

ISO/IEC Directives, Part 1

Directives ISO/CEI, Partie 1

Procedures for the technical work

Procédures pour les travaux techniques

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Foreword

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

- Part 1: Procedures for the technical work
- Part 2: Rules for the structure and drafting of International Standards

Furthermore, ISO and IEC have published independent supplements to these parts, which include procedures that are not common to the two organizations. All forms related to the process of standards development are given in the respective Supplements to the ISO/IEC Directives.

This part sets out the procedures to be followed within the International Organization for Standardization (ISO) and the International Electrotechnical Commission (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 JTC 1 has procedures that differ in part from those applicable to other committees in ISO and IEC.

Both ISO and IEC provide additional guidance and tools to all those concerned with the preparation of technical documents on their respective websites (http://www.iso.org/tc and http://www.iec.ch).

This fifth edition incorporates changes agreed by the respective technical management boards since publication of the fourth edition in 2001. Procedures which been adopted in only one of the organizations are being published separately in the ISO Supplement or the IEC Supplement to the ISO/IEC Directives, respectively. The Supplements are to be used in conjunction with this document.

The principal changes with respect to the previous edition are:

- a) modification of the criteria for approval of subcommittees, to align with the criteria for technical committees (see 1.6.1);
- b) modification of the text on liaisons (see 1.17);
- c) inclusion of the maximum time allowed for the development of publications (see 2.1.6);
- d) addition of a procedure for the withdrawal of Guides (see A.7)

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) Modern technology and programme management

Within the framework of these procedures, the work may be accelerated and the task of experts and secretariats facilitated both by progressive introduction of new technologies and modern programme 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.

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 rediscussion, national

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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 counterproductive, 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.

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		
strategic plan	business plan (BP)	strategic policy statement (SPS)		
For other concepts, ISO/IEC Guide 2 refers.				

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

- JTAB Joint Technical Advisory Board
- JCG Joint Coordination Group
- JWG joint working group
- TC technical committee
- SC subcommittee
- WG working group
- PT project team
- **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 chairmen 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 Explanations of the terms new work item proposal, committee draft, enquiry draft and final draft International Standard are given in Clause 2.

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 chairmen 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).

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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 1.11) or a joint working group (see 1.11.5) 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).

1.3 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. 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

Joint technical committees may be established by a common decision of the ISO/TMB and IEC SMB, or by a decision of the JTAB.

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 authorization of the ISO/IEC Joint Technical Advisory Board (JTAB).

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 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 national body membership.

1.5.4 The proposal shall be made using the appropriate form (see the respective Supplements to the ISO/IEC Directives), 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.

The form shall be submitted to the office of the CEO.

For details relating to justification of the proposal, see C.4.

1.5.5 The Chief Executive Officer shall consult interested parties, including the Chairman of the technical management board, immediately after such a proposal is received. If necessary, an ad hoc group may be established to examine the proposal.

Any comments and recommendations by the Chief Executive Officer resulting from the consultations shall be added to the proposal form.

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, 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 3 months after circulation.

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, and
 - 2) at least 5 national bodies have 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).

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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. 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. Should it be necessary to specify that certain questions are outside the scope of the technical committee, these questions shall be listed at the end of the scope and be introduced by the word "Excluded: ...".

For recommendations on scopes, see the IEC Supplement to the ISO/IEC Directives, 2004, Clause 2 and Annex A, and ISO Supplement to the ISO/IEC Directives, 2001, Annex SB.

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

1.5.12 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.

1.6 Establishment of subcommittees

1.6.1 Subcommittees are established and dissolved by a 2/3 majority decision of the Pmembers 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 technical committees and subcommittees

1.7.1 All national bodies have the right to participate in the work of technical committees and subcommittees.

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 enquiry drafts and final draft International Standards, and to participate in 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 P- and O-members of the parent technical committee. O-members of a technical committee may be granted P-membership in a subcommittee without changing their 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; notification is required of the intended status of any interested member of the technical committee.

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 by informing the office of the CEO and the secretariat of the committee concerned.

1.7.4 A technical committee or subcommittee secretariat shall notify the Chief Executive Officer if a P-member of that technical committee or subcommittee

- has been persistently inactive and has failed to make a contribution to 2 consecutive meetings, either by direct participation or by correspondence,
- or has failed to vote on questions submitted for voting within the technical committee or subcommittee (such as new work item proposals).

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 technical committee or subcommittee. 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.

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, 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 twelve months, indicate to the Chief Executive Officer that it wishes to regain P-membership of the committee, in which case this shall be granted.

1.8 Chairmen of technical committees and subcommittees

1.8.1 Appointment

For the appointment of chairmen, see the IEC Supplement to the ISO/IEC Directives, 2004, Clause 3 and ISO Supplement to the ISO/IEC Directives, 2001, 1.8.

1.8.2 Responsibilities

The chairman of a technical committee is responsible for the overall management of that technical committee, including any subcommittees and working groups. He shall advise the technical management board on important matters relating to that technical committee via the technical committee secretariat. For this purpose he shall receive reports from the chairmen of any subcommittees via the subcommittee secretariats.

The chairman of a technical committee or subcommittee shall

- a) act in a purely international capacity, divesting him- or herself of a national point of view; thus he/she cannot serve concurrently as the delegate of a national body in his own committee;
- b) guide the secretary of that technical committee or subcommittee in carrying out his 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).

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

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).

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 council board and the technical management board are followed.

The secretariat shall ensure the timely execution of the following:

- a) preparation of committee drafts, arranging for their distribution (see IEC Supplement to the ISO/IEC Directives, 2004, Annex D and ISO Supplement to the ISO/IEC Directives, 2001, Annex SF) and the treatment of the comments received;
- b) preparation of meetings (see also Clause 4), including
 - establishment of the agenda and arranging for its distribution;
 - 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);
 - preparation of compilations of comments on documents which appear on the agenda;
- c) recording of decisions taken in a meeting and making these decisions available in writing for confirmation during the meeting (see E.5);
- d) preparation of the minutes of meetings;
- e) preparation of reports to the technical management board (TC secretariat), or to the parent committee (SC secretariat);
- f) preparation of enquiry drafts and final draft International Standards.

The secretariat of a technical committee or subcommittee is responsible for 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 1.10 and the respective Supplements to the ISO/IEC Directives.)

In all circumstances, each secretariat shall work in close liaison with the chairman of its technical committee or subcommittee.

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

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 and in ISO maintain a register of the membership of its working groups.

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.

1.10 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.

In IEC, a representative of the office of the CEO will attend editing committee meetings if required.

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 texts electronically and of providing the finalized texts in machine-readable form (see also 2.6.6).

1.11 Working groups

1.11.1 Technical committees or subcommittees may establish working groups for specific tasks (see 2.4). A working group shall report to its parent technical committee or subcommittee through a convenor appointed by the parent committee.

A working group comprises a restricted number of experts individually appointed by the Pmembers, A-liaisons of the parent committee and D-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- or D-liaison organization (see 1.17) by which they have been appointed. 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.

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

Once the decision to set up a working group has been taken, P-members and A- and D-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, the convenor or acting convenor shall immediately be appointed and shall arrange for the first meeting of the working group to be held within 3 months. This information shall be communicated immediately after the committee meeting to the P-members of the committee and A- and D-liaison organizations, with an invitation to appoint experts within 6 weeks.

1.11.2 The composition of a working group (names, addresses, phone and fax numbers and e-mail addresses) shall be made available by the committee secretary to the working group convenor prior to the first meeting of the working group. The names of the members may also be made available to the other members and the members of the parent committee.

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

1.11.4 Distribution of the internal documents of a working group and of its reports shall be carried out in accordance with procedures described in the IEC Supplement to the Directives, 2004, Annex D and the ISO Supplement to the Directives, 2001, Annex SF.

1.11.5 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. For administrative purposes the joint working group shall be placed under one of the parent committees, nominated by mutual agreement. A proposal to establish a joint ISO/IEC working group, including clear recommendations on which organization is responsible for final publication and subsequent maintenance of the publication, shall be submitted for approval to the technical management boards (see also B.4.2.4).

1.12 Project teams

In the IEC, during the process of approving a new work item (see 2.3), P-members approving the work item are required to appoint experts able to participate in the development of the project. In IEC, these experts form a project team (PT) operating under the responsibility of the project leader. Project teams shall be designated by the project number assigned to the project concerned. 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.

For other aspects relating to the work of project teams, see 1.11, working groups.

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 chairman 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, 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 nominated by national bodies. The parent committee shall approve the final constitution.

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 1.11) or a joint working group (see 1.11.5) 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.

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 rapporteur.

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

1.15 Liaison between technical committees

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.

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 an observer, or observers, 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 observers shall be notified to the secretariat of the committee concerned, which shall communicate all relevant documents to the observer or observers and to the secretariat of that technical committee or

subcommittee. The appointed observer shall make progress reports to the secretariat by which he has been appointed.

1.15.4 Such observers shall have the right to participate in the meetings of the technical committee or subcommittee whose work they have been designated 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. They may also attend meetings of working groups of the technical committee or subcommittee if they so request.

1.16 Liaison between ISO and IEC

1.16.1 Arrangements for adequate liaison between ISO and IEC technical committees and subcommittees are essential. The channel of correspondence for the establishment of liaison between ISO and IEC technical committees and subcommittees 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 Observers 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 cooperating organization is not entitled to make any charges for documents submitted.

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.

1.17.2 Liaisons at the technical committee/subcommittee level

1.17.2.1 Category A and B liaison

The categories of liaison are the following.

- **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 sent copies of all relevant documentation and are invited to meetings. They may nominate experts to participate in a WG/PT (see 1.11.1 and 1.12).
- **Category B**: Organizations that have indicated a wish to be kept informed of the work of the technical committee or subcommittee. Such organizations are sent reports on the work of a technical committee or subcommittee.

1.17.2.2 Acceptance criteria

The liaison organizations shall be international or broadly based regional organizations working or interested in similar or related fields.

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.

1.17.2.3 Establishment of liaisons

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.

1.17.2.4 Review of liaisons

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

1.17.3 Liaisons at the working group/project team level

1.17.3.1 Category D liaison¹⁾

The category of liaison is as follows:

• **Category D**: Organizations that make a technical contribution to and participate actively in the work of a working group, maintenance team or project team.

1.17.3.2 Acceptance criteria

Liaison organizations can include 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.

A liaison organization shall be willing to make a contribution to 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.

1.17.3.3 Management of liaisons

Category D 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 1.17.3.2. The committee secretary is responsible for administering D-liaisons.

1.17.3.4 Review of liaisons

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⁾ Category C liaison is reserved for ISO/IEC JTC 1.

1.17.3.5 Rights and obligations

Category D liaison organizations have the right to participate as full members in a working group (see 1.11.1) or project team (see 1.12).

Category D liaison experts act as the official representative of the organization by which they are appointed.

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 plan

Each technical committee shall prepare a strategic 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 deleted (see also 2.1.9);
- c) evaluating revision work needed (see also IEC Supplement to the ISO/IEC Directives, 2004, Clause 4 and ISO Supplement to the ISO/IEC Directives, 2001, 2.9);
- d) giving a prospective view on emerging needs.

The strategic 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.

Project stage	Associated document					
Fillet stage	Name	Abbreviation				
Preliminary stage	Preliminary work item	PWI				
Proposal stage	New work item proposal	NP				
Preparatory stage	Working draft(s) ¹⁾	WD				
Committee stage	Committee draft(s) ¹⁾	CD				
Enquiry stage	Enquiry draft ²⁾	ISO/DIS IEC/CDV				
Approval stage	final draft International Standard 3)	FDIS				
Publication stage	International Standard	ISO, IEC or ISO/IEC				
1) These stages may be omitted, as described in Annex F.						
2) Draft International Stand	2) Draft International Standard in ISO, committee draft for vote in IEC.					
3) May be omitted (see 2.6.4).						

Table 1 — Project stages and associated documents

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

2.1.3.3 The IEC Supplement to the ISO/IEC Directives, 2004, Annex F and ISO Supplement to the ISO/IEC Directives, 2001, Annex SI, 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 IEC Supplement to the ISO/IEC Directives, 2004, Clause 4 and ISO Supplement to the ISO/IEC Directives, 2001, 2.9, 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.

NOTE Throughout the following text, the expression "technical committee or subcommittee" means "subcommittee" in all cases where there exists a subcommittee within whose defined scope the project in question may be considered to lie.

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 respective Supplements to the ISO/IEC Directives) and shall be retained in the programme of work under that number until the work on that project is completed or its deletion has been agreed upon. The technical committee or subcommittee may subdivide a 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.

2.1.5.5 The programme of work shall indicate, if appropriate, the subcommittee and/or working group or project team 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 technical committee or subcommittee shall establish, for each project on its programme of work, target dates for the completion of each of the following steps:

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

These target dates shall correspond to the shortest possible development times, taking into account the need 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 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 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

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).

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/PT convenor, a designated expert or, if appropriate, the secretary) shall be appointed by the technical committee or subcommittee, taking into account the project leader nomination made by the originator of the new work item proposal (see 2.3.4). 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 project leader reports to the committee concerned.

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 or project teams (see also IEC Supplement to the ISO/IEC Directives, 2004, Annex E and ISO Supplement to the ISO/IEC Directives, 2001, Annex SL). 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 IEC Supplement to the ISO/IEC Directives, 2004, Annex D and ISO Supplement to the ISO/IEC Directives, 2001, Annex SF.

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.

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

2.2.2 The preliminary stage shall be applied for work items where no target dates can be established.

2.2.3 All preliminary work items shall be subject to regular review by the committee. The committee shall evaluate the resources required for each such item.

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;
- in ISO, revision of an existing standard or part;
- in ISO, an amendment to an existing standard or part;
- 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 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 (see C.5 for all new work other than amendments to existing publications).

The originator 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.

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 for information.

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

A decision upon a new work item proposal may be taken either by correspondence or at a meeting of a technical committee or subcommittee.

If a decision upon a new work item proposal is to be taken at a meeting, the proposal shall be put on the agenda, according to the conditions of 4.2.1.

Votes shall be returned within 3 months or at the meeting at which the decision is to be taken.

P-members agreeing to participate actively in the work shall nominate (an) expert(s) on the appropriate form.

When completing the reply form, national bodies should consider the principles given in Annex C.

2.3.5 Acceptance requires

- a) 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,
 - in IEC, at least 4 P-members in committees with 16 or less 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 b)] will be taken into account when making this tally;
 - in ISO, 5 P-members approving the work item:

individual committees may increase this minimum requirement, and

b) approval of the work item by a simple majority of the P-members of the technical committee or subcommittee voting.

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 and shall be registered by the office of the CEO. The agreed target dates (see 2.1.6) shall be indicated on the appropriate form.

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 2.3.5a)).

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 or project team the convenor of which will normally be the project leader.

Such a working group or, in IEC, project team 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 1.11). The working group or project team convenor shall ensure that the work undertaken remains within the scope of the balloted work item.

2.4.4 In responding to the proposal to set up a working group or, in IEC, a project team, those P-members having agreed to participate actively (see 2.3.5a)) shall each confirm their technical expert(s). Other P-members or A- or D- 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 or project team. He may invite a member of the working group or project team 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, the first 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.

For the first committee draft 3 months 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.

National bodies shall fully brief their delegates on the national position before meetings.

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 chairman 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)

If, within 2 months 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 3 months for consideration. A period of 3 months 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 chairman of the technical committee or subcommittee, in consultation with the secretary of his 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 2:1996.

"**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."

Within ISO, 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 4 months.

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, technical committees and subcommittees 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 within 4 weeks to all national bodies for a 5 months 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 Chief Executive Officer shall send within 4 weeks to the chairman and secretariat of the technical committee or subcommittee the results of the voting together with any comments received, for further speedy action.

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 chairman 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 chairman 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 2.6.3 are met, to register the enquiry draft, as modified, as a final draft International Standard, or
- b) in the case of an enquiry draft where no negative votes have been received, to proceed directly to publication, or
- 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

NOTE Within ISO, a revised enquiry draft will be circulated for a voting period of 2 months, which may be extended up to 5 months at the request of one or more P-members of the committee concerned.

- 2) to circulate a revised committee draft for comments, or
- 3) to discuss the enquiry draft and comments at the next meeting.

2.6.5 Not later than 3 months 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 chairman 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 2 months from the date of dispatch, two or more P-members disagree with decision 2.6.4 c.1) or c.2) of the chairman, the draft shall be discussed at a meeting (see 4.2.1.3).

2.6.6 When the chairman 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 4 months 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 machinereadable form 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.

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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 $2.6.4 \ b$).

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 3 months in ISO, 4 months in IEC, to all national bodies for a 2 month vote.

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.

If a national body votes affirmatively, it shall not submit any comments.

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.

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.

Technical reasons for negative votes are submitted to the technical committee or subcommittee secretariat for consideration at the time of the next review of the International Standard.

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 Within 2 weeks after the end of the voting period, the office of the CEO shall circulate to all national bodies a report showing the result of voting and indicating either the formal approval by national bodies to issue the International Standard or formal rejection of the final draft International Standard.

Technical reasons for negative votes shall be appended for information only.

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 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 may decide to:

- resubmit a modified draft as a committee draft, enquiry draft or, in ISO, final draft International Standard;
- publish a Technical Specification (see 3.1);
- 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 3.1.1.2), or with the document being referred back to the committee.

2.8 Publication stage

2.8.1 Within 2 months, the office of the CEO shall correct any errors indicated by the secretariat of the technical committee or subcommittee, and print and distribute the International Standard.

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

2.9 Maintenance of standards

The procedures for the maintenance of standards are given in the IEC Supplement to the ISO/IEC Directives, 2004, Clause 4 and Annex B, and ISO Supplement to the ISO/IEC Directives, 2001, 2.9.

2.10 Technical corrigenda and amendments

2.10.1 General

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

- a technical corrigendum (or a corrected reprint of the current edition);
- an amendment.

Technical corrigenda and amendments are published as separate documents, the edition of the International Standard affected remaining in print.

2.10.2 Technical corrigenda

A technical corrigendum is issued to correct either

- a) a technical error or ambiguity in an International Standard, a Technical Specification, a Publicly Available Specification or a Technical Report, inadvertently introduced either in drafting or in printing and which could lead to incorrect or unsafe application of the publication, or
- b) information that has become outdated since publication, provided that the modification has no effect on the technical normative elements (see ISO/IEC Directives, Part 2, 2004, 6.3) of the standard.

NOTE Technical corrigenda are not issued to correct errors that can be assumed to have no consequences in the application of the publication, for example minor printing errors.

Suspected technical errors or outdated information shall be brought to the attention of the secretariat of the technical committee or subcommittee concerned. After confirmation by the secretariat and chairman, 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.

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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 or a corrected or updated reprint of the existing edition of the publication (see also 2.10.4).

2.10.3 Amendments

An amendment alters and/or adds to previously agreed technical provisions in an existing International Standard.

The procedure for developing and publishing an amendment shall be as described in 2.3 (ISO), or the maintenance procedures (see IEC Supplement) and 2.4 to 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).

2.10.4 Avoidance of proliferation of modifications

No more than 2 separate documents in the form of technical corrigenda or 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.

2.11 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 or IEC (whichever is concerned), as represented by the office of the CEO.

2.14 Reference to patented items

2.14.1 If, in exceptional situations, technical reasons justify such a step, there is no objection in principle to preparing an International Standard 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 standard are such that there are no alternative means of compliance. The rules given below and in the ISO/IEC Directives, Part 2, 2004, Annex F shall be applied.

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

a) The originator of a proposal for a document shall draw the attention of the committee to any patent rights of which the originator is aware and considers to cover any item of the

proposal. Any party involved in the preparation of a document shall draw the attention of the committee to any patent rights of which it becomes aware during any stage in the development of the document.

- b) If the proposal is accepted on technical grounds, the originator shall ask any holder of such identified patent rights for a statement that the holder would be willing to negotiate worldwide licences under his 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, and shall be referred to in the introduction to the relevant document [see ISO/IEC Directives, Part 2, 2004, F.3]. 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 document without authorization from ISO Council or IEC Council Board as appropriate.
- c) A document 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 document that licences under patent rights, which appear to cover items included in the document, cannot be obtained under reasonable and non-discriminatory terms and conditions, the document shall be referred back to the relevant committee for further consideration.

3 Development of other deliverables

3.1 Technical Specifications

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

3.1.1.1 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. The reasons for publishing the Technical Specification, and an explanation of its relationship to the expected future International Standard, shall be given in the foreword.

When a Technical Specification is used for "pre-standardization purposes", the following text, completed as appropriate, shall be included in the Foreword:

"This document is being issued in the Technical Specification series of publications (according to the ISO/IEC Directives, Part 1, 3.1.1.1) as a "prospective standard for provisional application" in the field of ... because there is an urgent need for guidance on how standards in this field should be used to meet an identified need.

This document is not to be regarded as an "International Standard". It is proposed for provisional application so that information and experience of its use in practice may be gathered. Comments on the content of this document should be sent to the ...[ISO Central Secretariat or IEC Central Office]...

A review of this Technical Specification will be carried out not later than 3 years after its publication with the options of: extension for another 3 years; conversion into an International Standard; or withdrawal."

In IEC, Technical Specifications are subject to the same maintenance procedure as IEC Standards. The final paragraph of the above text will therefore need to be replaced by the

relevant information on maintenance review dates (see also IEC Supplement to the ISO/IEC Directives, 2004, Clause 4 and Annex B).

3.1.1.2 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. The reasons why the required support could not be obtained shall be given in the foreword to the Technical Specification.

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 in machine-readable form by the secretariat of the technical committee or subcommittee to the office of the Chief Executive Officer within 4 months for publication.

3.1.3 Technical Specifications shall be subject to review by the technical committee or subcommittee 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 shall be agreed in advance of the publication of the Technical Specification (maintenance review date).

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.

3.2.2 A proposal for submission of a PAS may be made by an A-liaison or D-liaison (see 1.17.2 and 1.17.3) or by any P-member of the committee.

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.

3.2.4 At the same time, in IEC the PAS is entered into the regular work programme of the committee concerned with a view to transform it into an International Standard, using the regular procedures described in 2.4 to 2.8 or the Fast-Track Procedure (see F.2). In the case of an externally developed PAS, the PAS submitter should be invited to nominate the project leader.

3.2.5 A PAS shall remain valid for an initial maximum period of 3 years. The validity may be extended for a single 3-year period, following which it shall be revised to become another type of normative document, or shall be 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.

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 in machine-readable form by the secretariat of the technical committee or subcommittee to the Chief Executive Officer within 4 months 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.

4 Meetings

4.1 General

4.1.1 Technical committees and subcommittees shall use modern electronic means to carry out their work (for example, e-mail, 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 chairman 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.

4.2.1.3 The secretariat shall ensure that arrangements are made for the agenda 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 4 months before the date of the meeting. All other basic documents, for example new work item proposals, shall be distributed by the same deadline.

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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.

4.2.2 Working group meetings

4.2.2.1 Working groups shall use modern electronic means to carry out their work (for example, e-mail, groupware and teleconferencing) wherever possible. When a 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.

Arrangements for meetings shall be made between the convenor and the member of the working group in whose country the meeting is to be held. The latter member shall be responsible for all practical working arrangements.

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.

4.3 Languages at meetings

The languages at meetings are English, French and Russian, and meetings are conducted in any one or more of these.

The national body for the Russian Federation provides all interpretation and translation into or from the Russian language.

The chairman 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.

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 3 months 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 chairman and secretariat of the technical committee.

5.3.3 The Chief Executive Officer shall, following whatever consultations he deems appropriate, refer the appeal together with his comments to the technical management board within one month 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 Chairman of the technical management board shall form a conciliation panel.

The conciliation panel shall hear the appeal within 3 months and attempt to resolve the difference of opinion as soon as practicable. The conciliation panel shall give a final report within 3 months. If the conciliation panel is unsuccessful in resolving the difference of opinion,

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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 comments to the members of the council board within one month after receipt of the appeal.

The council board shall make its decision within 3 months.

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 technical committees and subcommittees. They may be prepared by an ISO Policy Development Committee, an IEC Advisory Committee, an ISO Technical Advisory Group, or a Joint ISO/IEC 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.2 Proposal stage

The procedure for proposing a new work item, and the criteria for its acceptance, shall be decided by the body to which the Committee or Group responsible for the project reports.

Once a project is accepted, 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 arrange for it to be circulated for comments to the members of the Committee or Group.

The time limit for replies shall normally be 3 months.

The Committee or Group responsible for the project shall examine the comments received and prepare a revised draft Guide.

A.5 Enquiry stage

A.5.1 The office of the CEOs shall circulate both the English and French texts of the revised draft Guide to all national bodies for a 4-month 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 chairman of the Committee or Group responsible for the project may decide to submit an amended draft for a 2-month 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 technical committees and subcommittees 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.

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

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

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 TC 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 type of liaison required, such as:

- a) full or selective exchange of committee documents;
- b) regular or selective attendance of liaison representatives at meetings;
- c) participation in a standing coordination (or steering) committee for selected ISO and IEC technical committees;
- d) setting up of a Joint Working Group (JWG).

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. To this end, 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 delegates from the other who have observer status and who ensure the technical

liaison with the other organization. Such observers 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 1.11.5.

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 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 TMBs. In the case of standards published under the auspices of both organizations, the enquiry and approval stages shall be carried out in parallel in both ISO and IEC.

B.4.2.5 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.4.2.6 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 for approval to the two TMBs.

B.4.3 Cooperation of secretariats

The secretariats of the TC/SCs 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. 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 intended primarily for use in the field of international standardization, but may be used in other fields.

C.1.6 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 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) 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 article 2.1 of its Constitution and of IEC in article 2 of its Statutes.

C.3.2 Any proposal for new work shall include (at least) the following elements, in order to assess and justify the need for such work:

- title;
- scope;
- purpose and justification;
- programme of work;
- the resources to be provided;
- relevant documents;
- cooperation and liaison.

C.3.3 The elements listed in C.3.2 may have slightly different interpretation for a new field of technical activity (proposal for a new committee) and for a new work item (proposal for a new standard in an existing committee). Their content is specified in more detail in C.4 and C.5. Examples of such proposals are offered in C.7 and C.8. (These examples are in considerable detail to illustrate the principles).

C.4 Elements to be clarified when proposing a new field of technical activity (new committee)

C.4.1 Title

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

Example: "Machine tools"

C.4.2 Scope

C.4.2.1 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.4.2.2 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.4.2.3 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.4.3 Purpose and justification

Details based on a critical study of the following elements shall be given wherever practicable:

- a) The specific aims and reason for the standardization activity, with particular emphasis on the aspects of standardization to be covered, the problems it is expected to solve or the difficulties it is intended to overcome;
- b) The main interests that might benefit from or be affected by the activity, such as industry, consumers, trade, governments, distributors;
- c) Feasibility of the activity: Are there factors that could hinder the successful establishment or general application of the standard(s)?

Example: Does it appear feasible to standardize a single practice for general use, or will it be more practical to standardize more than one practice or level?

- d) Timeliness of the standards to be produced: Is the technology reasonably stabilized? If not, how much time is likely to be available before advances in technology may render the proposed standards outdated? Are the proposed standards required as a basis for the future development of the technology in question?
- e) Urgency of the activity, considering the needs of other fields or organizations;
- f) The benefits to be gained by the implementation of the proposed standard(s); alternatively, the loss or disadvantage(s) if no standard is established within a reasonable time. Data such as product volume or value of trade shall be included and quantified.
- g) If the standardization activity is or is likely to be the subject of regulations or to require the harmonization of existing regulations, this should be indicated.

C.4.4 Programme of work

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.

C.4.5 Relevant documents

C.4.5.1 Any known relevant documents (such as standards and regulations) shall be listed, regardless of their source.

C.4.5.2 It would generally be helpful if the list of documents could be accompanied by an indication of their significance.

C.4.5.3 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.4.6 Cooperation and liaison

C.4.6.1 Relevant organizations or bodies with which cooperation and liaison should exist, shall be listed.

C.4.6.2 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.4.6.3 The result of any communication with other interested bodies shall also be included.

C.4.7 Secretariat duties

The proposer shall indicate whether his organization is prepared to undertake the secretariat work required for the new field of activity proposed.

C.5 Elements to be clarified when proposing a new work item (new standard)

C.5.1 Title

The title shall indicate the subject matter of the proposed new standard.

Example: "Electrotechnical products - Basic environmental testing procedures"

C.5.2 Scope (and field of application)

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:

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.

C.5.3 Purpose and justification

C.5.3.1 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, as is required in C.4.3. The proposer shall include a statement to the effect that according to his knowledge there is no other work dealing with the subject proposed.

C.5.3.2 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.5.4 Programme of work

Target date(s) shall be indicated and, when a series of standards is proposed, priorities shall be suggested.

C.5.5 Relevant documents

See C.4.5.

C.5.6 Cooperation and liaison

See C.4.6.

C.5.7 Preparatory work

The proposer shall indicate whether he or his organization is prepared to undertake the preparatory work required for the new work item. The proposer shall make every effort to submit a complete working draft with the proposal, or at least submit an outline. The proposer shall also nominate a project leader.

C.6 Matrix

C.6.1 To assist the proposer in ordering his thoughts in easily understandable terms, the matrix shown in C.9 may be helpful in establishing the purpose of the proposal and accordingly the aspects to be covered.

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The proposer should identify on the vertical axis the main purpose(s) of the proposed new work. The aspects most relevant should then be identified opposite the appropriate purpose(s).

C.6.2 It is recommended that a copy of any completed matrix be attached to the proposal.

The matrix in C.9 should be considered only as a model, because each characteristic and each test method may require its own column. It may be useful in the assessment of the proposal for the new work.

C.6.3 For some subjects. the matrix may be used at a very early stage; for others, in parallel with the establishment of a committee programme of work and in any case, it may be modified as necessary. In other cases (especially for complex products), it may not be possible to answer the questions contained in the matrix until the work has reached some advanced stage. Even in these cases, it may be useful to construct an appropriate matrix as early as possible because it may reveal some gap or inconsistency which might otherwise remain unnoticed.

C.6.4 Examples for the use of the matrix are given in C.10 and C.11.

C.7 Example of a proposal for a new field of technical activity

 $\ensuremath{\text{Proposer:}}$ Slobovian National Standards Institution (SNSI), member body of ISO for Slobovia $^{3)}$

Title: "Machine tools"

Scope:

"Standardization of all machine tools for the working of metal, wood and plastics, operating by removal of material or by pressure. Excluded: standardization of electrical equipments used in machine tools (dealt with by IEC/TC 44)."

Purpose and justification:

The purpose of the proposed standardization is to promote the harmonization of national specifications and requirements concerning the main characteristics, interface, interchangeability, operating elements, operating symbols, safety devices, accuracy, testing, etc., relating both to the machine tools themselves and to related tools and fixtures.

Problems arise in international trade, not only in the machine tools themselves but in semi-finished parts, due to differences in the technical requirements that are valid in different countries, especially for safety requirements, methods of testing accuracy as well as compatibility of accessories.

The main interests expected to benefit from the proposed standardization are machine tool makers, machine tool users, toolmakers and specialized producers of machine tool parts and accessories. Also workers operating the machine tools will benefit from uniform operating elements and symbols.

International trade in machine tools is increasing rapidly, and industrialized countries export more and more machines ⁴). However, some industries face barriers to trade from time to time caused by differing requirements in regulations.

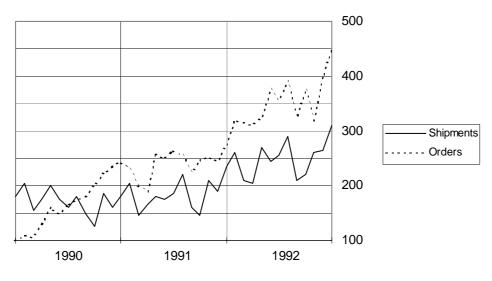
Recessions of the export volumes of some countries are partly caused by these barriers, to be removed or reduced by international standardization.

³⁾ Taking the example of an imaginary country.

⁴⁾ To illustrate this point, the proposer should attach tables, graphs, statistics or other supporting material.

Feasibility of the activity is apparent from the above facts. However the later international standardization is made, the more difficult the harmonization of national specifications will be. No other international organization is dealing with this standardization, hence the work is urgent.

The proposed standardization is timely since design and technology of machine tools are stabilized; nevertheless, further development is rapid, producing new types, new control systems, etc. World-wide need of these products is greater than the present world capacity, as shown in the figure.



Machine tool orders and shipments (\$million)

(Millions of dollars)	Nov prelim	Oct final	Nov year ago
Not new orders, total	448,80	414,00	286,10
cutting	347,85	334,05	222,65
forming	100,95	79,95	63,45
Shipments, total	312,35	266,80	221,95
cutting	207,90	195,05	163,05
forming	104,45	71,75	58,90
Export orders	37,40	27,45	21,10
shipments	38,95	28,25	32,30
Backlogs, cutting	2873,8	2733,8	1747,4
forming	522,8	526,3	361,7
Cancellations, cutting	16,95	15,10	8,70
forming	4,60	4,1	2,05
Domestic orders, 3-month moving average			
cutting	287,9	267,2	177,0
forming	81,4	81,3	61,6
Source: National Machine Too	Ruilders' Assoc	viation	

Source: National Machine Tool Builders' Association

Figure C.1 — Orders and shipments of machine tools

The benefits to be gained: specialized production and economical trade of standardized parts and units, international cooperation and trade, meeting safety requirements of importing parties, easy and safe handling and operation. $^{5)}$

Proposed work programme:

List of standards required	Suggested time to completion of task years
1 Machine tools – Speeds and feeds	3
2 Machine tool test codes	3
3 Symbols for indication appearing on machine tools	4
4 Machine tools – Direction of operation of controls	5
5 Machine tools – Spindle noses and face plates – Sizes for interchangeability – Part 1: Type A	5
6 Machine tools – Spindle noses and face plates – Sizes for interchangeability – Part 2: Camlock type	5
7 Machine tools – Spindle noses and face plates – Sizes for interchangeability – Part 3: Bayonet type	5
8 Test conditions for surface grinding machines with vertical grinding wheel spindle and reciprocating table – Testing of accuracy	6
9 Test conditions for surface grinding machines with horizontal grinding wheel spindle and reciprocating table – Testing of accuracy	6
NOTE It is proposed that this list should be reviewed and supplemented as needed in due	course.

Relevant documents:

Available national documents

- France NF E60-101, -102, -105, -111, -112, -115, -116, -117, -121, -122, -123, -124, -131, -132.
- Japan JIS B 6330-74, 6331-74, 6332-77, 6333-77, 6334-77.
- Czech Republic CSN 20 0301, 20 0312, 20 0315, 20 0316, 20 0318.
- Poland PN-M-55330, 55331, 55332, 55340, 55350, 55351, 55356.
- USA NAS 913, 938, 953, 972, 979, 983, 985.

We consider that NAS 979, Uniform cutting test. Metal cutting equipments specification can be adopted as an ISO standard.

Cooperation and liaison:

Liaison should be established with IEC/TC 44 dealing with electrical equipments used in machine tools.

Secretariat duties:

The Slobovian National Standards Institution (SNSI) is prepared to undertake the secretariat duties of the proposed committee.

1996-11-05

D. Prath Director Slobovian National Standards Institution

⁵⁾ Supporting data on world machine tool production and trade should be presented.

C.8 Example of a proposal for a new work item

Proposer: Slobovian National Standards Institution (SNSI), member body of ISO for Slobovia ⁶)

Title: "Machine tools – Spindle noses and face plates – Sizes for interchangeability"

Scope:

The standard specifies the sizes for interchangeability of spindle noses and corresponding face plates of machine tools, including size and form tolerances, as well as position tolerances of the connecting surfaces.

Purpose and justification:

The purpose of the proposed standard is to specify a standardized choice of spindle noses and face plates as connecting parts of machine tools for tools and toolholders.

Slobovian importers and exporters of semi-finished castings and forgings have experienced considerable difficulties because of differing dimensions of spindle noses in different countries. It is expected that the proposed work will reduce these problems.

The main interests that might benefit from the proposed standard are: machine tool makers, machine tool users, tool makers, specialized producers of machine tooling and accessories.

International trade of machine tools and tooling increases rapidly. Standardized spindle noses and face plates will promote the utilization of standard tooling on various machines. Machining operations will be made more flexible.

The preparation of the proposed standard is feasible and timely, since based on experience of many years of practice, the use of 3 designs became generally accepted: the so-called "A-type", the "Camlock.type" and the "Bayonet-type". These 3 designs are stabilized and offer excellent performance. In order to establish a controlled variety of spindle noses, the standardization of these types is proposed. If necessary, the standard can be issued in 3 parts.

Suggested time to completion of task: 3 years.

The benefits to be gained: uniformity of spindle noses of machine tools delivered by various industries, enabling machine tool users to use the same standardized tool sets on several machine tools.

Possibility of producing standardized tooling by specialized tool making firms. International trade of machine tools and that of tooling. Interchangeability of tooling.

Relevant documents:

Available national documents:

 United Kingdom: 	BS 4442
- USA:	ANSI B 5.9
- Germany:	DIN 55021

Cooperation and liaison:

Liaisons should be established with ISO/TC 29, dealing with standardization of tooling.

Preparatory work:

The SNSI is willing to undertake the preparatory work.

1996-11-20 D. Prath Director Slobovian National Standards Institution

⁶⁾ Taking the example of an imaginary country.

C.9 Matrix for establishing the purpose of a proposal

Title:

		Aspects to be covered in the standard(s)									
Purpose of the proposed new work	Terminology, symbols, signs, designation	Characteristics	Sampling	Testing and inspection	Complementary requirements (labelling, packaging, storage, etc.)	Documentation, e.g. to accompany the product		Other aspects and requirements			
Mutual understanding and communication											
Safety, EMC, health, protection of the environment											
Achievement of interchangeability or interface or compatibility provisions											
Performance, function, quality											
Economy of energy and raw material											
Variety control (rationalization)											
Consumer protection											
Other purposes											

C.10 Example of a matrix for establishing the purpose of a proposal for a new field of technical activity

Title: Machine tools

				As	pects to b	e covered	in the star	ndard(s)	
Purpose of the proposed new work			Characteristics (see below)		Accuracy tests	Symbols appearing on machine tools	Modular units	Lubricants	
		a)	b)	c)					
Mutual understanding and communication									
Safety, EMC, health, protection of environment	х			х		х			
Achievement of interchangeability or interface or compatibility provisions				х		Х			
Performance, function, quality			х				Х		
Economy of energy and raw material		х			х		х	х	
Variety control (rationalization)									
Consumer protection			х						
Other purposes									

Characteristics:

- a) overall internal height;
- b) speeds and feeds;
 - sizes of shanks;
 - sizes of T-slots and corresponding bolts;
 - sizes of grinding wheels;
 - sizes of spindle noses;
 - sizes of lathe centres;
- c) mounting of grinding wheels;
 - direction of operation of controls.

C.11 Example of a matrix for establishing the purpose of a proposal for a new work item

Purpose of the proposed new work	Aspects to be covered in the standard(s)								
	Terminology, symbols, signs, designation	Sizes and tolerances for interchangeability	Sampling	Testing and inspection	Complementary requirements (labelling, packaging, storage, etc.)	Documentation, e.g. to accompany the product		Other Aspects and requirements	
Mutual understanding and communication									
Safety, EMC, health, protection of environment									
Achievement of interchangeability or interface or compatibility provisions		х		х					
Performance, function, quality									
Economy of energy and raw material									
Variety control (rationalization)		х							
Consumer protection									
Other purposes									

Title: Machine tools: spindle noses and face plates – sizes for interchangeability

Annex D (normative) Resources of secretariats and qualifications of secretaries

D.1 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.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 in machinereadable form, 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 chairman when necessary;
- access by the secretary to basic International Standards (see the ISO/IEC Directives, Part 2, Annex B) 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 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.

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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 IEC Supplement to the ISO/IEC Directives and ISO Supplement 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 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 ISO/ITSIG Guide for the use of IT in development and delivery of standards and the IEC Guide to the use of information technology in the IEC.

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.

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 use 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 may be in any one or more of these languages, whichever is or are appropriate.

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

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, 2004, 4.5.)

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.4 Other publications developed by technical committees

Other publications may be issued in one official language only.

E.5 Documents for technical committee and subcommittee meetings

E.5.1 Documents prepared and circulated prior to the meeting

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

a) Draft agendas

Draft agendas are prepared in both English and French whenever possible by the responsible secretariats and are reproduced and distributed.

b) Committee drafts referred to in the agenda

It is desirable that both the English and the French versions of committee drafts referred to in the agenda will be available for the meeting.

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, formed at the beginning of each meeting and comprising the secretary and, whenever possible, one or more delegates of English and/or French mother tongue, edits each of the proposed resolutions.

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 technical committees and subcommittees.

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 member 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 chairman 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 technical committees and subcommittees, 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" ¹⁾	"Fast-track Technical Specification ²⁾ Technical Report ³⁾		Publicly Available Specification ⁴⁾	
Proposal stage (see 2.3)	Acceptance of proposal	Acceptance of proposal	Acceptance of proposal	Acceptance of proposal		Acceptance of proposal	
Preparatory stage (see 2.4)	Preparation of working draft	Study by working group ⁵		Preparation of draft		Approval of draft PAS	
Committee stage (see 2.5)	Development and acceptance of committee draft	Development and acceptance of committee draft ⁵⁾		Acceptance of draft	Acceptance of draft		
Enquiry stage (see 2.6)	Development and acceptance of enquiry draft	Development and acceptance of enquiry draft	Acceptance of enquiry draft				
Approval stage (see 2.7)	Approval of FDIS ⁶⁾	Approval of FDIS ⁶⁾	Approval of FDIS ⁶⁾				
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.

1) See F.2.

2) See 3.1.

3) See 3.3.

4) See 3.2.

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

6) May be omitted if the enquiry draft was approved without negative votes

F.2 "Fast-track procedure"

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

F.2.1.1 Any P-member or category A liaison organization of a concerned technical committee 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;
- 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; 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 to the approval stage (2.7). 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 authorities

H.1 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.2 The technical management board designates registration authorities in connection with International Standards on the proposal of the technical committee concerned.

H.3 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.4 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.5 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.