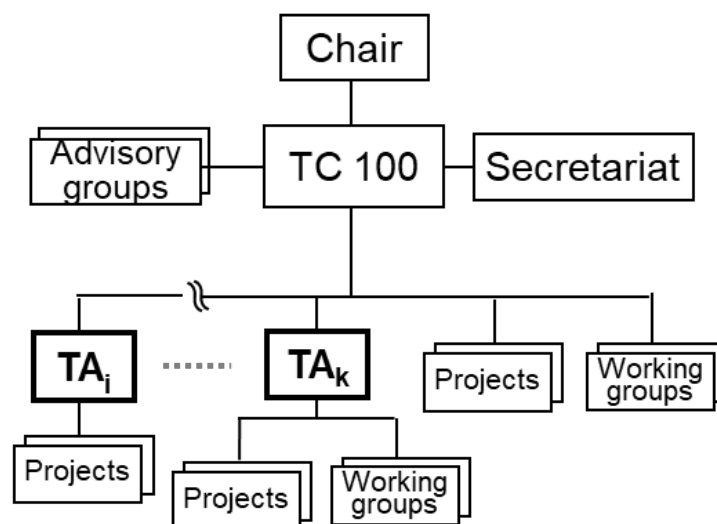


Figure SN.1 – Structure of TC 100

SN.3.2 Technical Area (TA)

SN.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.

SN.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.

SN.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.

SN.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.

SN.4 Functions and responsibilities

SN.4.1 Technical Secretary (TS)

SN.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.

SN.4.2 Technical Area Manager (TAM)

SN.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.

SN.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.

SN.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.

SN.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.

SN.5 Meetings

SN.5.1 TA meetings

SN.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.

SN.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.

SN.6 Reporting

SN.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.

SN.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 SO

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 SP
(normative)**Systems standardization****SP.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.

SP.1.1 Definitions**SP.1.1.1 Systems Reference Deliverable (SRD)**

See Clause SP.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.

SP.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.

SP.2 Establishment of Systems Committees

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

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

SP.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.

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

SP.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.

SP.2.6 The Standardization Management Board evaluates the replies and, either decides the establishment of a new Systems committee, provided that:

- 1) a 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, and allocates the secretariat to the Central Office,

or assigns the work to an existing technical or systems committee, subject to the same criteria of acceptance.

SP.2.7 SyCs shall have a labelling assignment distinctive from the TC numbering systems (e.g. SyC AAL, SyC Smart Energy, etc.).

SP.2.8 As soon as possible after the decision to establish a new SyC, the necessary Registered members (R-members) and liaisons shall be arranged.

SP.2.9 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).

SP.2.10 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.

SP.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 Systems Committee subcommittee shall be allocated to the Central Office.

SP.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 technical committee and subcommittee 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.

SP.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.

SP.4.2 Other types of participation

SP.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:

SP.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.

SP.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.

SP.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.

SP.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.

SP.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. See SP.5.2.1.4.

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.

SP.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.

SP.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.

SP.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.

SP.5 Chairs of Systems Committees

SP.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).

SP.5.2 Responsibilities

See ISO/IEC Directives Part 1, 1.8.2 applies for responsibilities except to substitute Technical Committee with Systems Committee.

SP.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.

SP.6 Secretariat of Systems Committees

SyCs and the CO have the ability to add assistant secretaries as the specific situations warrant.

SP.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 Central Office.

SP.7 SyC Deliverables

Systems Committees can publish Systems Reference Deliverables (SRD) and International Standards (IS).

SP.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, approval and maintenance processes for an SRD shall be as defined in ISO/IEC Directives Part 1, 3.1 except 3.1.3 which shall not apply.

In case that the SyC would like to transform an SRD to an IS, it is required to use the process outlined in SP.7.2.

SP.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 SP.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.

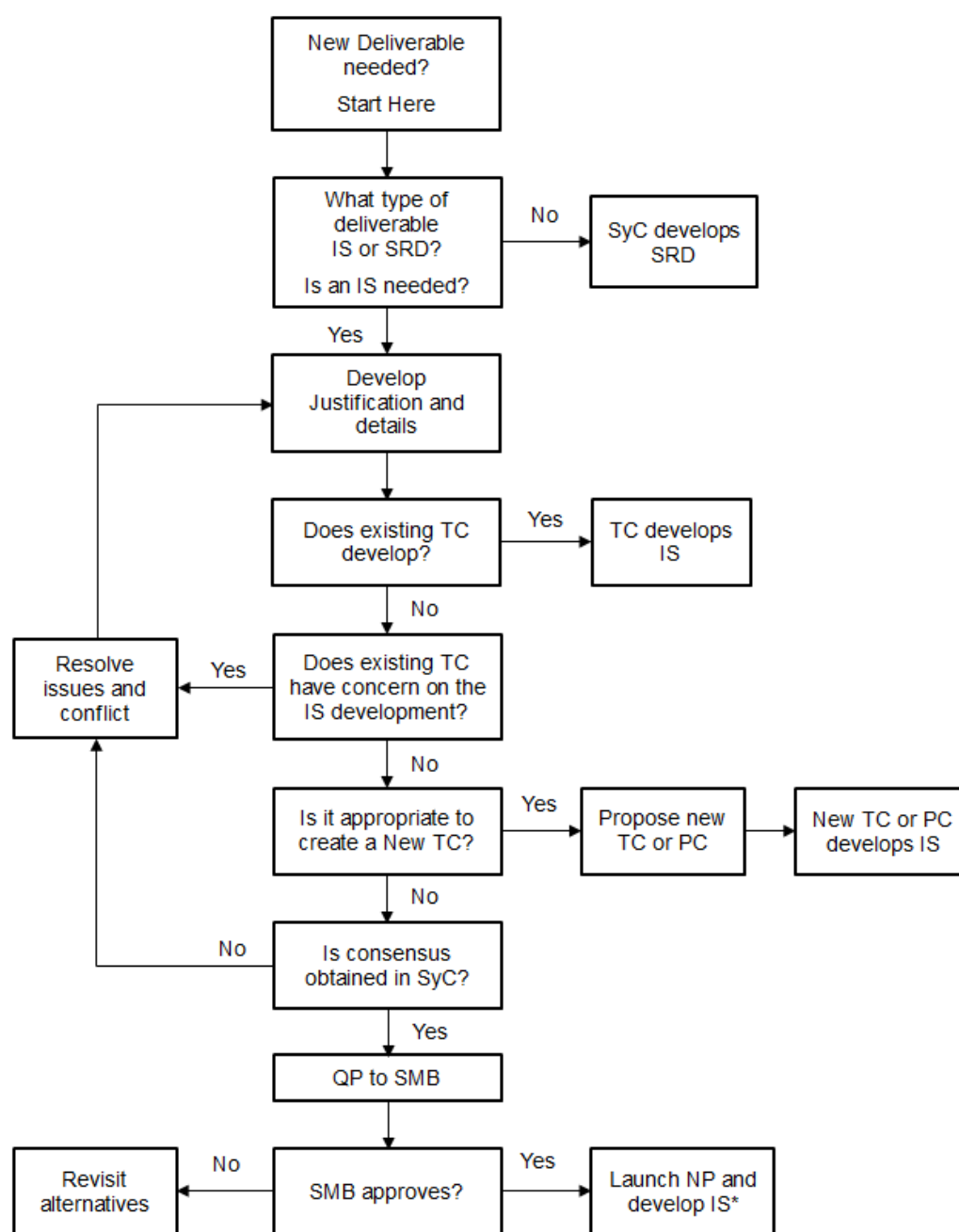
TC/SCs and SyCs shall work together to determine the best method to resolve such gaps in standardization. TC/SCs may be unable to address the standards gap identified by the SyC or may raise concerns that such work may overlap or duplicate existing work. In these cases, both the TC/SC and SyC have an 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.



* If not reach full consensus, may be published as an SRD

Process for initiating and IS in a SyC

Annex SQ
(normative)**Procedures for Questions of Principle from Technical Committees****SQ.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.

SQ.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.

SQ.3 Procedures for Questions of Principle**SQ.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.

SQ.3.2 Roles of the IEC Central Office

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 Central Office, 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

SQ.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.

SQ.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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