



# **ISO/IEC Directives**

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## **Supplement — Procedures specific to IEC**

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## FOREWORD

This Supplement to the ISO/IEC Directives comprises modifications and additions to the ISO/IEC Directives that have been approved by the Committee of Action for implementation within IEC. Reference is also made the list of additional documentation provided on the IEC web site. Relevant material from this documentation will be regularly included in this Supplement.

Generic terminology is used in the common parts of the ISO/IEC Directives and this has been replaced by terminology particular to the IEC in this Supplement (for example, the TMB is called the Committee of Action in this Supplement).

## ISO/IEC Directives — Procedures specific to IEC

### 1 Scope

The ISO/IEC Directives define the basic procedures to be followed in the development of International Standards and other publications. It was agreed to separate out the common procedures of ISO and IEC from procedures specific to one or other organization. This document is a Supplement to the ISO/IEC Directives, describing procedures specific to IEC.

This Supplement needs to be used in conjunction with the [ISO/IEC Directives, Parts 1 & 2](#).

### 2 Guidelines on drafting of scopes of committees

Of prime importance is that scopes not be too specifically technology related since constant revision will be needed in the light of changes in technology. More emphasis should be placed on defining concisely the application areas and market sectors covered by the committee since, not only are these more slowly changing, but are also more easily understood and appreciated by those not directly involved in the TCs work.

Of major importance also are brevity and clarity. Where more detail is required, this should be put in the Strategic Policy Statement, which is regularly reviewed and readily updated.

Scopes shall be formulated in accordance with the following four paragraphs.

#### a) Definition of the domain of activity.

Should start with the phrase “To prepare international standards (IS) ...”

Should specify the field of application or market sector. In many cases this is already well defined in the SPS and should be repeated here in a concise way.

Avoid lists of equipment and components, and useless phrases such as “... includes but is not limited to...”.

#### b) Qualifications to the definition of Section 1 but only where essential for explicitness or clarity.

#### c) Limitations and exclusions

Only to be used if really essential to the understanding of the domain or where specific agreements have been reached with other committees or organizations. Liaisons are **not** to be part of the Scope

#### d) Specific horizontal, group or pilot functions allocated by the Committee of Action.

In most cases a scope drafted in accordance with a) is sufficient.

Examples from current scopes meeting these requirements are given in Annex A.

### 3 Chairmen of technical committees and subcommittees

#### 3.1 Appointment

Chairmen of technical committees shall be nominated by the secretariat of the technical committee and appointed by the Committee of Action, for a maximum period of 6 years or for such shorter period as may be appropriate. A first extension, of a maximum of 3 years, requires a majority vote of the Committee of Action members. Subsequent extensions, each of a maximum of 3 years, may be approved by a 2/3 majority of those Committee of Action members voting.

Chairmen of subcommittees shall be nominated by the secretariat of the subcommittee and appointed by the technical committee for a maximum period of six years or for such shorter period as may be appropriate. A first extension, of a maximum of 3 years, requires a majority

vote of the P-members of the technical committee. Successive extensions, each of a maximum of 3 years, may be approved by a 2/3 majority of the P-members technical committee voting.

The possibility of appointing as chairman a national of a country other than that of the secretariat is recommended.

### 3.2 Procedure

Twelve months before the end of the term of office of a TC/SC chairman, Central Office requests the TC/SC secretariat to indicate whether it wishes to nominate another candidate as chairman or extend the term of office of the current chairman.

- a) In the case of the secretariat wishing to propose a new candidate for appointment, the following procedure is applied :
  - 1) All National Committees are informed of the vacancy and invited to submit nominations to the secretariat within a period of 3 months.
  - 2) The secretariat chooses a single candidate from the nominations received from National Committees
  - 3) The nomination is submitted, in the case of a TC chairman, to the Committee of Action and, in the case of an SC chairman to the P members of technical committee, for approval within 6 weeks.
  - 4) If the nomination is not supported by either a majority of the CA members in the case of a TC or by the majority of TC P members in the case of an SC, the nomination procedure shall be repeated.
- b) In the case of the secretariat choosing to request extension of the term of office of the current chairman, the following procedures are applied :
  - 1) If the extension is the first extension of the current chairman following his/her initial term of office, the procedure under a) 3) and a) 4) is followed.
  - 2) If an extension beyond the first extension is proposed, this shall be submitted in the case of a TC chairman, to the Committee of Action and, in the case of an SC chairman to the P members of technical committee, for formal approval by vote within 6 weeks.
  - 3) Any objections to the extension submitted by the CA members or by the P members during the voting period shall be distributed immediately to the other members.
  - 4) The approval criteria shall be a 2/3 majority affirmative vote of those CA members or P members of the parent TC voting.

## 4 Target dates

The IEC Committee of Action has decided that for IEC, the following guidelines are applicable.

**Table 1 — Guidance for the development of standards (maximum period in years)**

		1 no major obstacle (short term)	2 no major obstacle but validation of proposal made by Round Robin Tests	3 difficulties due to market competition (intermediate step)  Regional competition	4 production of standard is not of major importance  Regional competition
<b>Categories of standards</b>	<b>A</b> General (Terminology, units)	<b>3</b>	-	-	-
	<b>B</b> Horizontal (EMC, Safety, Environmental)	<b>3</b>	<b>5</b>	<b>6</b>	-
	<b>C</b> Interface (interconnection, interoperability)	<b>2</b>	<b>4</b>	(1)	(1) (2)
	<b>D</b> Products (e.g. Optical/magnetic recording, broadcasting, components)	<b>2</b>	<b>4</b>	(1)	(1) (2)
NOTE 1 Not applicable for standards but indication is given for other deliverables					
NOTE 2 This category shall not be included in the statistics					

For all work items on the work programme of a committee, whether these are for new standards or parts of a standard (see [ISO/IEC Directives, Part 1, 2001, 2.3](#)), or a result of maintenance (see 5.3), a project plan shall be established and recorded (see [ISO/IEC Directives, Part 1, 2001, 2.1.5](#)). In establishing project plans, committees shall take into account the guidelines given above for the various categories of standards.

## 5 Maintenance

### 5.1 Definitions

#### 5.1.1

##### **maintenance** (of documents)

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

#### 5.1.2

##### **maintenance cycle**

period over which the publication is stable

#### 5.1.3

##### **maintenance team (MT)**

group of experts designated to keep a publication or set of publications up to date

#### 5.1.4

##### **review date**

date when the maintenance cycle report (MCR) is distributed to National Committees and which allows for revision or amendment of the publication by the maintenance result date



**5.1.5****maintenance result date**

date when the committee's decision (reconfirmation, withdrawal, amendment, revision) has been implemented

**5.1.6****document for comment (DC)**

document with proposals for changes to a normative document and submitted for comments, prior to distribution of the maintenance cycle report

**5.1.7****maintenance cycle report (MCR)**

form, which has the maintenance team's recommendation after the review of a publication

**5.2 Establishment of maintenance team**

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

Its members may be the same or different from those who developed the original publication. The convenor shall be appointed by the TC/SC.

The Secretary shall send the finalized list of maintenance team experts to IEC Central Office for circulation.

For other requirements relating to maintenance teams, the procedures for working groups apply, see the [ISO/IEC Directives, Part 1, 2001, 1.11](#).

**5.3 Maintenance procedure**

The programme for maintenance of publications shall be included in the Strategic Policy Statement and will be subject to approval by the Committee of Action. The maintenance work need not be delayed pending Committee of Action approval. See also Annex B for guidance on implementation.

The maintenance team shall be activated at the appropriate point in the maintenance cycle (see Figure B.1).

The maintenance team shall be responsible for reviewing and, if appropriate, revising or amending publications covered by the maintenance procedure, collating proposed changes. It shall implement a project plan to enable maintenance cycle dates to be met.

The SPS shall include the maintenance cycle for each of its publications (typically between 2 and 12 years, maximum of 3 years for a Technical Specification).

The maintenance cycle shall be agreed by the committee before submission of the draft at the approval stage (FDIS) and the information shall be included in the Foreword of the final publication.

Individual proposals for changes may be distributed for information only and kept in hand by the TC/SC Secretary until the next scheduled review.

If a committee needs to process amendments before the next review in the Maintenance Cycle, it shall submit a request to the Committee of Action, in order to ensure stability for the users of publications.

The date for submitting proposed changes for forthcoming review shall be communicated to the P-members of the committee.

The steps for revision or amendment of a publication are the same as those for preparation of a new publication or part (CD, CDV, FDIS, as appropriate) and shall include the establishment of target dates for the completion of the relevant stages.

The maintenance result date shall be included in the Foreword of the publication.

If at the time of scheduled review, it is determined that insufficient resources are available, or that there is no need for revision or amendment, the committee shall take the decision to confirm the publication for a further period or withdraw it.

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

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

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

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

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

Any possible misuse of the clause, that cannot be resolved by the chairmen and secretaries of TC/SCs, should be brought to the attention of the Committee of Action for decision.

NOTE 3 If, after serious discussions with the National Committee concerned, the TC/SC officers feel that there is misuse of the clause, they should refer the matter to the Committee of Action.

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

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

Two cases of particular conditions are distinguished:

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

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

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

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

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

## **7 Interpretation sheets**

### **7.1 Introduction**

An interpretation sheet provides a quick formal explanation to an urgent request by a user of a standard (testing laboratory, manufacturer, etc.).

Changes of requirements or test procedures in a standard by means of an interpretation sheet shall be avoided.

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

### **7.2 Proposal stage**

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

- the Secretariat of the technical committee or subcommittee which is responsible for the relevant standard;
- a National Committee;
- an IEC Committee of Testing Laboratories (e.g. IECEE-CTL);
- any other body of the IEC.

Proposals emanating from the IECEE-CMC or IECEE-CTL or from “any other body of the IEC” shall be sent to the secretary of the technical committee or subcommittee which is responsible for the relevant standard.

The chairman and secretary of the technical committee or subcommittee shall consider whether the subject is really a matter of interpretation within the sense of 7.1. If this is considered not to be the case, the subject shall, if deemed necessary, be dealt with as a proposal for an amendment of the standard.

### **7.3 Preparatory stage**

The secretary of the technical committee or subcommittee that is responsible for the relevant standard shall circulate the draft for the interpretation sheet to all National Committees, with a request for comments on the draft within a period of two months.

The proposal and the comments received shall be assessed by the chairman and secretary of the technical committee or subcommittee or be discussed at the next meeting of the technical committee or subcommittee, whichever is the most appropriate.

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

### **7.4 Approval stage**

The draft shall be distributed in bilingual version to the National Committees for approval within three months. It shall be referenced as a final draft International Standard, the title being “Interpretation of Clause x, y, z of IEC: ...”

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

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

Abstentions are excluded when the votes are counted.

### 7.5 Issue of interpretation sheets

The draft, when approved, shall be issued by the Central Office with the heading "Interpretation sheet".

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

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

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

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

### 7.6 Review

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

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

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

## 8 Reference material for secretaries

Indications on reference material for TC/SC secretaries are given in Annex C. TC/SC secretaries should also be aware of the material listed in the [ISO/IEC Directives, Part 1, 2001, Annex D](#).

## 9 Distribution of documents in the IEC

The processes of document distribution at the various stages described in the [ISO/IEC Directives, Part 1, 2001, Clause 2](#), are given in Annex D.

## 10 Reporting

The reporting processes for project teams/working groups, subcommittees and technical committees are given in Annex E.

## 11 Project stages

The different project stages and their equivalent harmonized stage codes, as described in ISO Guide 69, *Harmonized Stage Code system – Principles and guidelines for use*, are given in Annex F.

## 12 Numbering of documents

The procedures for numbering of IEC documents are given in Annex G.

## 13 Forms

The forms used as cover pages for IEC documents are given in Annex G. They are also available on the IEC web site at the address <http://www.iec.ch/contents.htm>.

## 14 Procedures for developing the IEV, graphical symbols and letter symbols

Procedures for the development of the IEV (International Electrotechnical Vocabulary) are given in Annex I.

Procedures for the development of graphical symbols for use on equipment are given in Annex J.

The procedure for development of data elements is given in [IEC/TR3 61360-3 \(1995-10\)](#): Standard data element types with associated classification scheme for electric components - Part 3: Maintenance and validation procedures.

Procedures for the development of graphical symbols for use on diagrams (IEC 60617) are given in Annex K.

**Annex A**  
(informative)  
**Examples of well-drafted scopes of committees**

**A.1 Definition of the domain of activity**

To prepare IS on methods of measurement of characteristics which are of importance to determine the performance of household electrical appliances and are of interest to the consumer. (TC 59)

To prepare IS concerning the manufacture, installation and application of electrical equipment used in medical practice. This also concerns surgery, dentistry and other specialities of the healing arts. (TC 62)

To prepare IS for systems and elements used for industrial process measurement and control concerning continuous and batch processes. (TC 65)

To prepare IS for systems of photovoltaic conversion of solar energy into electrical energy and for all elements in the entire photovoltaic energy system. (TC 82)

**A.2 Qualifications**

In this context, the concept "photovoltaic energy system" includes the entire field from light input to a solar cell to and including the interface with the electrical system(s) to which energy is supplied. (TC 82)

Power systems control comprises control within control centres, RTU's and substations including telecontrol and interfaces to equipment, systems and databases outside the scope of TC 57.

Dependability is used in the sense defined in IEC 191 as a collective term in a non-quantitative way. (TC 56)

**A.3 Limitations and exclusions**

Aspects of this equipment other than safety are covered by TC 85. (TC 66)

The standards to be prepared will not cover temporary and provisional places of work in the open ... (TC 71)

Excluded: work practices and methods for live working. (TC 78)

**A.4 Special horizontal or group functions**

Horizontal Safety Function: Methods of measuring touch current and protective conductor current. (TC 74)

Group Safety Function: Aspects of ultrasound pertaining to human safety. (TC 87)

## Annex B (informative)

### Guidance on implementation of the maintenance procedure

#### B.1 For new publications (Edition 1) – defining the key dates in the maintenance cycle

Steps in the process	Explanatory notes
<ul style="list-style-type: none"> <li>• For TS, TR, the Maintenance result date (year - YYYY) to be submitted with the CDV.</li> <li>• For IS, the Maintenance Result date to be proposed by the WG/PT latest at the enquiry stage (CDV)</li> </ul>	
<ul style="list-style-type: none"> <li>• For IS, at the approved draft International Standard stage (ADIS), the TC/SC Secretary supplies the Maintenance Result date (YYYY) with the manuscript for the final draft International Standard (FDIS).</li> </ul>	<ul style="list-style-type: none"> <li>• The IEC Template has been revised and the maintenance result date is required to be stated in the foreword.</li> </ul>
<ul style="list-style-type: none"> <li>• For IS, approval stage, the NCs' vote will cover both the technical content and the Maintenance Result date.</li> </ul>	<ul style="list-style-type: none"> <li>• Objections to the Maintenance Result date may lead to a negative vote. These will be indicated on the RVD.</li> </ul>
<ul style="list-style-type: none"> <li>• For IS, TS and TR, registration of the Maintenance Result date after the final publication.</li> </ul>	<ul style="list-style-type: none"> <li>• The objective is to ensure that Maintenance Result dates are recorded, thus               <ul style="list-style-type: none"> <li>• enabling a timely follow-up for the review process – definition of the review date</li> <li>• ensuring that the publication's Maintenance Result date can be recorded.</li> </ul> </li> <li>• It is the responsibility of the TC/SC Secretary to register the maintenance result dates and monitor the review dates. It is recommended to use the revised table in Section E – Maintenance cycles in the Strategic Policy Statement document (Form 15a).</li> <li>• Maintenance Result dates will be automatically stored in the IEC CO database replacing the existing Systematic Review (SR) date. These will appear in the IEC Catalogue.</li> </ul>

#### B.2 The maintenance process

Steps in the process  (Please refer to the schematic representation in Figure B.1)	Explanatory notes
Proposals for amendments/ revisions are sent to the TC/SC Secretary (See Figure B.1, Stage 2)	<ul style="list-style-type: none"> <li>• They may be distributed for information only. This is optional but it may be helpful in retrieving proposals for publications with a long maintenance cycle.</li> <li>• Proposals can be made from those organizations cited under Directives Part 1, 2.3.2.</li> </ul>
URGENT proposals for amendments/ revisions are sent to the TC/SC Secretary with a technical justification and if the TC/SC wishes to process them, it will need to submit a request to the Committee of Action. (See Figure B.1, Stage 2)	<ul style="list-style-type: none"> <li>• The TC/SC should submit the urgent proposals for amendments/ revisions to the Committee of Action for approval along with :               <ul style="list-style-type: none"> <li>• Technical justification</li> <li>• P-member approval</li> <li>• A list of experts willing to participate in the work.</li> </ul> </li> </ul>

TC/SC Secretary initiates document for comments (DC) informing P-members that publications are coming up for review and requests comments/proposals and making a call for experts (in the case of an existing maintenance team – reconfirmation of existing experts and/or nomination of new experts, for a new maintenance team – nomination of experts)(See Figure B.1, Stage 3)

- This process should be initiated by the TC/SC Secretary on a regular basis by referring to the review dates recorded in the table in Section E – Maintenance cycles of the SPS.
- It is recommended that the publications are grouped, if possible, to minimize the number of DC documents to be distributed and treated by the P-members.

TC/SC Secretary assesses the results from the DC :

- if there are comments/ proposals and adequate resources pass onto the maintenance team for review.
- if there are no comments/ proposals nor adequate resources then a recommendation is made either to confirm for another period or withdraw. The TC/SC Secretary completes the MCR form (See Figure B.1 Stage 5)

- If the recommendation is withdrawal, then objections are handled according to Directives Part 1, 2.9.5

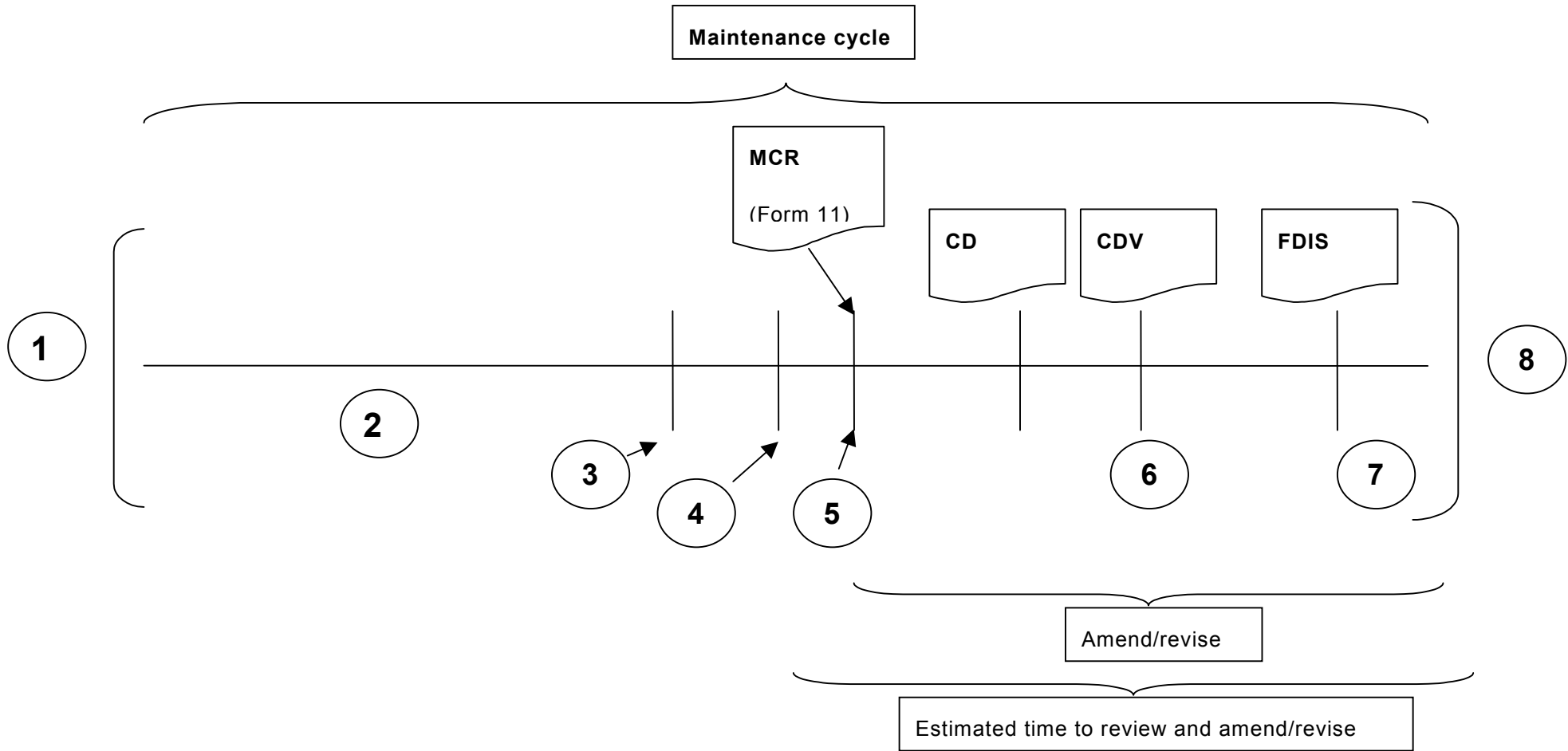
MT reviews the comments/proposals and makes a recommendation, to the TC/SC secretary. The TC/SC secretary records this on the MCR form and sends it to IEC CO for circulation.(See Figure B.1 Stage 6)

- If the recommendation is amend or revise, then the project plan requires completion. The milestones in the project plan should be aligned with those given in document CA/1363A/R “How to better assess and improve the global efficiency of the IEC technical work.”
- The MCR (Form 11) has been modified by the addition of the following phrase concerning the recommendation on reconfirmation, amend, revise “National Committees objecting to this recommendation should inform the TC/SC Secretary with copy to IEC CO within two months otherwise the recommendation will be taken as being approved.”

Follow the same procedures as given in “1. New publications” for the definition of maintenance result dates. (See Figure B.1, Stage 7)

- Currently the maintenance result date is only requested for revisions leading to the publication of the next edition. This is incomplete, as the publication of an amendment also constitutes the end of a maintenance cycle. Consequently, the TC/SC Secretary should indicate the maintenance period and date respectively when sending the CDV and manuscript for the FDIS to IEC CO.
- IEC CO will modify the foreword to amendments in order to ensure the insertion of the maintenance result date.





1 Publication issued with maintenance date. TC/SC Secretary revised Section E of SPS with review and maintenance result dates	5. Maintenance team reviewed publication and made recommendation completing Maintenance Cycle Report and returned to TC/SC Secretary by the Review Date.
2 Proposals for amendments/revisions sent to TC/SC Secretary. Distributed for information only or held in hand until the next review.	6. Maintenance Result date for the next maintenance cycle proposed at enquiry stage
3. Document for comment (DC) issued requesting comments/proposals for amendments/ revision and a call for experts (reconfirmation and/or nomination)	7. Amendment/ revision issued with maintenance result date. TC/SC Secretary revised Section E of SPS with review and Maintenance result dates.
4. Comments/ proposals passed on to maintenance team	8. Next maintenance cycle started.

Figure B.1 – Schematic representation of maintenance cycle.

**Annex C**  
(normative)  
**Reference material for IEC secretaries**

The latest editions of the publications listed are essential reference material for secretaries of IEC committees. All of these publications are available on the [IEC web site](#).

- a) The ISO/IEC Directives:
  - Part 1: Procedures for the technical work
  - Part 2: Rules for the structure and drafting of International Standards <sup>1)</sup>
  - IEC Directives Supplement
- b) IEC Statutes and rules of procedure
- c) IEC Directory <sup>2)</sup>
- d) Catalogue of IEC Publications <sup>2)</sup>
- e) Guide for drafting Minutes of meetings
- f) Guidance for TC/SC secretaries
- g) Guide on the use of information technology tools in the IEC

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1) Lists further documents to which a secretary will need to refer

2) Up-to-date information is available on the IEC web site (<http://www.iec.ch>).

## Annex D (normative) Document distribution within IEC

DOCUMENTS	PARTY(IES) CONCERNED									
	Proposal initiator	TC or SC secretariat	TC or SC P-members	TC or SC O-members	Category A liaisons	Office of CEO	WG/PT convenor	WG/PT experts	National bodies	TC or SC chairman
<b>Proposal stage</b>										
New work item proposal	*					●				
Copy of proposal		●				*				
Comments on the proposal		*				●				
Copies of proposal & ballot		○	●	○	○	* <sup>1)</sup>				○
Completed ballot			*			●				
Votes/comments		●				*				
Result of voting	●	*				■				
		●	○	○	○	* <sup>1)</sup>				○
<b>Preparatory stage</b>										
Working draft(s) (WD)							*	●		
Final working draft		●					*	○		
<b>Committee stage</b>										
Committee draft(s) (CD)		*				■				
Comments		○	●	○	○	* <sup>1)</sup>				○
Compilation of comments + proposal		○	*	☆	☆	●				○
Reaction to proposal		○	●	○	○	* <sup>1)</sup>				○
		○	☆			●				
<b>Enquiry stage</b>										
Committee Draft for Vote (CDV)		*				■				
Committee Draft for Vote & ballot		○	●	●	○	* <sup>1)</sup>				○
Votes/comments		○	*	☆		●				
Result of vote & proposal		●				*				○
		*				■				●
		○	●	○	○	* <sup>1)</sup>				○
Text for Final Draft International Standard		*				■				
<b>Approval stage</b>										
Final Draft International Standard & ballot		○			○	* <sup>1)</sup>			●	○
Completed ballot						●			*	
Final corrections to standard		*				■	○			○
Result of voting		○			○	* <sup>1)</sup>			○	○
<b>Publication stage</b>										
International Standard		○				* <sup>1)</sup>			○	○
* Sender of document ● Recipient for action ■ Recipient for registration action					1) For an SC, a copy is also sent to the chairman and secretariat of the TC for information  ○ Recipient for information  ☆ Optional action					

## Annex E (normative) Reporting of secretariats within IEC

DOCUMENTS	PARTY(IES) CONCERNED							
	WG/PT convenor	WG/PT experts	SC secretariat	TC secretariat	TC or SC P- and O- members and A- liaisons	Office of CEO	Committee of Action	President, Vice- President and Council members
<b>SC working group / project team</b>								
– meeting report	* —	○ —	○ —					
– progress report to SC meeting	* —	○ —	○ —					
<b>TC working group / project team</b>								
– meeting report	* —	○ —		○ —				
– progress report to TC meeting	* —	○ —		○ —				
<b>Subcommittee</b>								
– meeting report			* —	○ —	○ —	● —	* —	
– progress report to TC meeting			* —	○ —	○ —	● —	* —	
– report to Committee of Action			* <sup>1)</sup> —	* —	○ —	● —	* —	○ —
<b>Technical committee</b>								
– meeting report				* —	○ —	● —	* —	
– report to Committee of Action				* —		● —	* —	○ —
<b>Office of CEO</b>								
– progress report on the technical work			○ —	○ —	○ —	* —	○ —	○ —
<b>Committee of Action</b>								
– progress report on the technical work					○ —	● —	* —	○ —

<p>* Sender ● Recipient for redistribution action ○ Recipient for information</p>	<p>1) Only if the SC meets in isolation from the parent TC</p>
---	--

**Annex F**  
(normative)  
**IEC project stages**

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

## Annex G (normative) Numbering of documents

### G.1 Working documents

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

- a) a number, indicating the technical committee or subcommittee for which the document is primarily intended;
- b) the serial number of the document with respect to the committee;
- c) a mnemonic indicating the type of document <sup>3)</sup>.

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

The serial number is allocated by the Central Office at the time of circulation of the document, based on the register of all documents kept by the Central Office

### G.2 Allocation of project number

When a new project is registered by the Central Office (see ISO/IEC Directives, Part 1, 2.3.6), the latter allocates a number to the project. The number allocated remains the same for the ensuing WD, CD, CDV and DIS and for the published International Standard. The number allocated is purely a registration and reference number and has no meaning whatsoever in the sense of classification or chronological order. The number allocated to a withdrawn project or International Standard shall not be used again.

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

### G.3 Meeting documents

Meeting documents, as the name implies, are intended for use only at a meeting of a committee. They are usually duplicated on green paper to distinguish them from documents distributed to all National Committees through the Central Office.

<sup>3)</sup> List of mnemonics to indicate the type of document

AC	Administrative Circular	NP	New Work Item Proposal
CC	Compilation of Comments on CD	PAS	Publicly Available Specification
CD	Committee Draft for Comments	PW	Programme of Work
CDV	Committee Draft for Vote	Q	Questionnaire
CL	Circular Letter	QP	Question of Principle (CA only)
DA	Draft Agenda	R	Report
DC	Document for Comments	RCA	Report to Committee of Action
DIS	Draft International Standard	RM	Report on Meeting
DL	Decision List	RQ	Report on Questionnaire
DV	Draft for Voting (C/CA only)	RV	Report of Voting (C/CA only)
FDIS	Final Draft International Standard	RVC	Report of Voting on CDV
FMV	Four Months' Vote (IECQ CMC only)	RVD	Report of Voting on FDIS or PAS
INF	Document for Information	RVN	Report of Voting on NWP
ISH	Interpretation Sheet	RVP	Rep. of Voting on draft provisional specification
MCR	Maintenance Cycle Report	SPS	Strategy Policy Statement
MTG	Meeting Document	WD	Working Document (SB only)
NCC	National Committee Comment (C/CA only)	WG	Working Group Membership List (also for MT, PT)
NCP	National Committee Proposal		

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

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

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

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

#### EXAMPLES

**20(Paris/Secretariat)2**

**20(Paris/Belgium)3**

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

### **G.4 Documents from groups within a committee**

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

#### EXAMPLE

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

**Annex H**  
(normative)  
**Forms relating to standards development**

FORM NTC	Proposal for a new field of technical activity .....
FORM VTC	Vote on proposal for a new field of technical activity .....
FORM NSC	Decision to establish a subcommittee .....
FORM NP	New work item proposal .....
FORM RVN	Result of voting on new work item proposal .....
FORM CD	Cover page of committee draft .....
FORM CDV	Cover page of committee draft for vote .....
FORM CC	Compilation of comments on committee draft .....
FORM RVC	Result of voting on CDV .....
FORM CTS	Annex for compilation of comments .....
FORM FDIS	Cover page of final draft International Standard .....
FORM RVD	Report of voting on IEC/FDIS .....
FORM DTS	Cover page of draft Technical Specification .....
FORM DPAS	Cover page of draft Publicly Available Specification .....
FORM DTR	Cover page of draft Technical Report .....
FORM MCR	Maintenance cycle report .....
FORM RCA	Report to the Committee of Action .....
FORM SPS	Strategic Policy Statement .....





# [Document reference]

## PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY

Proposer	Date of circulation
----------	---------------------

A proposal for a new field of technical activity shall be submitted to the Central Office, which will assign it a reference number and process the proposal in accordance with ISO/IEC Directives, Part 1, 1.5. The proposer may be a National Committee of the IEC, a technical committee or subcommittee, the Committee of Action or one of its advisory committees, the General Secretary, a body responsible for managing a certification system operating under the auspices of IEC, or another international organization. Guidelines for proposing and justifying a new field of activity are given in the ISO/IEC Directives, Part 1, Annex C.

### The proposal (to be completed by the proposer)

**Subject** (the subject shall be described unambiguously and as concisely as possible)

**Scope** (the scope shall define precisely the limits of the proposed new field of activity and shall begin with "Standardization of ..." or "Standardization in the field of ...")

**Purpose and justification** (the justification shall endeavour to assess the economic and social advantages which would result from the adoption of International Standards in the proposed new field)

**Programme of work** (list of principal questions which the proposer wishes to be included within the limits given in the proposed scope, indicating what aspects of the subject should be dealt with, e.g. terminology, test methods, dimensions and tolerances, performance requirements, technical specifications, etc.)

**Survey of similar work undertaken in other bodies** (relevant documents to be considered: national standards or other normative documents)

**Liaison organizations** (list of organizations or external or internal bodies with which co-operation and liaison should be established)

**Other comments** (if any)

Name: ..... Signature of the proposer .....

**Comments of the General Secretary** (to be completed by the Central Office)

Signature .....



# [Document reference]

## VOTE ON PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY

Date of circulation	Closing date for voting
---------------------	-------------------------

Please send this form, duly completed, to the Central Office

<b>Subject</b>
----------------

1  **We agree to the subject proposed being dealt with by IEC**

2  We agree to the scope proposed

3  We suggest the scope be modified as follows:

4  **We do not agree to the subject proposed being dealt with by IEC**  
The reasons for our disagreement are the following:

If a new technical committee is established,

- 5  We are willing to undertake the secretariat (see 1.9 and annex D of part 1 of the ISO/IEC Directives)
- 6  We wish to participate actively in the work (P-member)
- 7  We wish to be kept informed of the progress of work (O-member)
- 8  We do not wish to be either P- or O-member

Standards, regulations and other relevant documentation existing in our country are listed hereafter, and where necessary, any remarks concerning their application are given.

National Committee:	Date:
	Signature: .....



# [Document reference]

## DECISION TO ESTABLISH A SUBCOMMITTEE

IEC/SC	Date of decision
--------	------------------

This form shall be completed by the secretary of the IEC parent technical committee concerned and be submitted to the Central Office, which will assign it a reference number and submit it to the Committee of Action for ratification of the decision.

<b>Title of subcommittee</b> (the title shall be unambiguous and as concise as possible)
<b>Scope</b> (the scope shall define precisely the limits of the proposed field of activity of the subcommittee within the defined scope of the parent technical committee and shall begin with "Standardization of ..." or "Standardization in the field of ...")
<b>Purpose and justification</b> (the justification shall explain why it is considered necessary to establish a subsidiary body within the parent technical committee, taking into account the additional resources that will be required to operate the subcommittee secretariat)
<b>Programme of work</b> (list of principal questions which the parent technical committee wishes to be included within the limits given in the proposed subcommittee scope, indicating what aspects of the subject should be dealt with, e.g. terminology, test methods, dimensions and tolerances, performance requirements, technical specifications, etc.)

<b>Survey of similar work undertaken in other bodies</b> (relevant documents to be considered: national standards or other normative documents)
<b>National Committees</b> (at least five P- or O-members of the parent technical committee, having expressed their intention to participate in the work of the subcommittee)
<b>Secretariat</b> (National Committee — one of those listed above — having confirmed its readiness to undertake the secretariat of the subcommittee)
<b>Liaison organizations</b> (list of organizations or external or internal bodies with which co-operation and liaison should be established)
<b>Other comments</b> (if any)
Name: ..... Signature of the TC Secretary .....



# [Document reference]

## NEW WORK ITEM PROPOSAL

Proposer	Date of proposal
TC/SC	Secretariat
Date of circulation	Closing date for voting

Classification according to IEC Directives Supplement, Table 1

A proposal for a new work item within the scope of an existing technical committee or subcommittee shall be submitted to the Central Office. The proposal will be distributed to the P-members of the technical committee or subcommittee for voting, and to the O-members for information. The proposer may be a National Committee of the IEC, the secretariat itself, another technical committee or subcommittee, an organization in liaison, the Committee of Action or one of the advisory committees, or the General Secretary. Guidelines for proposing and justifying a new work item are given in ISO/IEC Directives, Part 1, Annex C (see extract overleaf). **This form is not to be used for amendments or revisions to existing publications.**

**The proposal** (to be completed by the proposer)

<b>Title of proposal</b>		
<input type="checkbox"/> Standard	<input type="checkbox"/> Technical Specification	
<b>Scope</b> (as defined in ISO/IEC Directives, Part 2, 6.2.1)		
<b>Purpose and justification</b> , including the market relevance and relationship to Safety (Guide 104), EMC (Guide 107), Environmental aspects (Guide 109) and Quality assurance (Guide 102) . (attach a separate page as annex, if necessary)		
<b>Target date</b>	for first CD .....	for IS .....
Estimated number of meetings	Frequency of meetings per year	Date and place of first meeting: .....
Proposed working methods	<input type="checkbox"/> E-mail	<input type="checkbox"/> ftp
<b>Relevant documents to be considered</b>		
<b>Relationship of project to activities of other international bodies</b>		
<b>Liaison organizations</b>	<b>Need for coordination within ISO or IEC</b>	
<b>Preparatory work</b> Ensure that all copyright issues are identified. Check one of the two following boxes <input type="checkbox"/> A draft is attached for vote and comment <input type="checkbox"/> An outline is attached We nominate a project leader as follows in accordance with ISO/IEC Directives, Part 1, 2.3.4 (name, address, fax and e-mail):		
<b>Concerns known patented items</b> (see ISO/IEC Directives, Part 2) <input type="checkbox"/> yes <input type="checkbox"/> no If yes, provide full information as an annex	<b>Name and/or signature of the proposer</b>	

Comments and recommendations from the TC/SC officers corresponding Sector Board
1) Work allocation <input type="checkbox"/> Project team <input type="checkbox"/> New working group <input type="checkbox"/> Existing working group no:
2) Draft suitable for direct submission as <input type="checkbox"/> CD <input type="checkbox"/> CDV
3) General quality of the draft (conformity to ISO/IEC Directives, Part 2) <input type="checkbox"/> Little redrafting needed <input type="checkbox"/> Substantial redrafting needed <input type="checkbox"/> no draft (outline only)
4) Relationship with other activities In IEC  In other organizations
<b>Other remarks</b> <b>Remarks from the TC/SC officers</b>
<b>Remarks from the Sector Board</b>

#### Elements to be clarified when proposing a new work item

##### Title

Indicate the subject matter of the proposed new standard.

Indicate whether it is intended to prepare a standard, a technical report or an amendment to an existing standard.

##### Scope

Give a clear indication of the coverage of the proposed new work item and, if necessary for clarity, exclusions.

Indicate whether the subject proposed relates to one or more of the fields of safety, EMC, the environment or quality assurance.

##### Purpose and justification

Give details based on a critical study of the following elements 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?
- d) Timeliness of the standard 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 standard outdated? Is the proposed standard required as a basis for the future development of the technology in question?
- e) Urgency of the activity, considering the needs of the market (industry, consumers, trade, governments etc.) as well as other fields or organizations. Indicate target date and, when a series of standards is proposed, suggest priorities.
- f) The benefits to be gained by the implementation of the proposed standard; alternatively, the loss or disadvantage(s) if no standard is established within a reasonable time. Data such as product volume or value of trade should 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.

If a series of new work items is proposed, the purpose and 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.

##### Relevant documents

List any known relevant documents (such as standards and regulations), regardless of their source. When the proposer considers that an existing well-established document may be acceptable as a standard (with or without amendments), indicate this with appropriate justification and attach a copy to the proposal.

##### Cooperation and liaison

List relevant organizations or bodies with which cooperation and liaison should exist.

##### Preparatory work

Indicate the name of the project leader nominated by the proposer.



# [Document reference]

## RESULT OF VOTING ON NEW WORK ITEM PROPOSAL

IEC/TC or SC		Date of circulation
Allocated project number		
Reference number of the proposal	Title of the TC or SC concerned	
Title of proposal:		

**Voting results** — to be completed by the secretariat and sent to the Central Office for distribution (alternatively use the results sent by the Central Office and attach them to this document)

P-members having identified a market need and supporting the addition of the new work item to the programme of work	P-members having nominated or confirmed an expert	P-members not supporting the addition of the proposed new work item to the programme of work	P-members abstaining
			P-members not replying
Total:	Total:	Total:	Total:

- The proposal is supported by a simple majority of the P-members voting
  At least 25% of the P-members, but at least 4 P-members, approving the proposal have nominated or confirmed the name of an expert

Under the voting criteria for the acceptance of new work items (see ISO/IEC Directives, Part 1, 2.3.5)

- the proposal is not approved**  
 **the proposal is approved and the new work item has been introduced in the programme of work under the following title:**

(Titre F):

The project is assigned to	project team/working group no. ....	name of project leader .....	
Draft attached to form 4 will be	<input type="checkbox"/> distributed as a CD	<input type="checkbox"/> discussed (with comments annexed) on [Date]	<input type="checkbox"/> distributed as a CDV
Proposed target date for submission of a CD:	CDV:	FDIS:	IS:
The date and place of the first PT or WG meeting are: ..... or arrangements for electronic operations are annexed <input type="checkbox"/> .			
The list of experts nominated is annexed <input type="checkbox"/> .			
Proposals for further modifications are given in annex A <input type="checkbox"/> .			

Secretariat	Name or signature of secretary
-------------	--------------------------------



# [Document reference]

## COMMITTEE DRAFT (CD)

IEC/TC or SC:	Project number	
Title of TC/SC:	Date of circulation	Closing date for comments
Also of interest to the following committees	Supersedes document	
Functions concerned: <input type="checkbox"/> Safety <input type="checkbox"/> EMC <input type="checkbox"/> Environment <input type="checkbox"/> Quality assurance		
Secretary:	THIS DOCUMENT IS STILL UNDER STUDY AND SUBJECT TO CHANGE. IT SHOULD NOT BE USED FOR REFERENCE PURPOSES. RECIPIENTS OF THIS DOCUMENT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.	

Title:

(Titre) :

Introductory note



# [Document reference]

## COMMITTEE DRAFT FOR VOTE (CDV) PROJET DE COMITÉ POUR VOTE (CDV)

		Project number Numéro de projet	
IEC/TC or SC: CEI/CE ou SC:	Date of circulation Date de diffusion	Closing date for voting (Voting mandatory for P-members) Date de clôture du vote (Vote obligatoire pour les membres (P))	
Titre du CE/SC:		TC/SC Title:	
Secretary: Secrétaire:			
Also of interest to the following committees Intéresse également les comités suivants		Supersedes document Remplace le document	
Functions concerned Fonctions concernées <input type="checkbox"/> Safety Sécurité <input type="checkbox"/> EMC CEM <input type="checkbox"/> Environment Environnement <input type="checkbox"/> Quality assurance Assurance qualité			

CE DOCUMENT EST TOUJOURS À L'ÉTUDE ET SUSCEPTIBLE DE MODIFICATION. IL NE PEUT SERVIR DE RÉFÉRENCE.

LES RÉCIPIENDAIRES DU PRÉSENT DOCUMENT SONT INVITÉS À PRÉSENTER, AVEC LEURS OBSERVATIONS, LA NOTIFICATION DES DROITS DE PROPRIÉTÉ DONT ILS AURAIENT ÉVENTUELLEMENT CONNAISSANCE ET À FOURNIR UNE DOCUMENTATION EXPLICATIVE.

THIS DOCUMENT IS STILL UNDER STUDY AND SUBJECT TO CHANGE. IT SHOULD NOT BE USED FOR REFERENCE PURPOSES.

RECIPIENTS OF THIS DOCUMENT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

Titre :

Title :

Note d'introduction

Introductory note





# [Document reference]

## COMPILATION OF COMMENTS ON COMMITTEE DRAFT

Project number:	Reference number of the CD
IEC/TC or SC	Date of circulation

Title of the TC or SC:
------------------------

<b>Title of the committee draft:</b>
--------------------------------------

The above-mentioned document was distributed to National Committees with a request that comments be submitted
---

<b>Comments received</b> – see annex <sup>1)</sup>
--

<p><b>DECISION OF THE CHAIRMAN</b> (in cooperation with the secretariat)</p> <p>a <input type="checkbox"/> A revised committee draft will be distributed as a committee draft for vote (CDV) by (date) .....</p> <p>b <input type="checkbox"/> A revised committee draft will be distributed for comment by (date) .....</p> <p>c <input type="checkbox"/> The committee draft and comments will be discussed at the next meeting (date) .....</p> <p>NOTE In the case of a proposal <i>a</i> or <i>b</i> made by the chairman, P-members objecting to such a proposal shall inform the Central Office with copy to the secretary in writing within 2 months of the circulation of this compilation (see ISO/IEC Directives, Part 1, 2.5.3).</p>
--

Name or signature of the Secretary	Name or signature of the Chairman
------------------------------------	-----------------------------------

<sup>1)</sup> to be collated on Form 8C and annexed.



# [Document reference]

## RESULT OF VOTING ON CDV

Project number:	Reference number of the CDV
IEC/TC or SC	Date of circulation

Title of the TC or SC concerned
---------------------------------

<b>Title of the committee draft:</b>
--------------------------------------

The above-mentioned document was distributed to National Committees with a request that voting take place for approval for circulation as an FDIS (or publication as a Technical Specification or Report)

### Voting results

see printout attached

### Comments received – see annex <sup>1)</sup>

#### In the case that the approval criteria for acceptance have been met,

- a  The committee draft for vote (CDV) will be registered as an FDIS by (date) .....
- b  The committee draft for vote (CDV) will be published as a Technical Specification  or Report  by (date) .....

**DECISION OF THE CHAIRMAN** (in cooperation with the secretariat), in the case that the approval criteria for acceptance have not been met or in the case of a draft Technical Specification or Report

- c  A revised committee draft for vote (CDV) will be distributed by (date) .....
- d  A revised committee draft (CD) will be distributed by (date) .....
- e  The committee draft for vote (CDV) and comments will be discussed at the next meeting (date) .....

NOTE — In the case of a proposal *b*, *c* or *d* made by the chairman, P-members objecting to such a proposal shall inform the Central Office with copy to the secretary in writing within 2 months of the circulation of this compilation (see ISO/IEC Directives, Part 1, 2.6.5).

Name or signature of the Secretary	Name or signature of the Chairman
------------------------------------	-----------------------------------

<sup>1)</sup> to be collated on Form 8C and annexed.

Annex

Date	Document
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National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted



## [Document reference]

**FINAL DRAFT INTERNATIONAL STANDARD  
PROJET FINAL DE NORME INTERNATIONALE**

		Project number Numéro de projet	
		IEC/TC or SC CEI/CE ou SC	Secretariat / Secrétariat
<input type="checkbox"/>	Submitted for parallel voting in CENELEC Soumis au vote parallèle au CENELEC	Distributed on / Diffusé le	Voting terminates on / Vote clos le
Also of interest to the following committees Intéresse également les comités suivants		Supersedes document Remplace le document	
Functions concerned Fonctions concernées			
<input type="checkbox"/>	Safety Sécurité	<input type="checkbox"/>	EMC CEM
<input type="checkbox"/>		<input type="checkbox"/>	Environment Environnement
<input type="checkbox"/>		<input type="checkbox"/>	Quality assurance Assurance de la qualité

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

Title

Titre

THIS DOCUMENT IS A DRAFT DISTRIBUTED FOR APPROVAL. IT MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH. IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, FINAL DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

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OUTRE LE FAIT D'ÊTRE EXAMINÉS POUR ÉTABLIR S'ILS SONT ACCEPTABLES À DES FINS INDUSTRIELLES, TECHNOLOGIQUES ET COMMERCIALES, AINSI QUE DU POINT DE VUE DES UTILISATEURS, LES PROJETS FINAUX DE NORMES INTERNATIONALES DOIVENT PARFOIS ÊTRE EXAMINÉS EN VUE DE LEUR POSSIBILITÉ DE DEVENIR DES NORMES POUVANT SERVIR DE RÉFÉRENCE DANS LES RÈGLEMENTATIONS NATIONALES.

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**REPORT OF VOTING ON AN FDIS  
RAPPORT DE VOTE SUR UN FDIS**

Project number Numéro de projet	Reference of FDIS Référence du FDIS
Date	IEC/TC or SC / CEI/CE ou SC

**Résultats du vote**

Le document mentionné en annexe A a été diffusé aux Comités nationaux à la date indiquée, avec prière de faire savoir au Bureau Central dans les deux mois si les Comités nationaux étaient favorables à la publication du FDIS comme Norme internationale.

Les résultats énumérés dans l'annexe A ont été reçus et les raisons de nature technique appuyant des votes négatifs éventuels sont données en annexe B.

**Result of the voting**

The document mentioned in annex A was distributed to National Committees on the date shown, with a request that the Central Office be informed within two months whether or not National Committees were in favour of publication of the FDIS as an International Standard.

The replies listed in annex A have been received and technical reasons for negative votes are given in annex B.



# [Document reference]

## MAINTENANCE CYCLE REPORT

IEC/TC or SC	Date of circulation
Title of the TC or SC concerned	
Publication number: <b>IEC</b>	Original publication date:

**Title of publication:**

The Maintenance Team makes the following recommendation for the above publication (check one of the alternatives)

**The publication is to be withdrawn**  
**Reasons for the withdrawal:**

**Date of withdrawal\*:**  
 National Committees objecting to this decision should inform Central Office within two months.

**The publication is reconfirmed and the next review will take place in** .  
**The maintenance result date for the publication is** .

**The publication is to be revised and will be included in the work programme with the following title:**

(Titre F):

**The publication is to be amended and will be included in the work programme**

The project is assigned to Maintenance Team: .....	Name, address and e-mail of project leader .....
---	--

**Project plan:**

Proposed target date for submission of a	CD:	CDV:	FDIS:	<b>Date of publication as an IS:</b>
--	-----	------	-------	--------------------------------------

The date and place of the next MT meeting are: or arrangements for electronic operations are annexed .

National Committees objecting to this recommendation should inform the TC/SC secretary, with copy to the Central Office, within two months, otherwise the recommendation will be considered as being approved.

Secretariat	Name or signature of secretary
-------------	--------------------------------

\* normally the maintenance result date given in the publication or approved by the Committee of Action



# [Document reference]

## DRAFT TECHNICAL SPECIFICATION

Project number	
IEC/TC or SC	Secretariat
Distributed on	Voting terminates on
Also of interest to the following committees	Supersedes document
Functions concerned	
<input type="checkbox"/> Safety	<input type="checkbox"/> EMC
<input type="checkbox"/> Environment	<input type="checkbox"/> Quality assurance

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Title



# [Document reference]

## DRAFT PUBLICLY AVAILABLE SPECIFICATION

Project number	
IEC/TC or SC	Secretariat
Distributed on	Voting terminates on

Also of interest to the following committees	Supersedes document
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Title





# [Document reference]

## DRAFT TECHNICAL REPORT

Project number	
IEC/TC or SC	Secretariat
Distributed on	Voting terminates on
Also of interest to the following committees	Supersedes document
Functions concerned	
<input type="checkbox"/> Safety	<input type="checkbox"/> EMC
<input type="checkbox"/> Environment	<input type="checkbox"/> Quality assurance

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Title



# [Document reference]

## STRATEGIC POLICY STATEMENT

IEC/TC or SC	Secretariat	Date
--------------	-------------	------

Please ensure this form is annexed to the Report to the Committee of Action if it has been prepared during a meeting, or sent to the Central Office promptly after its contents have been agreed by the committee.

Title of TC

### A. Background

### B. Environment

#### B.1 Business environment

#### B.2 Market demand

#### B.3 Trends in technology and trade

#### B.4 Ecological environment

### C. Work programme

#### Current work

#### C.2 Resources/infrastructure needed

### D. Future work

### E. Maintenance cycle

Publication no.	Date of publication	Review date	Maintenance result date	Responsibility (Maintenance Team)

Name or signature of the secretary

## Guidelines for the preparation of Strategic Policy Statements

### Title of TC

Titles of the parent TC and SCs (if appropriate) should be included in this section.

### A – Background

TC and SC scopes should systematically be reproduced in this section, together with the list of current and future working groups. A short history of the setting-up of the TC/SC should be noted. The number of publications issued and the number of projects in development (differentiating the maintenance work and genuine new work) should be included together with the number and the list of participating countries (P-members) and the list of active liaisons with IEC TCs and other international organizations.

### B – Environment

This section is the more problematic one and it should be more market and systems oriented. It is therefore suggested to subdivide it as follows:

**B.1 Business environment:** Appreciation of the current most important technical, industrial and economic indicators in the sphere of activity of the TC/SC. This section should distinguish between those aspects of the business environment that will influence the work of the TC but over which the TC has little or no control (i.e. the **external** environment) and those aspects that the TC may well be able to influence to a significant extent (i.e. the **internal** environment).

**B.2 Market demand:** This paragraph should include the answers to the following questions:

- Who are the customers of the issued and future standards developed by the TC/SC?
- Are they actively represented in the TC/SC?
- Are there any other interested and affected parties that should be represented in the structure of the TC?
- Are there any difficulties in obtaining the participation of any of these parties?
- Are the IEC standards widely used at the regional/national level?
- Which are the competing standards developed by other organizations?
- Is it an area where only maintenance of current standards is necessary or is it a developing standardization area?
- Which horizontal standards can the TC/SC not apply and why?

**B.3 Trends in technology and trade:** Impact on the future work of the TC/SC.

**B.4 Natural environment:** Environmental impact (resource consumption, energy consumption, pollution, waste generation...) over the whole life of the product from materials procurement to end of life.

### C – Work programme

This should outline a clear plan of action, including timescales, resources needed, etc. in order to meet in a timely manner the market demands identified in the previous section. It should be divided as follows:

**C.1 Current work:** Plan for meetings of the TC/SC – List of work priorities – Plan and objectives of WG meetings for the next 2 years – number of meeting days and location planned for these meetings – Number of working hours needed for each of the WG members (in order to help industry to determine an accurate budget for the experts) – number of documents to be discussed – additional expertise that needs to be recruited, and where this might be found.

### C.2 Resources / infrastructure needed

- Invitations for TC meetings;
- Invitations WG/Project leader team meetings;
- Administrative support;
- Liaisons needed;
- Editing committee.

### D – Future work

A longer term view – 5 to 10 years – of the TC work – Appreciation of the activity (growing, stable, decreasing) of the TC – structural rearrangements (e.g. creation, merging or disbanding of SCs, or merging with another TC) considered necessary in the future to maintain efficiency as market demands are met, or as market conditions change – New expertise needed in a particular area – Details of stage 0 projects.

### E – Maintenance cycle

Include in this section a list of all publications for which your committee is responsible, together with the date of publication of the current edition and amendments, but excluding those projects in the current work programme. For each publication, indicate the review and maintenance result dates. Finally indicate the designation of the maintenance team.



# [Document reference]

## REPORT TO THE COMMITTEE OF ACTION

IEC/TC or SC	Secretariat	Date
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Please ensure this form is sent to the Central Office as soon as possible following the meeting, either by handing it to the Central Office representative or by sending it by telefax or airmail.

Title of TC
Title of SCs

Meeting dates	Place and country
Number of delegates	Number of countries
Chairman of the meeting (name and country)	

<b>A. Questions of principle</b> on which a decision is required
--

<b>B. New work items</b> , and drafts approved for voting as FDIS: see programme of work attached (annex A), as updated during the meeting.
---

<b>C. Brief statement of the results achieved</b> during the meeting (other than those included in A and B), such as setting-up or disbanding of WGs, changes to the tasks of WGs.
--

<b>D. Strategic policy statement</b>
<input type="checkbox"/> not modified <input type="checkbox"/> attached <input type="checkbox"/> expected by .....

<p><b>E. Approximate date at which the committee considers its next meeting should be held</b>, subject to the understanding that the secretariat must submit a formal request to the Central Office at least six months before the date proposed for the meeting.</p> <p><i>It is important to note that isolated meetings should, as far as possible, not be held too closely to or overlap with a General Meeting expected to take place between mid-September and mid-October each year (see Administrative Circular No. 282/89).</i></p>
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Name or signature of the secretary
------------------------------------

# Annex I (normative)

## Implementation of the ISO/IEC Directives for the work on the International Electrotechnical Vocabulary (IEV)

### I.1 Definitions

The following terms, specific to the terminology work, have been taken from the standards prepared by ISO TC 37, with some interpretations and modifications. In particular the term “special language” in 3.1 has been replaced by “subject field”.

#### I.1.1

##### **terminology (1)**

set of designations belonging to a particular subject field

[ISO 1087-1:2000, 3.5.1 MOD]

NOTE In ISO 704 and in the present document “terminology” used in the singular and without an article (or as an adjective) is used for “terminology discipline”.

#### I.1.2

##### **terminology (2)**

##### **terminology science**

science studying the structure, formation, development, usage and management of terminologies(1) in various subject fields

[ISO 1082-1:2000, 3.5.2]

#### I.1.3

##### **terminological dictionary**

##### **technical dictionary**

dictionary of terminological entries presenting information related to concepts or designations from one or more specific subject fields

[ISO 1087-1:2000, 3.7.2]

#### I.1.4

##### **vocabulary**

terminological dictionary which contains designations and definitions from one or more subject fields

#### I.1.5

##### **glossary**

terminological dictionary which contains a list of designations and definitions from a subject field with equivalents in one or more languages

NOTE In English common language usage “glossary” can refer to a unilingual list of designations and definitions in a particular subject field.

[ISO 1087-1:2000, 3.7.4]

#### I.1.6

##### **concept**

unit of knowledge created by a unique combination of characteristics

[ISO 1087-1:2000, 3.2.1]

#### I.1.7

##### **designation**

representation of a concept by a sign that denotes it

[ISO 1087-1:2000, 3.4.1]

NOTE In terminology work, three types of designations are distinguished: symbols, appellations and terms.

### **I.1.8**

#### **terminological entry**

part of a terminological data collection which contains the terminological data related to one concept

[ISO 1087-1:2000, 3.8.2]

NOTE In the present document we will use the abbreviated form "entry".

### **I.1.9**

#### **term**

verbal designation of a general concept in a specific subject field

[ISO 1087-1:2000, 3.4.3]

### **I.1.10**

#### **entry term**

term which heads a terminological entry

[ISO 1087-1:2000, 3.8.4]

### **I.1.11**

#### **preferred term**

term evaluated in a term acceptability rating as the primary term for a given concept

[ISO 1087-1:2000, 3.4.15]

NOTE In the note to 3.4.14, ISO 1087-1 mentions that the following ratings are common: preferred, admitted, deprecated; definitions of admitted and deprecated are given in 3.4.16 and 3.4.17.

In the IEV, there is only one preferred term, which is also the entry term; the synonyms are admitted, or deprecated or obsolete.

### **I.1.12**

#### **abbreviation**

designation formed by omitting words or letters from a longer form and designating the same concept

[ISO 1087-1:2000, 3.4.9]

NOTE ISO 1087-1 mentions three types of abbreviations:

- acronym: abbreviation made up of the initial letters of the components of the full form of the designation or from syllables of the full form of the designation and pronounced syllabically [ISO 1087-1:2000, 3.4.10]
- initialism: abbreviation made up of the initial letters of the components of the full form of the designation and pronounced letter by letter [ISO 1087-1:2000, 3.4.11]
- clipped term: abbreviation formed by truncating a part of a simple term [ISO 1087-1:2000, 3.4.12]

### **I.1.13**

#### **definition**

representation of a concept by a descriptive statement which serves to differentiate it from related concepts

[ISO 1087-1:2000, 3.3.1]

### **I.1.14**

#### **monosemy**

relation between designations and concepts in a given language in which one designation relates to one concept

[ISO 1087-1:2000, 3.4.23]

### **I.1.15**

#### **polysemy**

relation between designations and concepts in a given language in which one designation represents two or more concepts sharing certain characteristics

[ISO 1087-1:2000, 3.4.24]

**I.1.16****homonymy**

relation between designations and concepts in a given language in which one designation represents two or more unrelated concepts

[ISO 1087-1:2000, 3.4.25]

**I.1.17****synonymy**

relation between or among terms in a given language representing the same concept

[ISO 1087-1:2000, 3.4.19]

NOTE For ISO 1087-1, terms which are interchangeable in all contexts, are called “synonyms”; if they are interchangeable only in some contexts, they are called “quasi-synonyms”. The present document does not make the distinction: terms (and abbreviations) that are interchangeable with the entry term, possibly with some restrictions (specific use of a term, national variant) are considered and treated as synonyms of the entry term.

**I.2 Drafting and presentation of the International Electrotechnical Vocabulary****I.2.1 General****I.2.1.1 Introduction**

This clause has been prepared on the basis of the experience acquired in the preparation of the International Electrotechnical Vocabulary (IEV) by IEC/TC 1: Terminology, and of the work of ISO/TC 37: Terminology (Principles and Co-ordination) in which experts of TC 1 participated.

**I.2.1.2 Aim of the IEV**

The aim of the IEV is to provide precise, brief and correct definitions of internationally accepted concepts in the field of electrotechnology, electronics and telecommunications, and to name the terms by which these defined concepts shall be known.

It is “standardization-oriented”, that is intended to help the standards writer to prepare standards, and to help the standards users to understand and implement them. It is also intended to be of help to the translators of normative (and more generally technical) texts.

It is not intended to cover all the terms used in the various IEC standards, but is rather a general purpose vocabulary, giving:

- the basic and reference terms to be used by the other technical committees;
- for each “product” or “family product” covered by other technical committees, a limited number of terms sufficient to give the general (or system) engineer an overview of the techniques used by these technical committees (these TCs may in addition prepare specialized terminology for their own use – see I.3.7).

Last but not least, the IEV is not meant to be a treatise on electrical engineering. This should be borne in mind when considering the degree of precision provided by the definitions.

**I.2.1.3 Contents and structure of the IEV**

Within this general framework, the IEV consists of a number – about 18 000 for the time being – of terminological entries, each of these entries corresponding to a concept, and comprising the following elements (see I.2.2):

- an entry number (see I.2.1.8);
- possibly a letter symbol (or letter symbols) representing the concept (see I.2.2.1);

then, for each of the **principal** (see I.2.1.6) **IEV languages**:

- the term designating the concept (see I.2.2.3), called “entry term”, possibly accompanied by synonyms and abbreviations;
- the definition of the concept (see I.2.2.4);
- possibly the source (see I.2.2.5);
- possibly notes to the definition (see I.2.2.6).

and finally, for each of the **additional** (see I.2.1.6) **IEV languages**, the term (and possible synonyms and abbreviations) alone.

These entries are distributed among about 80 parts, each part corresponding to a given field of electrotechnology.

Examples:

**Part 161** (IEC 60050-161) : Electromagnetic compatibility  
**Part 411** (IEC 60050-411) : Rotating machines

NOTE The term “part” has recently replaced the term “chapter”, for reasons of consistency with the overall classification scheme of the IEC Publications.

The parts of the IEV are distributed into classes, the number of each class being the first digit of the number of the relevant part. The numbering of the classes is defined in the following table.

Class number	Class of concepts
1	General concepts
2	Materials
3	Measurement, automatic control
4	Electric equipment
5	Electronic equipment
6	Generation, transmission and distribution of energy
7	Telecommunications
8	Particular applications

Each part is subdivided into sections. The sections within the parts, and the entries within the sections are organized in a systematic order (see I.2.1.7).

The IEV is developed under the responsibility of TC 1, in co-operation with the other IEC technical committees, each part being prepared by a project team or working group, either within TC 1 or within another IEC technical committee (see I.3.1).

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

Example :

IEC 60050-121:1998 – Electromagnetism

which constitutes Part 121 of the IEV, and belongs to class 1 “General concepts”.

In addition the material contained in the various parts is used to compile a dictionary (IEC Electricity, Electronics and Telecommunications Multilingual Dictionary), the last paper edition of which dating back to 1992, and now available on CD-ROM.



The entries (and their elements) shall thus be constituted in such a way that they can be accessed and understood independently of their context in a given part.

#### I.2.1.4 Concepts, definitions and terms

The preparation of each part of the IEV follows – at least theoretically, the three phases described below being often intermingled and iterative – a concept-oriented approach (see in particular ISO 704):

- the task starts with a study of the concepts needed in the subject field of the part, and of their organization in a concept system;
- a separate definition is then prepared for each concept;
- and finally each concept is designated in each language by one term (entry term); the entry term may be accompanied by synonyms, abbreviations and by letter symbols (for quantities or units).

The practical process is described in I.3.2, and in particular in I.3.2.2, for the preparatory stage.

One of the main concerns during this process is to maintain the overall consistency of the IEV:

- unnecessary divergences between definitions of the same concept in different parts shall be avoided;
- the polysemy and homonymy cases shall at least be detected and if possible dealt with appropriately at the earliest stage in the preparation of each part.

**Polysemy:** It may happen that, in a given IEV Part, several closely related concepts are designated by the same term, in one or several IEV languages: these concepts shall be placed in different entries, even if the appropriate definitions differ from each other by a few words only, and even if corresponding terms do not exist in every IEV language (as defined in I.2.1.6).

Example :

<p>101-11-34  <b>champ</b> (1)            état d'un domaine déterminé dans lequel une grandeur ou un ensemble de grandeurs liées entre elles existe en chaque point et dépend de la position du point  <b>field</b>            state of a region in which a quantity or an interrelated set of quantities exists at each point and depends on the position of the point</p>
<p>101-11-35  <b>champ</b> (2)            grandeur scalaire, vectorielle ou tensorielle, qui existe en chaque point d'un domaine déterminé et qui dépend de la position de ce point  <b>field quantity</b>            scalar, vector or tensor quantity, existing at each point of a defined region and depending on the position of the point</p>

The example shows that the polysemy can be language dependent. Note also that an attribute "Occurrence number" (within the Part) is added after the term (see I.2.2.3.6.2).

#### I.2.1.5 Basic terminology

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

Terms relating to quantities and units are to be found in IEC 27, IEC 60050-111, IEC 60050-121 and in ISO 31-0. IEC 60050-111 and ISO 31-0, Annex A covers in particular the use of some special terms like:

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

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

Terms relating to measurements and measuring instruments can be found in the International Vocabulary of basic and general terms in Metrology (VIM) and in IEC 60050-301, 302, 303.

#### I.2.1.6 Languages

The terms and definitions corresponding to the concepts are given in the three IEC languages, that is French, English and Russian, referred to as the **principal IEV languages**.

The terms alone are also given in the **additional IEV languages** (Arabic, German, Spanish, Italian, Japanese, Polish, Portuguese and Swedish at the time of preparation of this document).

Both the principal and the additional IEV languages are referred to, in what follows, as **IEV languages**.

#### I.2.1.7 Classification

In the IEV, concepts shall, as far as reasonably possible, be set out in a logical order according to their interdependence, in sections which themselves form the elements of the parts.

Concepts applying to the same phenomenon or class of phenomena, or to the same technique or the same equipment, shall normally be classified in the same section, leading from the general to the specific, from the whole to the elements.

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

#### I.2.1.8 Numbering system

The numbering system used in the IEV parts is derived from that already used in the first two editions.

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

- **Part\_N°**: number of the part (formerly “chapter”) : three digits, the first one being the class number (see [ISO/IEC Directives, Part 2, 2001, Table 1](#));
- **Section\_N°**: number of the section : two digits (01 to 99) <sup>4)</sup>;

---

4) Note - In the past some of the existing “Chapters” (now known as “Parts”) had been subdivided into “parts”, each comprising a number of sections, as shown in the following example, taken from IEV 393 “Nuclear instrumentation: Physical phenomena and basic concepts”:

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

These “parts” will now be named “sub-chapters”, to avoid possible confusion with the “parts” (formerly “chapters”); however such a subdivision is deprecated for the future “chapters”.

- **Concept\_N°:** number of the concept in the section: two digits (01 to 99).

In each part, the sections are numbered from 01 (or, in the case of a revision – see I.3.3 – from another suitable starting number) to 99 consecutively, and in each section the terms are numbered from 01 to 99 consecutively.

Example:

151-13-82

## I.2.2 Elements of the entries

### I.2.2.1 Entry number

See I.2.1.8

### I.2.2.2 Letter symbol(s)

A letter symbol (or a limited number of letter symbols) may be used to designate the concept. This (these) symbol(s) shall be in accordance with the relevant standards, in particular with the IEC 60027 and ISO 31 series. It is (they are) printed on a separate line following that of the reference number, preceded by the prefix “symb. : ”.

The letter symbols for quantities are printed in italics, with the character font and the settings specified for the variables in paragraph 3.1.3 of the “Guide on the use of information tools in the IEC”, whereas the letter symbols for units are printed in upright characters, in the font used for the current text of the IEV terms and definitions.

The letter symbols are independent of the language, and shall not be repeated in the terms corresponding to the principal or the additional IEV languages.

Examples:

131-11-22  
symb. : *R*  
**résistance**, *f*  
pour un élément résistif, quotient de la tension *u* par le courant *i*  
**resistance**  
for a resistive element, quotient of voltage *u* by current *i*

111-11-15  
symb. : m  
**mètre**, m  
unité SI de longueur...  
**metre**  
SI unit of length...

## I.2.2.3 Terms

### I.2.2.3.1 General

As mentioned in I.2.1.3, each concept is designated in each IEV language by one term (entry term), possibly followed by synonyms (see I.2.2.3.4) and abbreviations (see I.2.2.3.4.4). These terms may comprise one or several words, and may be followed by optional attributes, corresponding to specific features of the term, placed immediately after the term, in the following order:

- specific use of the term (see I.2.2.3.6.1);
- occurrence number (see I.2.2.3.6.2);

- national variant (see I.2.2.3.4.2 and I.2.2.3.6.3);
- grammatical indication (see I.2.2.3.6.4);
- abbreviations (see I.2.2.3.6.5);
- deprecated or obsolete synonyms (see I.2.2.3.6.6).

### **I.2.2.3.2 Choice or formation of terms**

In general, it is recommended to apply the rules given in the [ISO/IEC Directives, Part 2](#) and in ISO 704 “Terminology work – Principles and methods”.

Ideally, the objective of the term-concept assignment in a given technical domain is to ensure a one-to-one correspondence between term and concept (monosemy). However cases of homonymy, synonymy or polysemy are often unavoidable, but shall be kept to a minimum, and duly indicated.

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

A term has to be accepted and used by the specialists in the domain covered by the terminology. Therefore well-established and widely used terms, even if etymologically questionable, should be changed only if there are very good reasons (e.g. risk of confusion or contradiction). However trade names (brand names) and archaic and colloquial terms shall be avoided.

For the creation of new terms (or for the revision of existing terminologies), the following principles should be followed (see in particular ISO 704, 7.3):

- the term is a label used to designate the concept (as described by the definition) in a concise and unambiguous (that is avoiding as far as possible polysemy and homonymy) manner. It should of course evoke the concept, but is not intended to replace the definition;
- consistency: the terminology in any subject field should not be an arbitrary collection of terms, but rather a coherent terminological system corresponding to the concept system;
- appropriateness: the terms proposed should adhere to familiar and established patterns of meaning within a language community. Term formation that cause confusion shall be avoided. Terms shall be as neutral as possible and avoid connotations, especially negative ones;
- derivability: terms that allow for the formation of derivatives should be favoured;
- linguistic correctness vis-à-vis the language considered;
- preference should be given to terms in native language rather than to terms borrowed from other languages.

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

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

### **I.2.2.3.3 Absence of an appropriate term**

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

### **I.2.2.3.4 Synonyms**

#### **I.2.2.3.4.1 Use**

According to the note to definition I.1.17, terms (and abbreviations) that are interchangeable with the entry term, possibly with some restrictions (specific use of a term, national variant) are considered and treated as synonyms.

The use of synonyms shall be kept to a minimum <sup>5)</sup>. An abundance of synonyms in a given entry is very often the sign that this entry covers in fact several (closely related) concepts.

For the principal IEC languages, the synonyms shall be placed on successive lines, following the line of the entry term, and in the order of preference (see I.2.3).

For the additional IEC languages, the synonyms shall be placed on the same line as the entry term, separated by semicolons, and in the order of preference (see I.2.3).

The number of synonyms may be different for each language.

#### **I.2.2.3.4.2 National variants**

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

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

A variant, which is not used in all the countries, shall be followed by a symbol representing the country or countries in which the variant is used (see I.2.2.3.6.3).

Example:

<b>grounding inductor</b> US
------------------------------

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

#### **I.2.2.3.4.3 Deprecated or obsolete synonyms**

The inclusion of deprecated or obsolete synonyms in the IEC should be avoided. Such synonyms shall be indicated by the attribute “deprecated” or “obsolete” (see I.2.2.3.6.6).

#### **I.2.2.3.4.4 Abbreviations**

Abbreviations should be given only when they are of current usage for a given concept. They shall be treated as synonyms (see I.2.2.3.4)

### **I.2.2.3.5 Presentation of terms and synonyms**

#### **I.2.2.3.5.1 Letter form and printing of terms and synonyms**

Terms and synonyms shall be printed as they would appear in the middle of a sentence, i.e. letters normally appearing in lower case shall remain in lower case (this is applicable in particular to the first letter of the term). The term or synonym shall not be followed by a full stop, unless this forms part of the term.

In the clause “Terms and definitions” of an IEC document (see I.2.3):

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<sup>5)</sup> However one should bear in mind that the IEC is also intended to constitute a help for translators (see I.2.1.2) who will find in it the various terms (even if their use are deprecated) under which the concept might be known.

- Terms and synonyms shall be printed in bold-face type (except for the deprecated or obsolete synonyms, which are printed in lightface type) of the same size for all IEV languages;
- attributes relating to the terms and synonyms shall be printed in lightface type.

For the indexes, see I.2.4.

#### I.2.2.3.5.2 Grammatical form

Terms and synonyms shall be given in their basic grammatical form, i.e. nouns and adjectives in the nominative (when applicable in the language concerned) and verbs in the infinitive (without the word “to” in English).

#### I.2.2.3.5.3 Multi-word terms

When a term is composed of several separate words, it shall be given in the clause "Terms and definitions" of an IEV document in the usual order of words in the language to which it belongs.

In the alphabetical index however, such a term should also appear under one or several of its most significant words, considered as key words (see I.2.4).

#### I.2.2.3.5.4 Parts that may be omitted

There may be parts of a term that may be omitted, either in the field under consideration or in an appropriate context. Such parts of a term are printed in the same face (lightface or boldface type) as the rest of the term, and placed between parentheses.

Example: (electromagnetic) emission

It is to be noted that, unlike the attributes, these parts are to be considered as part of the term. In particular these terms shall appear in their full form when they are used in a definition or in a note.

#### I.2.2.3.6 Attributes to the terms

The attributes are printed in lightface type on the same line as the corresponding term, and follow this term.

A table giving the list of attributes, with examples, is given in I.4.

##### I.2.2.3.6.1 Specific use of a term

In some cases, it is desirable to add an attribute to a term in order to specify or restrict its use or its field of application.

Examples: rang (d'un harmonique)

depolarisation (in electrophysiology)

transmission line (in electric power systems)

This attribute is placed between parentheses and directly follows the term.

### I.2.2.3.6.2 Occurrence number

The number of the occurrence of the term in the part (in the case of polysemy within a given part) follows the term or the attribute corresponding to the “specific use of the term” (if any), without comma, and is printed between parentheses.

### I.2.2.3.6.3 National variant

The variant is indicated by the country code(s), taken from given by ISO 3166, representing the country (or countries) in which the variant is used (see ISO 10241, 6.2.3); it is placed after the term or the previous attribute, if any, and separated from it by a space.

### I.2.2.3.6.4 Grammatical information

The word class (noun, adjective, qualifier or verb), gender, number, as well as the verb features (transitive, intransitive), of the terms and synonyms shall be indicated, when applicable (see I.4), in accordance with ISO 10241, 6.2.9. It is preceded by a comma.

Examples:

harmonique, m

transient, noun

transient, adj

### I.2.2.3.6.5 Abbreviations

The abbreviations are followed by the indication “abbreviation”, placed between parentheses:

Example:

ESD (abbreviation)

### I.2.2.3.6.6 Deprecated and obsolete synonyms

Deprecated and obsolete synonyms shall be indicated by the appropriate attribute in the language concerned, placed in parentheses, the term being then printed in lightface type.

Examples:

facteur de distorsion, m (déconseillé)

phase conductor (deprecated)

If a term is deprecated when used in the sense defined, the attribute “deprecated” shall be replaced by the attribute “deprecated in this sense”:

Example :

equipotential reference chassis  
frame (deprecated in this sense)

## I.2.2.4 Definitions

### I.2.2.4.1 Characteristics expressed

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

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

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

Negative definitions should be avoided: a definition shall describe what a concept is, not what it is not. However, when the absence or the non-existence of a characteristic is essential to the understanding of a concept, a negative form is required.

Example :

<b>nonconformity</b> nonfulfilment of a specified requirement
--

#### **I.2.2.4.2 Drafting**

The definition shall have the same grammatical form as the term. Thus, to define a verb, a verb shall be used; to define a noun in the singular, the singular shall be used.

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

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

The term designating the concept shall not be repeated in the definition, and in particular not at the beginning.

A definition shall remain comprehensible even when separated from the context (part, section, neighbouring entries) in which it appears. In particular a definition shall not rely on general explanations (e. g. in a foreword to the part or section in which the concept is placed).

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

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

Circularities shall be avoided.

A concept shall not be defined only by a figure or a formula, but in some cases a figure or a formula may help to make clear a simplified definition.

#### **I.2.2.4.3 Terms used in definitions**

Technical terms appearing in a definition should be defined either in the IEV itself, or in another authoritative publication. If the term comprises, in the same document, a part that may be omitted, marked by parentheses (see I.2.2.3.5.4), the term shall be repeated in its full form, including, if any, the part that may be omitted, without the parentheses.

When a term of the IEV is used in a definition, the entry number of the concept which it designates may be added (at least for its first occurrence in the definition) between parentheses. When a term is defined in the same part, it is exceptionally possible to put it in italics only <sup>6)</sup>.

#### **I.2.2.4.4 Style and form**

The style and form shall be as uniform as possible throughout all the parts of the IEV.

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<sup>6)</sup> This practice is mainly used in the class 7 parts of the IEV.



Drawings, diagrams, graphs and formulae shall be used only when they are necessary for a better understanding of the text (see [ISO/IEC Directives, Part 2, 6.6.5](#), and [6.6.10](#)).

Letter symbols used for quantities or units shall be in accordance with the relevant standards, in particular with the IEC 60027 and ISO 31 series.

The meaning of all letter symbols used in a definition shall be explained in the definition.

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

All the abbreviations of terms used in the definitions shall be defined in other entries.

#### **I.2.2.4.5 Languages**

The definition of a concept shall be given in the principal IEV languages, i.e. French, English and Russian. The meaning shall be identical in the three languages, although it may be expressed differently to conform to the rules and structure of each language.

#### **I.2.2.4.6 Presentation of the definitions**

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

#### **I.2.2.5 Source**

In some cases, it might be necessary to include in an IEV part a concept taken from another IEV part, or from another authoritative terminology document (VIM, ISO/IEC 2382...), in both cases with or without modification to the definition (and possibly to the term).

This shall be indicated by the following mention, printed in light-face, and placed between square brackets at the end of the definition (see I.2.3):

[{Document reference} Reference of the term in the document {MOD}]

Where:

- **Document reference** (optional) comprises the source of the document, if it is not the IEV, and the year of publication or the number of the edition, if necessary,
- and **MOD** (optional) indicates that the definition has been modified.

Examples:

[702-08-04]

[131-03-13 MOD]

[CISPR 22]

#### **I.2.2.6 Notes to definitions**

##### **I.2.2.6.1 General**

In certain cases, it may be necessary or useful to add notes to the definitions. These notes may be used:

- to add further explanations, details or special cases which may give additional information about the concept and assist to understand it;
- to point out deviations from earlier definitions or differences between the definitions being adopted and other definitions;
- to draw attention to linguistic or etymological peculiarities;
- to give examples.

The notes shall be given in each of the principal IEV languages. The number and content of the notes shall be the same in each of these languages (this is also valid for the notes mentioning linguistic peculiarities).

There should be as few notes as possible.

The provisions of I.2.2.4.3 and I.2.2.4.4 are also applicable to the notes.

#### **I.2.2.6.2 Presentation of the notes**

A note to a definition shall be placed under the definition and shall be sufficiently separated from the definition so as not to be confused with it. Each note consists of one or several “regular” (that is starting with a capital letter, and ending with a full stop) sentences.

#### **I.2.3 Structure and layout of IEV documents**

The overall structure and layout of IEV documents (drafts and final Publications) shall be in accordance with the [ISO/IEC Directives, Part 2](#). The “[Guide on the use of IT tools in the IEC](#)” and the “[IECSTD template](#)” shall also be taken into consideration.

An IEV document shall thus comprise the following elements:

- Table of contents (see the [ISO/IEC Directives, Part 2, 6.1.2](#));
- Foreword (see the [ISO/IEC Directives, Part 2, 6.1.3](#));
- Introduction, indicating the principles and rules followed;
- Scope (see the [ISO/IEC Directives, Part 2, 6.2.1](#));
- Normative references (as necessary; see the [ISO/IEC Directives, Part 2, 6.2.2](#)); IEC 60027 and/or ISO 31 shall be mentioned if the part contains symbols taken from these standards;
- Terms and definitions;
- Annexes (as necessary):
  - figures;
  - tables of symbols;
  - bibliography;
  - ...
- alphabetical indexes, in the various IEV languages.

A template `vei.dot` has been developed by the secretariat of IEC/TC 1 for the clauses “Terms and definitions” and “alphabetical indexes”. For all the other clauses, the template `iecstd.dot` applies.

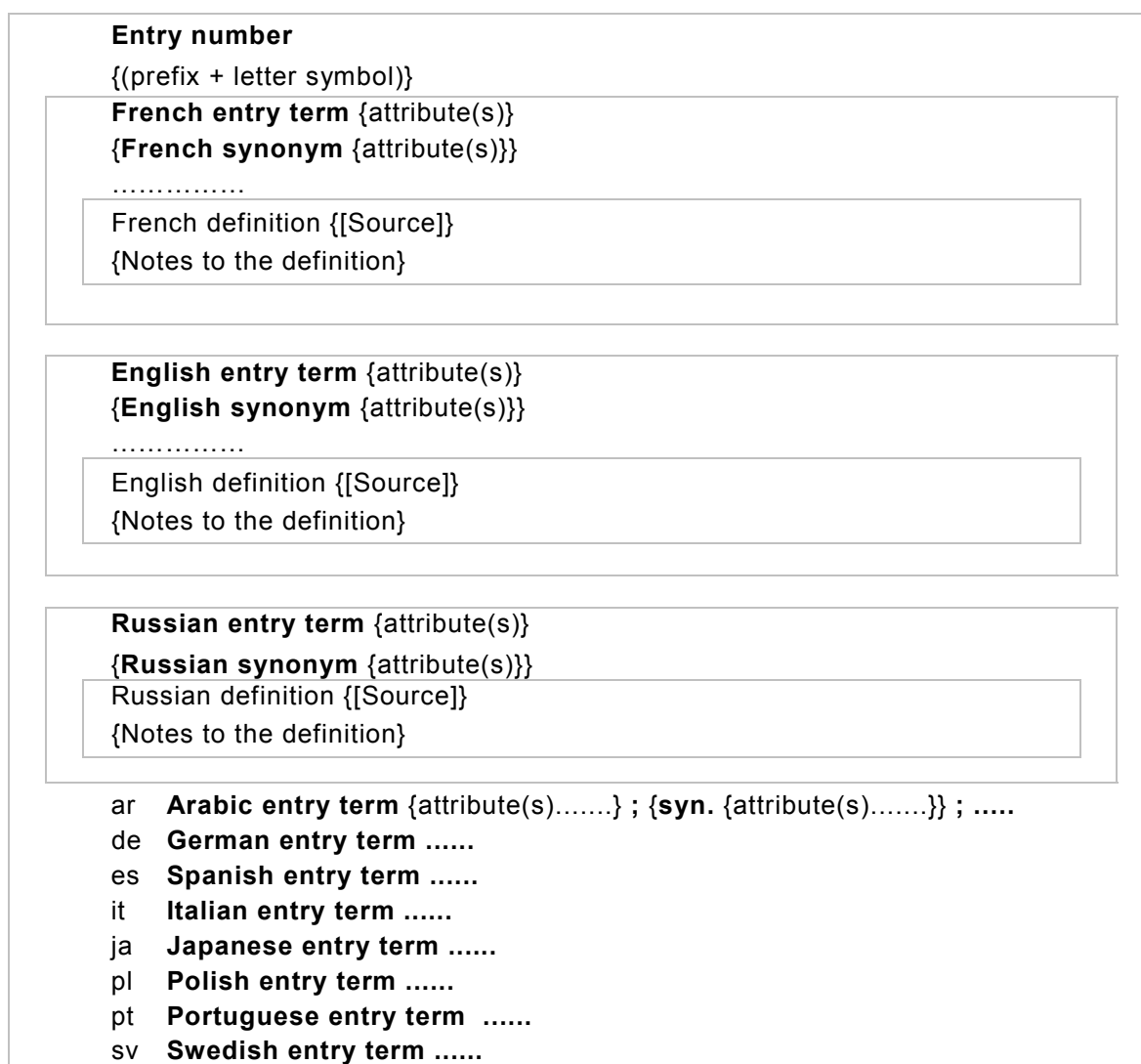
##### **I.2.3.1 Clause “Terms and definitions” – Structure and layout for the publication**

As mentioned in I.2.1.8, a part is subdivided into a series of Sections, each Section comprising:

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

The individual presentation of the various elements of the entries is given in I.2.2 above.

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



NOTE 1 The signs { and } mark optional elements.

NOTE 2 The terms in additional IEV languages are placed at the end of the “block”, (one single line for each language), preceded by the ISO 639 alpha-2 code for the language considered, and in the alphabetic order of this code. The synonyms are separated by semicolons.

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

NOTE 4 A “block” corresponding to an entry should not be split between two consecutive pages.

**Figure I.1 – Arrangements of the elements within a block (Publication)**

### I.2.3.2 Clause “Terms and definitions” – Structure and layout for the drafts

It is recommended to use for the drafts the layout defined in I.2.3.1 for the final publication (Russian terms and definition and terms in additional IEV languages excluded, of course):

### I.2.4 Alphabetical indexes

For each publication of the IEV, an alphabetical index of the terms shall be drawn up separately for each IEV language. For each term (and each synonym or abbreviation, if any), it shall give the term (printed in lightface type), its attributes, and the entry number of the corresponding concept.

It is recommended to present these indexes in a permuted or hierarchical form, as necessary (see I.5).

The indexes shall be given in the following order:

- French alphabetical index;
- English alphabetical index;
- Russian alphabetical index;
- alphabetical indexes in the additional IEV languages, in the alphabetic order of the name of these additional languages in French.

The name of the language shall be given in the title of the index.

In the indexes the terms, synonyms, abbreviations and entry numbers shall be printed in lightface type and the keywords (for hierarchical indexes) in boldface type.

### **I.2.5 Table of letter symbols**

It is recommended to draw up, if necessary, a table of the letter symbols, with the reference of the entry where the element “letter symbol” is given (these letter symbols are not given in the alphabetical indexes mentioned in I.2.4).

## **I.3 Procedures for the preparation of the IEV parts**

### **I.3.1 General – Technical Committee No 1 responsibility**

Technical Committee N°1: Terminology has the overall responsibility for preparing the International Electrotechnical Vocabulary.

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

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

### **I.3.2 Development of projects (New work)**

(See [ISO/IEC Directives, Part 1, 2001, 2.](#))

#### **I.3.2.1 Proposal (NP) stage**

(See [ISO/IEC Directives, Part 1, 2001, 2.3.](#))

The NP and report on voting are circulated with a reference of the initiating TC/SC. If accepted, the project is assigned to TC 1.

In the case of a part relevant to several technical committees, the chairman and secretary of TC 1 may, after consulting with the chairmen and secretaries of the technical committees concerned, assign the project to TC 1/WG 100, Fundamental concepts, or set up a new working group directly under the responsibility of TC 1.

#### **I.3.2.2 Preparatory stage**

(See [ISO/IEC Directives, Part 1, 2001, 2.4.](#))

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

- define the field of the terminology to be studied, state its limits and any possible overlap with other IEV parts;
- list the concepts to be defined;
- classify the concepts in a logical order and number them;
- Verify, by using the general index of the IEC (index maintained by the secretariat of TC 1, and including the index of the IEC multilingual dictionary and the indexes of the current drafts) that these concepts have not already been defined in another IEV part: should this be the case, the existing definition should be used. A definition may only be changed if it is:
  - incorrect or unsatisfactory, or
  - rendered obsolete because of further developments.

This shall be indicated in the corresponding entry of the new project by the mention “MOD ” 7) in the source field (see I.2.2.5).

- give a definition in French, English and Russian; when the Russian Federation is not represented in the working group, the Russian term(s) and definition will be provided at the FDIS stage (see I.3.2.5) by the National Committee of the Russian Federation, using the French and English definitions as a basis for translation;
- establish, on behalf of its technical committee, the first committee draft (CD).

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

The following points shall be noted:

- It is essential to request the presence of a representative of the secretariat of TC 1 to attend the first meeting of the project team or working group and all other important meetings in order to ensure that the work is correctly developed; this representative will ensure that the general rules are followed, ensure effective co-ordination with other IEV parts, and, with the aid of the Central Office, if necessary, establish liaisons with ISO and other international organizations (ITU, CIE, UIC, IUPAP, etc.).
- It is essential to work in at least two languages; for instance, the obligation to prepare immediately in English a definition proposed in French (or vice versa) will ensure a more precise definition; a definition checked by a group of experts is better than a translation made subsequently by a single person; translation into a third language is simplified when a bilingual definition exists. In practice, it is therefore essential that every working group comprise at least one expert of French mother tongue and one expert of English mother tongue.
- As already mentioned in I.2.1.3, the terms shall be chosen and the definitions of the concepts written with a view to their further integration into a dictionary in which the logical order of every IEV part will no longer exist.

### **I.3.2.3 Committee (CD) stage**

(See ISO/IEC Directives, Part 1, 2.5.)

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

#### **Follow-up of a committee draft**

- a) If there are substantial comments, the convenor of the project team or working group shall call an “enlarged meeting”, and invite, in addition to the project team or working group members:
  - the chairman and the secretary of the technical committee entrusted with the part;

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

- the chairman and the secretary of TC 1;
- a representative of every National Committee which has made important comments on the draft or which may be interested in this draft (even if the National Committee has already appointed an expert to the PT/WG);
- a representative of other international organizations concerned;
- a Central Office engineer.

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

- b) This “enlarged meeting” shall lead to proposals on how to deal with the comments received, that is:
- submitting the document, with or without amendments, to the secretariat of IEC/TC 1 for circulation as an enquiry draft (CDV) (see I.3.2.4);
  - preparation of a new committee draft for comments.
  - These proposals, together with a version of the compilation of comments marked up with the decisions taken during the “enlarged meeting” are then forwarded to the secretary of TC 1 by the convenor of the project team or working group (subject to the agreement of his technical committee, if appropriate).
- c) The decision to circulate an enquiry draft shall then be taken by the chairman of TC 1, in consultation with the secretary of TC 1, taking into account these proposals, and on the basis of the consensus principle (see ISO/IEC Directives, Part 1, 2.5.6). The document shall then be forwarded to IEC Central Office by the secretary of TC 1, with the request that the draft be distributed as Committee Draft for Vote (CDV) (see I.3.2.4).
- d) If necessary, the procedure described in a) to f) above shall be repeated until the draft is ready for submission to National Committees for approval as a Committee Draft for Vote.

#### I.3.2.4 Enquiry (CDV) stage

(See ISO/IEC Directives, Part 1, 2.6.)

#### I.3.2.5 Approval (FDIS) stage

(See ISO/IEC Directives, Part 1, 2.7.)

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

These National Committees shall return these translations within 6 months, together with the titles of the sections and the indexes, in printed form and electronically :

	NC Russian Federation	NCs in charge of additional languages
<b>Section header</b>	X	
<b>Term</b>	X	X
<b>Definition</b>	X	
<b>Index</b>	X	X

The secretariat of TC 1 shall send as soon as possible (and anyhow before the end of the period allowed for the translations) the “manuscript” of the document, in French and English,

together with the French and English indexes, to the Central Office in printed form and electronically.

### **I.3.2.6 Publication stage**

(See ISO/IEC Directives Part 1, 2.8.)

The problem of the translations into Russian and additional IEV languages is dealt with in I.3.2.5 above. If the translations are not available within six months (or any longer period that the secretariat may specify in the case of exceptionally long documents, or when the six months' period covers a holiday period), which follow the date at which the FDIS was sent to the National Committee responsible for the translation, the IEV part concerned will be published without the missing translation.

The checking of the printer's proof, after typesetting by the Central Office, is then ensured in parallel:

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

The IEC Central Office shall then ensure the corrections and the publication, and the integration of the final version into the Dictionary database.

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

### **I.3.3 Revision of IEV parts or sections**

The revision of each IEV part shall be included in the programme of maintenance of TC 1 publications. This programme is prepared by TC 1, in consultation, when appropriate, with the technical committees concerned. It is then included in the Strategic Policy Statement, and is subject to approval by the Committee of Action.

If the revised part has the same reference number, to avoid confusion between references to the old and new entries, the section numbers of the revised part shall be different from those of the existing part (for example by adding 10 or 20).

### **I.3.4 Amendments**

If the concepts concerned are deemed to be of interest for several Parts, TC 1/WG 100 "Fundamental concepts" (or other "horizontal" WGs such as TC 1/WG 161 "Electromagnetic compatibility", TC 1/WG 195 "Earthing and protection against electric shock" etc., as appropriate) is consulted, and advantage can be taken of the meeting of TC 1/WG 100 in conjunction with the TC 1 plenary meeting to expedite the treatment of this update.

In the case of the addition of new entries, these entries are given numbers following the last one in the existing section(s) concerned, irrespective of the logical order in which they should appear in the section(s). The logical order will be restored on the occasion of a subsequent revision or of a new edition of the part.

### **I.3.5 Cancellation of IEV parts or Sections**

Sometimes, a revised part or a new part does not correspond exactly with an existing part, but involves the cancellation of one or more sections belonging to one or more existing parts. Such a cancellation of sections shall be explained in detail in the Foreword of the new part.

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

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

### **I.3.6 Co-operation with other international organizations**

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

**EXAMPLE** Part 845: *Lighting*, has been prepared together by the IEC and CIE (International Commission on Illumination). The drafts of Sections 7, 8 and 10 have been prepared by a working group comprising experts from IEC/TC 34: *Lamps and related equipment*, while the other sections have been prepared under the aegis of the CIE. Since German is one of the official languages of the CIE, all the definitions are given in four languages.

### **I.3.7 Terminologies specific to technical committees**

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

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

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

If the TC considers that some of its existing specialized terms and definitions should be given a more general validity and included in the IEV, it shall inform the secretariat of TC 1, in order to begin the process. If approval is granted, the procedures defined in I.3.2, I.3.3 or I.3.4 are applicable.



## I.4 List of attributes

Attribute	Applicability	Sub-clause	ISO 10241	Examples	
				French	English
<b>Specific use of the term</b>	If needed	1.2.2.3.6.1		<b>rang</b> (d'un harmonique), m	<b>transmission line</b> (in electric power systems)
<b>Occurrence number</b>	If needed	1.2.2.3.6.2		<b>champ</b> (1), m <b>champ</b> (2), m	<b>magnetic area moment</b> (1) <b>magnetic area moment</b> (2)
<b>National variant</b>	If needed	1.2.2.3.6.3	6.2.3	<b>unité de traitement CA</b> , f	<b>lift GB</b>
<b>Grammatical information:</b> – <b>word class</b>	If needed	1.2.2.3.6.4	6.2.9 6.2.9.2	<b>thermoplastique</b> , nom <i>(s'il y a un genre, inutile d'indiquer "nom")</i> ... <b>en court-circuit</b> , qualificatif <b>thermoplastique</b> , adj <b>automatiser</b> , verbe <i>(s'il y a une indication de transitivité, inutile d'indiquer "verbe")</i>	<b>thermoplastic</b> , noun <i>(if there is a gender indication, no need to mention "noun")</i> <b>short-circuit</b> ..., qualificatif <b>thermoplastic</b> , adj <b>automate</b> , verb <i>(if there are verb features, no need to mention "verb")</i>
– <b>gender</b>	Mandatory (if applicable for the language)	1.2.2.3.6.4	6.2.9.3.1	<b>diaphragme</b> , m	
– <b>number</b>	If needed	1.2.2.3.6.4	6.2.9.3.2	<b>archives</b> , f, pl	<b>scissors</b> , pl <b>news</b> , sing
– <b>verb features</b>	If needed	1.2.2.3.6.4	6.2.9.4	<b>filtrer</b> , trans <b>filtrer</b> , intrans	<b>percolate</b> , trans <b>percolate</b> , intrans
<b>Abbreviation</b>	If needed	1.2.2.3.6.5	6.2.5	<b>CEM</b> (abréviation)	<b>EMC</b> (abbreviation)
<b>Deprecated or obsolete synonyms</b>	If needed	1.2.2.3.6.6	6.2.8	constante diélectrique, f (déconseillé)	quantity of electricity (obsolete)

## I.5 Permuted and hierarchical indexes

### Example

The entry:

voltage detector ..... 651-10-04
----------------------------------

will appear, in a **permuted index**, under:

detector, voltage ..... 651-10-04
-----------------------------------

and:

voltage detector ..... 651-10-04
----------------------------------

and, in a **hierarchical index**, under:

<b>detector</b>
..... voltage detector
..... 651-10-04

and:

<b>voltage</b>
..... statistical impulse withstand voltage
..... 651-01-16
..... voltage detecting system
..... 651-10-05
..... voltage detector
..... 651-10-04
..... voltage indicating system
..... 651-10-06

## Annex J (normative)

### Processes for the validation of new graphical symbols for use on equipment

#### J.1 Introduction

The Committee of Action of the IEC has entrusted SC 3C with the overall responsibility for the standardization and validation of graphical symbols for use on equipment. This document provides an overview the main functions of SC3C and, in particular, specifies the procedure in accordance with CA/1185/AC (1998-02-06) "Recommendations on procedures of horizontal committees". The "fast procedure" allows Product Committees to develop their own graphical symbols with SC 3C acting in an advisory role. The content of this document has been agreed by SC3C and TC 3 in Charlottenlund in November 1998, and Annex J supersedes the previous description of SC 3C procedures.

The main functions of SC 3C are shown in the flowchart in Figure J.1 and are described below.

#### J.2 General maintenance of IEC 60417

The general maintenance function is concerned with the editorial aspects and the overall consistency of IEC 60417, and includes the allocation of keywords and classifications for approved graphical symbols.

#### J.3 Comprehensive procedure

The comprehensive procedure is followed where proposals are received from National Committees, for example where generic graphical symbols are required which are of interest across a broad range of Product Committees. The coordination of such projects through SC 3C ensures that the interests of all Product Committees are taken into account and avoids the proliferation of graphical symbols. The addition of new graphical symbols to IEC 60417 is part of the maintenance of the standard. Therefore, in accordance with 53/AC, no separate new work item proposal (NP) is required. SC 3C decides whether proposed graphical symbols fall within the scope of IEC 60417 before accepting them for work.

#### J.4 Fast procedure

The fast procedure is applied where Product Committees develop their own graphical symbols.

- The proposed graphical symbols are submitted to the SC 3C advisory panel at the earliest possible stage for comment. The Product Committee may submit a revised proposal for further comment.

NOTE The advisory panel is a specific function of SC 3C, not a separate group.

- Before the Product Committee issues its FDIS, the graphical symbols shall be validated by the SC 3C P-members. The validation vote is equivalent to voting on an SC 3C FDIS.
- After successful validation, the graphical symbols are published as approved IEC graphical symbol in IEC 60417 and may be included with the proper reference in other standards and documents.

In order to make the fast procedure "fast", the work of the advisory panel and the validation decision should be carried out electronically. Ideally this requires a database linked to the Internet, a moderated discussion group to handle comments within the fast procedure and electronic voting. In the meantime, the SC 3C Secretary will progress the work using the fastest alternative means available.

## J.5 Submission of proposals

All proposals to SC 3C whether from a National or Technical Committee shall, with immediate effect, include a drawing of the symbol in accordance with IEC 60416 <sup>8)</sup> and the minimum set of information required for further processing. A template for submitting new proposals is attached. An electronic version of the template can be downloaded from the SC 3C area on the IEC web site.

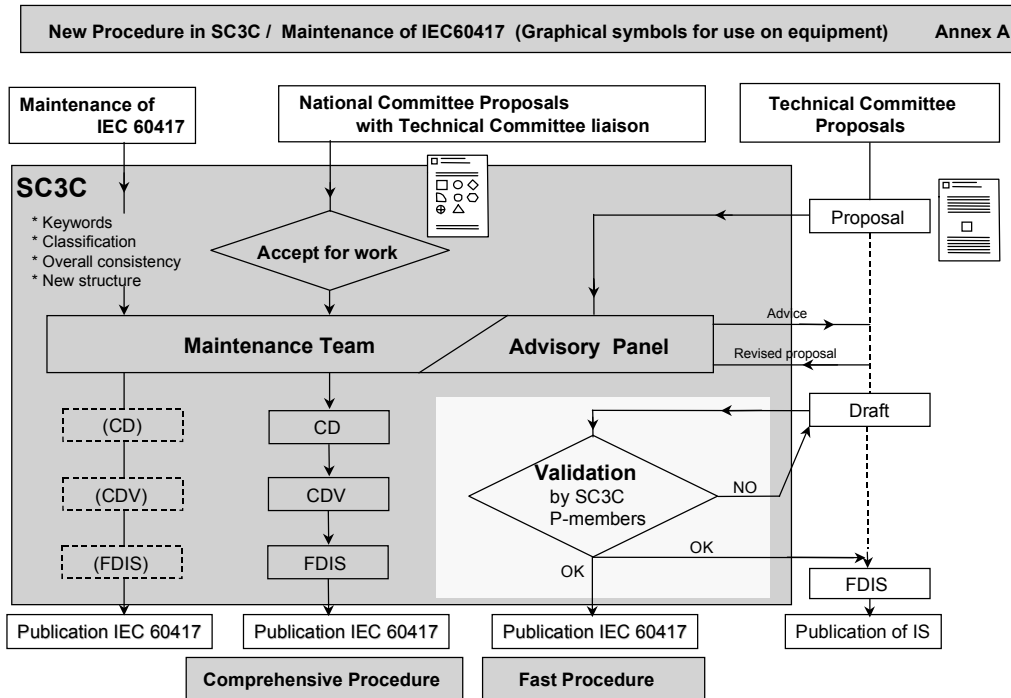


Figure J.1 — Procedure for development of graphical symbols in IEC

<sup>8)</sup> IEC 60416 is currently being revised and will be published as IEC 80416-1.



<b>Proposer:</b> (Product Committee or National Committee) <b>Date of proposal:</b>	_____ _____
---	----------------

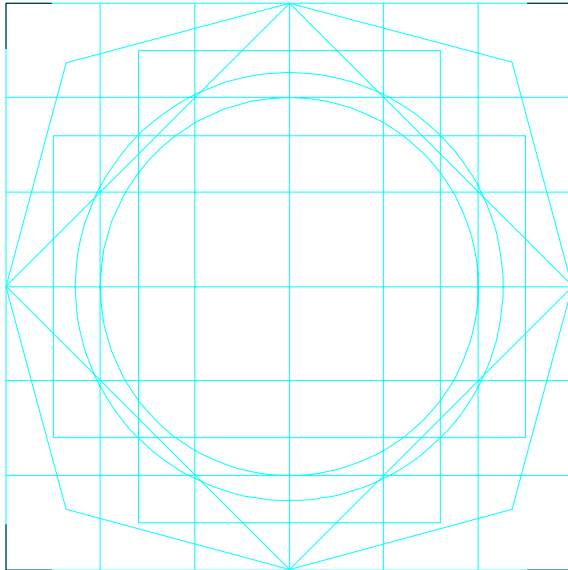
## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### IEC 60417 - Proposal form for new graphical symbols

The completed form should be sent by email to the Secretary of SC3C. The symbol drawing may be included in the form by using the embedded CorelDraw file containing the corner markings and basic pattern. Alternatively the drawing may be submitted as a separate vector graphics file which should be editable in CorelDraw 7 or Adobe Illustrator 7.

NOTE There is no limit to the amount of text that can be entered in the fields provided.

<b>Reference number:</b>	_____ (a new reference number will be allocated by SC3C where appropriate)		
<b>English title:</b>	_____	<b>French title:</b>	_____
<b>English product type:</b> (eg. "On dish washers")	_____ (if appropriate)	<b>French product type:</b>	_____ (if appropriate)
<b>English description:</b>	_____	<b>French description:</b>	_____
<b>English note(s):</b>	_____ (if appropriate)	<b>French note(s):</b>	_____ (if appropriate)
<b>Main field of application:</b>	<b>General (select from list)</b>	<b>Restricted application:</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Second field of application</b>	<b>None</b> (select from list, if appropriate)	<b>Users:</b>	<input checked="" type="checkbox"/> <b>General public</b> <input type="checkbox"/> <b>Specialist users</b>
<b>Purpose and justification:</b>	_____	<b>Notes on special context of use:</b>	_____ (if appropriate)
<b>Relevant documents:</b>	_____ (if appropriate)	<b>Need for liaison and coordination:</b>	_____ (other interested committees, including ISO and other bodies)
<b>Drawing :</b>	<input checked="" type="checkbox"/> <b>Embedded below</b> <input type="checkbox"/> <b>Submitted separately</b>		
<b>Filename:</b>	_____ (only required when drawing is submitted as a separate file)		



**CorelDraw template (embedded file) with corner markings and basic pattern from IEC 60416**

Note- Additional templates can be downloaded from the SC3C area of the IEC web site. These include an comma separated variable (csv) template containing the field names for submitting the texts in database compatible format, and an Adobe Illustrator file for drawings containing the corner markings and basic pattern.

## Annex K (normative)

### Development and maintenance of graphical symbols for diagrams (IEC 60617) and other symbols standards and collections of items

#### K.1 Introduction

Although the standard IEC 60617 *Graphical symbols for diagrams*, is frequently referred to as a case, the document describes a procedure for the maintenance of any international standard consisting of “collections of items” managed in a database. This includes graphical symbols of different kinds, as well as data element types.

The terminology used in this annex is dealt with in Table K.1.

#### K.2 General description of the procedure(s)

##### K.2.1 Overview

IEC 60617 is one of the international standards that contains “a collection of standardized items”. It has for a long time been seen as a drawback that the graphical symbols could not be processed and published “item by item” in order to keep the information up-to-date. The database is the tool needed, but in order to get all the benefits the procedures have to be properly adapted.

The procedure described in this document is based on the use of the database and electronic communication. The description is split in three parts: it starts with the *preliminaries*, followed by either the *normal database procedure* or the *extended database procedure*.

**Preliminaries** is for the entering of the information in the web accessible database, and for taking a decision on whether any work should be carried out or not and, in the first case, if the normal database procedure or the extended database procedure is to follow.

**The extended database procedure** respects all stages of the procedure described in the ISO/IEC directives, the *original procedure*. However, no draft documents on the graphical symbols are distributed, but the graphical symbols are made available in the database only. The procedure involves the National Committees and the usual different project stages are introduced by formal messages to the National Committees.

**The normal database procedure** is faster and relies on the use of a *Validation Team (VT)*, acting on behalf of the National Committees. In addition to the validation team only the secretary/assistant secretary for the committee in charge of the standard is involved. This procedure is applicable for graphical symbols that can be seen as combinations of already existing graphical symbols or new graphical symbols well within the boundaries of existing rules.

Figure K.1 provides an overview of the procedure(s).

Proposed items are entered to the database by authorized "proposers", i.e. persons in the NCs or secretary of a TC, that have got relevant training.

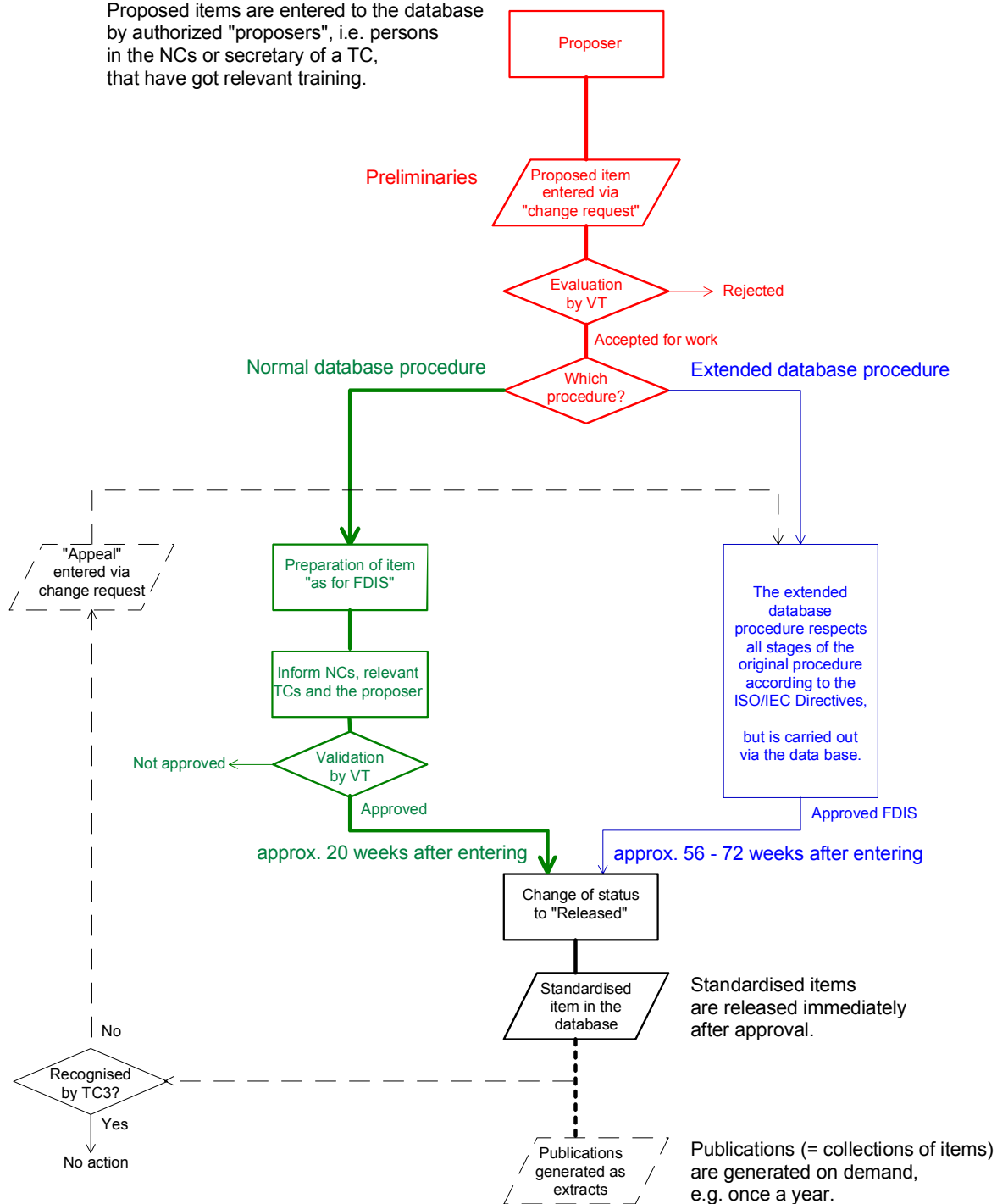


Figure K.1 — Flow chart showing an overview of the procedures

**The content of the database** is not limited to approved graphical symbols only, but includes also all graphical symbols under development.

The graphical symbols in the database with the status “released” (= “standardized”) constitute the valid International Standard.

The concept “graphical symbol” is normally defined as: *visually perceptible figure used to transmit information independently of language*. (There are other definitions, but with the same meaning). This is a definition seen from the application point of view.



For a proper understanding of how the database works it should be noted that what is stored in the database are not graphical symbols in this sense, but *objects that contain information on concepts including associated graphical representations*. A definition might be: *concept represented by a visually perceptible figure*. The concept has one unambiguous identifier, one name, if necessary a definition (at least when there are synonym names), at least one graphical representation (symbol variant), for each of which there might be several renditions (file formats). In this description the term “graphical symbol” is used with this meaning. When the *graphical representation* only is meant this is explicitly written.

## K.2.2 Functionality in the database

For the purpose of the procedures described the following functionality is required from the application controlling the database:

- The database shall be able to store graphical symbols and associated data, including information on the processing stages, such as: *proposed, accepted\_for\_work, rejected, released* and *withdrawn*.
- The database shall be able to store change requests and associated data, including information on the processing stages, such as: *submitted, accepted, rejected, resolved* and *withdrawn*.
- The database shall be accessible via a web interface. How much/deep a person is allowed to enter depends on his role: Secretary, proposer, validation team member, ordinary user.
- Appointed persons in the National Committees have a limited write access, allowing them to enter new graphical symbol proposals and change requests. These persons are in this description referred to as *proposers*.
- The *secretary* for a specific standard has full write, read (and delete) access to the parts relating to this standard. He can also change status of the graphical symbols in process.
- The *validation team* has read access to the entire information.
- Other users have read access in accordance with future policy decisions.

## K.3 Introduction of a new graphical symbol

### K.3.1 Preliminaries

The procedure described in the following is applicable under “*steady state conditions*” (i.e. the initial loading and validation is out of the scope of this description).

All proposals for change, including the introduction of a new graphical symbol or change to or the entire withdrawal of an existing symbol, are entered by a **change request**.

- a) A *proposer* enters directly a proposal into the database or. Alternatively, a proposal can be submitted (by e-mail, fax, letter, etc) to the secretary that is carrying out the physical entry.

Two things need to be entered:

- the change request, that carries the “project information”, and
- the graphical symbol that carries the “object information”.

One change request can be used to manage many graphical symbols. A proposal for a new symbol or a change that requires the change of the graphical representation of a symbol should be accompanied by a file with the graphics (preferably a gif file).

The entered graphical symbol with associated information will get the **status proposed** and (automatically) given an **identification**. The identification is a **once and for all** assigned registration number (unique within the context of the entire database) without any associated meaning. It will follow the graphical symbol, irrespective of whether it is rejected or released. Once the registration number is used it will be kept in the database and not reused.

NOTE The existing symbol number in IEC 60617 depend on the logical position of the symbol in the printed publication and is not usable for this purpose.

The change request with associated information will get the status *submitted* and also given an *identification*. This is a once and for all assigned registration number to the change request.

The symbol is linked to the change request by the proposer (making use of the identification of the symbol(s)). The change accepted for evaluation is classified as either *editorial*, *techn\_new* (technically new) or *techn\_mod* (technical modification)

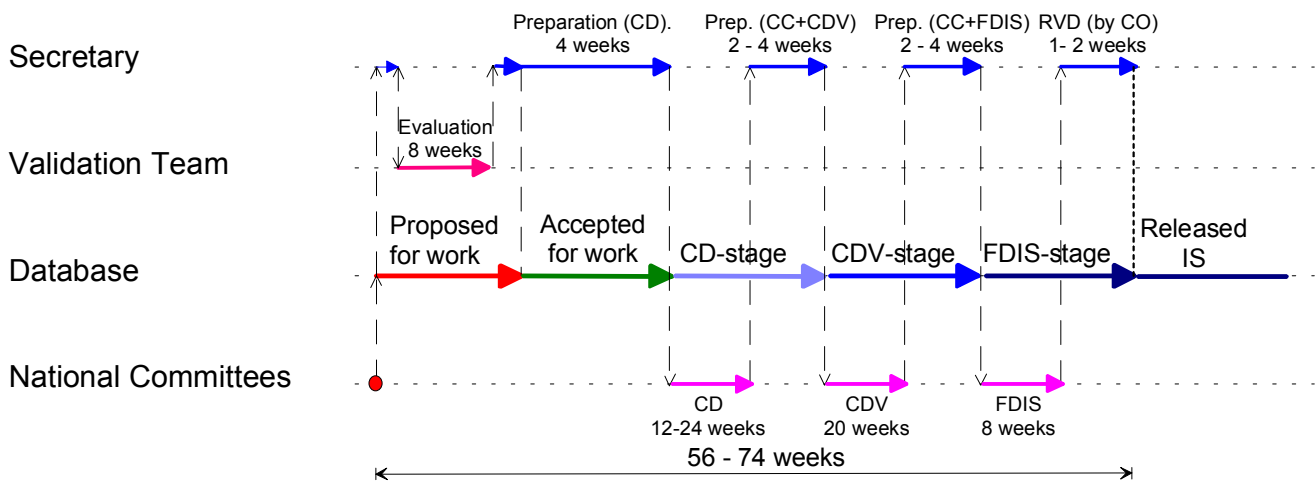
The secretary checks the change request with associated graphical symbol to see that it is formally satisfactory for entering, changes the status of *the change request* to *accepted*, and informs (by an e-mail exploder provided and maintained by the IEC/CO) the validation team on the proposal, asking for a first **evaluation** whether or not further work should be carried out, and which procedure that should be followed. Answer is requested within 8 weeks. For this decision it is sufficient if consensus is reached within a majority of the members. (There is no need for a formal voting for this decision.)

- b) The validation team has to accept the graphical symbol for further work or to reject it. If rejected, the reason for the rejection needs to be communicated to the proposer and entered in the database as a **remark** to the graphical symbol. The status of the graphical symbol is changed by the secretary either to *accepted\_for\_work* or to *rejected*. If rejected no further work is done and the status of the change request is also changed to *rejected*.
- c) If the graphical symbol is accepted for work, the validation team shall also decide whether the normal database procedure or the extended database procedure is applicable. The validation team should also indicate which other relevant IEC committees could be interested in the change request. The secretary adds the information on the decision as a remark, and the procedure is continued either as described in K.3.2 or as described in K.3.3.
- d) Criteria for selection of procedure are:
  - The normal database procedure should be used for changes (text and/or graphical presentation) to an existing graphical symbol, for new symbols that can be seen as combinations or of already standardized graphical symbols, and extension with a new symbol to an already standardized group of symbols.
  - The extended database procedure shall be used in all other cases and specifically in cases of appeal, see K.3.5.

### K.3.2 Extended database procedure

In order to shorten the description, it is assumed that the proposed graphical symbol follows the procedure straight forward. It is, of course, possible that there might be comments against a graphical symbol so that the CD or CDV stage might need to be repeated (as described in the ISO/IEC Directives), but this does not change the principle way of working.

Figure K.2 shows a "process map" with the different roles indicated along the vertical axis. This type of diagram highlights the flow, and indicates clearly when the different roles have to be active.



**Figure K.2 – The extended database procedure including preliminaries**

- a) If the extended database procedure is applicable the secretary checks that the graphical representation of the symbol is in line with already existing related graphical symbols (in IEC 60617, ISO/DIS 14617, etc) and design rules (ISO 81714-1, IEC 81714-2 and –3), and that sufficient supplementary information is supplied. The secretary makes necessary corrections.

He or she may as necessary and possible use resources within the validation team. This work should be carried out within 4 weeks.

- b) When the graphical symbol is sufficiently well prepared, the secretary issues a formal e-mail to the National Committees, informing that the graphical symbol is available for commenting on the CD stage, within the normal time frame for CDs. Comments are to be sent to the secretary. (Min 12 – max 24 weeks according to the Directives)

NOTE When the procedure for electronic re-distribution to the experts in the National Committees is in place, it may be possible to shorten the times presently given in the directives.

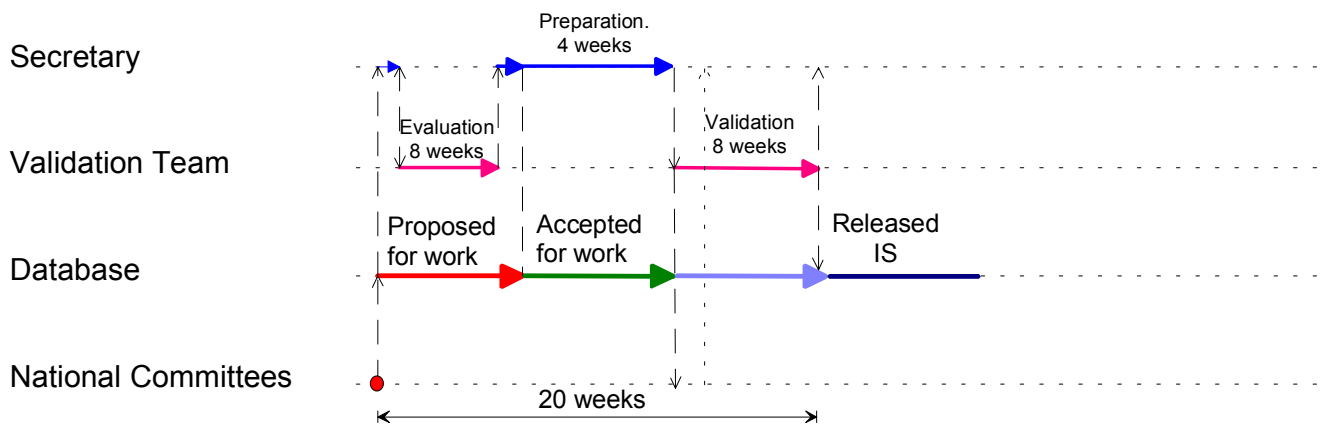
- c) After stipulated time the comments are compiled and made available as an ordinary compilation of comments (published on the web server). (Max. 4 weeks not along the critical line, say 2 weeks)
- d) The graphical symbol and its associated information is prepared for the CDV stage taking note of the comments. When ready, the secretary issues a formal e-mail to the National Committees, that the graphical symbol is available for commenting and voting for acceptance as an FDIS, within the normal time frame for a CDV. (20 weeks according to the Directives)
- e) After stipulated time the comments are compiled and the votes counted and made available as an ordinary compilation of comments and result of voting on a CDV. (Max. 4 weeks not along the critical path, say 2 weeks)
- f) The graphical symbol and its associated information is prepared for the FDIS stage taking note of possible editorial comments. When ready, the secretary issues a formal e-mail to the National Committees, that the graphical symbol is available for voting for approval as an IS, within the normal time frame for a FDIS. (8 weeks according to the directives)
- g) After stipulated time the votes are counted. If accepted the secretary changes the **status** of the graphical symbol to *released*, the status of the change request to *completed*, and the procedure is finished. (say 1 week)

The extended database procedure for introduction of a new graphical symbol is possible to complete within approximately 56 – 72 weeks.

### K.3.3 Normal database procedure

The normal database procedure involves the National Committees through their participation in the validation team. The validation team is composed of representatives for the National Committees.

Figure K.3 shows a process map of this procedure.



**Figure K.3 – The normal database procedure including preliminaries**

- If the normal database procedure is applicable the secretary checks that the graphical symbol is prepared in line with already existing related graphical symbols (in IEC 60617, ISO/DIS 14617) and design rules (ISO 81714-1, IEC 81714-2 and –3), and that sufficient supplementary information is supplied in the database. The secretary makes necessary corrections, and may as necessary and possible use resources within the validation team. This work should be carried out within 8 weeks.
- When the quality of the information is satisfactory (i.e. the same as for an FDIS) the validation team shall (by electronic means) be called to vote within 8 weeks by the secretary, with copies to the proposer, the P-members of TC 3 and possible other relevant TCs.

NOTE Parties not represented in the validation team may communicate serious objections to the proposed change request to the Secretary who in turn informs the validation team in time before close of the voting.

- If not accepted, then the reason(s) are noted in the remark, the status of the graphical symbol is set to *rejected*, the status of the change request to *completed*, and the work is finished.
- If accepted, then the secretary changes the status to *released*, the status of the change request to *completed*, and the work is finished.

The normal database procedure for the introduction of a new graphical symbol is possible to complete within approximately 20 weeks.

### K.3.4 Recognition by the Technical Committee TC 3

The secretary summarises the set of symbols approved in accordance with the normal database procedure in a report to the TC 3 plenary meeting.

### K.3.5 Appeal

If a National Committee does not agree with all or any of the symbols included in the report then it should be allowed to raise the matter at the plenary meeting of TC 3 giving due notice and justification of its objection. Full discussion should be permitted and if TC 3 does not accept the symbol(s) then a change request shall be issued for the symbol(s) in question and processed in accordance with the extended database procedure.

## K.4 Introduction of changes to an existing graphical symbol

### K.4.1 Preliminaries

A change to an already existing graphical symbol (including associated textual information) in the database has to be both upstream (new for old) and downstream (old for new) compatible. This means that textual descriptions etc. have to be technically equivalent after a change and that changes to the graphical representation have to be so small that a human reader considers the old and new one as “the same”.

If this is not the case, then a new graphical symbol has to be entered and registered in connection with the registration of the change request.

The preliminaries are similar to those for the entry of a new symbol, with the exception that the change request is associated to an already existing symbol, and possibly also to a proposed new one.

### K.4.2 Procedure if a new graphical symbol is entered

- a) If the change request is accepted for work, and if a new graphical symbol is entered, the validation team shall decide whether the normal database procedure or the extended database procedure is applicable. The secretary adds the information on the decision as a remark to the change request, and the procedure is continued either as described in K.3.2 or as described in K.3.3.
- b) When the chosen one of these procedures is completed then the status of the new graphical symbol is changed to *released* and the status of the old one to *withdrawn*. The status of the change request is then changed to *resolved* and the work is finished.

### K.4.3 Procedure if a new graphical symbol is not entered

- a) If the change request is accepted for work and if no new graphical symbol is entered, i.e. it is a minor editorial change, either to the text or to the graphical representation, the Secretary describes the proposed change fully **in the change request** within 4 weeks.
- b) When the quality of the information in the change request is satisfactory (i.e. the same as for an FDIS), the validation team is informed (by e-mail) by the Secretary and called to vote within 8 weeks. All members of the validation team are obliged to vote, and the result is evaluated following the same rules as for voting on an FDIS. Negative votes shall be accompanied by a justification.
- c) If not accepted, then the reason(s) are noted in the remark, the status of the change request to *resolved*, and the work is finished.
- d) If accepted, then the secretary makes the proposed changes to the existing, released, graphical symbol, either as changes to the textual information or through the provision of a new file for the graphical representation of the symbol. (A revision note is entered.)
- e) The secretary then changes the status of the change request to *resolved*, and the work is finished.

## K.5 Publication

### K.5.1 Network access

As stated earlier in this document the set of released (= standardized) graphical symbols in the database constitutes the valid standard. Direct read access to the released graphical symbols in the database by users is therefore seen as the most natural form of publication for the future.

The conditions for this depend on future policy decisions with regard to network access to IEC standards, and is therefore not further dealt with in this document.

## K.5.2 Published extracts

Publications, to be distributed either in printed paper form or as electronic files, can be created as extracts of all *released* (= standardized) graphical symbols in the database at any time, even using “print-on-demand” technique. For this purpose a template for the presentation is required in an adapted application software.

The location of the graphical symbols in a publication is controlled by a set of entities in the database *paper\_publication*, *publication\_part* and graphical *symbol\_in\_paper\_publication*. To the latter is the attribute *publication\_reference* associated. This is the place where the traditional graphical symbol number used in IEC 60617 shall be located.

This technique makes it possible to change the composition of the publication and also to publish graphical symbols in other international standards, for example product standards, which is sometimes requested. The database can contain information on where such places are.

Reference to the valid graphical symbol shall in all cases be done to the neutral identifier given in *identification*. If a graphical symbol has been changed it is then always possible to find information on what has happened, if it has been replaced or withdrawn, for example, via the *symbol\_history\_relationship*.

## K.6 Regular maintenance of the entire standard

In addition to the continuous maintenance described above, a comprehensive review of the entire collection of standardized items, e.g. IEC 60617, at regular intervals may be necessary. For such reviews the maintenance cycle concept as defined in Clause 5 is relevant. For the carrying out of this work it may also be advantageous to set up a specific maintenance team.

The resulting proposal from such a work is formally to be entered into the database as one or more change requests, and then each change is dealt with according to the normal or extended database procedure as appropriate.

**Table K.1 — Terminology**

Term with definition	Comments related to IEC 60617
<p><b>3.1</b> <b>original procedure</b> for standard publications standardization procedure as described in the <b>present</b> ISO/IEC directives relying on the <b>circulation of documents</b></p>	<p>Applicable for standard publications, but in the case of database based standards only at revisions in the context of regular maintenance cycles of the entire collection of symbols in IEC 60617.</p>
<p><b>3.2</b> <b>normal database procedure</b> standardization procedure making use of a <i>validation team</i> and a workflow around a database for information sharing (as specified in this document ). NOTE 1 – The normal database procedure is used for validation of new graphical symbols and for graphical symbol combinations that are within the boundary of existing rules. NOTE 2 – Interimistically other means of electronic communication, like e-mail, may be used to implement the workflow.</p>	<p>Applicable in most cases when a new single item, e.g. a symbol is introduced or an existing one modified. The term “fast procedure” has not been used in order to avoid confusion with “fast track procedure”, which is already defined (with an other meaning) in the directives.</p>
<p><b>3.3</b> <b>extended database procedure</b> standardization procedure with stages and time frames as specified in the <i>original procedure</i>, but implemented <b>as a workflow around a database</b> for</p>	<p>Applicable in certain cases when new areas are being standardized and in cases of</p>

Term with definition	Comments related to IEC 60617
information sharing (as specified in this document).	appeal.
<p><b>3.4</b></p> <p><b>maintenance team</b></p> <p>group of experts that has the task to carry out revisions of existing international standards at specified maintenance cycles following the <i>original procedure</i></p>	<p>A maintenance team according to this definition is used, within the area of graphical symbols for diagrams, for the maintenance of the basic standards describing principles and methodology, and for regular revisions of the entire collection, say every 10 years, and when rules for the entire collection are established or modified, e.g. with regard to the printed layout.</p> <p>For the continuous maintenance of the graphical symbols in the database the procedure is different, and therefore the term maintenance team is not used in that context.</p>
<p><b>3.5</b></p> <p><b>validation team</b></p> <p>a permanent, “executive”, group of experts appointed by and acting between meetings of the committee (by electronic means, and within a short time frame) on behalf of their National Committees</p> <p>NOTE 1 - All P-members have the right to appoint an own member of the team. The validation team evaluates proposals and votes, in the normal database procedure, on symbols on behalf of their National Committees. The validation team reports to the technical committee or subcommittee.</p> <p>NOTE 2 – The described procedure asks for very short response times from the validation team members. Therefore, the National Committees shall appoint a deputy, that takes over the task when the ordinary one for any reason is absent (travel, business, etc.)</p> <p>NOTE 3 – It is up to the National Committee to decide for how long time a member should be appointed</p> <p>NOTE 4 – The secretariat manages the validation team.</p>	<p>The validation team, that is a permanent group, has two tasks:</p> <p><b>Evaluation task:</b> members of the National Committees that are part of the validation team reach consensus on the acceptance of a proposal for work</p> <p><b>Validation task:</b> voting on behalf of their National Committees for release of an item/symbol.</p>
<p><b>3.6</b></p> <p><b>proposer</b></p> <p>person (or body) (at a National Committee, representing <b>all</b> TC's and/or appointed secretaries of ISO/IEC product committees) <b>authorized</b> to enter new proposals and change requests in the database</p> <p>NOTE 1 – There are many proposers.</p> <p>NOTE 2 – The required limited write access to the database is password protected, and authorization will only be granted to persons appointed by the National Committees. Proposers have to be personally authorized, and should in connection with this authorization get the required information and training.</p>	