GWP

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GOOD WORKING PRACTICE

colour inside

IEC TC 65: Industrial-process measurement, control and automation

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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CONTENTS

Introduction 5
1 Scope 6
2 Normative references 6
3 Terms, definitions, abbreviations and acronyms 7
3.1 Terms and definitions 8
3.2 Abbreviated terms 9
4 Guidance for Chair, Secretaries and Convenors 10
4.1 WG/MT/PT Organization 10
4.1.1 General 10
4.1.2 WG/MT/PT participation 10
4.1.3 JWG 11
4.1.4 Succession planning 11
4.2 IEC TC/SC Officers training 12
4.3 IEC List of “Country Codes” 12
4.4 TC 65 Plenary meetings 12
4.4.1 General considerations 12
4.4.2 Host National Committee considerations 12
4.4.3 Automation Forum 12
4.4.4 Meeting Registration System (MRS) 12
4.4.5 Document circulation 13
4.5 Use of editing marks 16
4.6 CDV publication without FDIS 16
4.7 Redline standards 16
4.8 Commented Version 16
4.9 IEC supporting information 17
5 Document Types 17
5.1 Types of documents 17
5.2 International Standard (IS) 17
5.3 Technical Specification (TS) 17
5.4 Technical Reports (TR) 17
5.5 Publicly Available Specification (PAS) 17
6 Initiating a Project 18
6.1 New project 18
6.2 Maintenance project 19
7 Document Preparation 19
7.1 General 19
7.2 Forewords 19
7.3 Table of Contents 20
7.4 Automatic cross-references and hyperlinks 20
7.5 Normative references of standards 20
7.6 Terms and definitions of standards 21
7.6.1 Opening paragraph 21
7.6.2 Definitions 21
7.6.3 Definitions for parts of a series 22

7.6.4 Common definitions 22
7.7 Common requirements in series 22
7.8 Document control practices 22
7.8.1 General 22
7.8.2 Drafting 23
7.8.3 Comment preparation and submittal to ballots 25
7.8.4 Line number references 26
7.8.5 Comment resolution 26
7.8.6 Implementation of resolutions (applying revisions to working document) 28
7.8.7 Final FDIS check 28
7.9 WG/MT/PT meetings and agendas 28
7.9.1 Role of the convenor 28
7.9.2 Role of the experts 28
7.9.3 Role of liaisons 29
7.9.4 WG/MT/PT meetings 29
7.9.5 Meeting location 30
7.9.6 Remote conference considerations 31
7.9.7 WG/MT/PT meeting agendas 31
7.9.8 Meeting management 32
7.9.9 Minutes 32
7.9.10 Action logs 32
7.9.11 Meeting participation 32
7.10 Document naming and numbering 33
7.10.1 General 33
7.10.2 Internal documents 33
7.11 Electronic communications 33
8 Collaboration Platform 34
9 Internet meeting guidelines 34
9.1 General 34
9.2 IEC Internet meeting tool 34
Annex A (informative) IEC Procedure for figures after CDV 36
Annex B (informative/normative) Sample Meeting Agenda 38
Annex C (informative) Sample Meeting Minutes 41
C.1 Project schedule review 41
C.2 Next meeting(s) 42
C.3 Meeting documents 42
Annex D (informative) Sample Action Log 43
Annex E (informative) Comment Form recommendations 45
Annex F (informative) Summary of actions and time guidelines for the development of new standards 52
Annex G (informative) Document numbering schemes 56
G.1 Introduction 56
G.2 ISO Based - 1 56
G.3 ISO Based – 2 57
G.4 Committee-Name option 57
G.5 Document Name-Number option 58
G.5.1 Document naming 58
G.5.2 Document numbering 58

Table 1 – Delivery dates of Plenary Meeting documents 13
Table 2 – Electronic communication descriptors 34
Table D.1 – Sample Action Log Table 44
Table F.1 – Project Milestone Guidelines 52
Table F.2 – Project Document Circulation Time Guidelines 53
Table F.3 – Summary of actions and time guidelines for the development of a Technical Specification (TS) 54
Table F.4 – Summary of actions and time guidelines for the development of a Publicly Available Specification (PAS) 55
Table F.5 – Summary of actions and time guidelines for the development of a Technical Report (TR) 55

Introduction

This GWP document is intended to be shared by the Secretary with the Convenor, Project Team Leader (or the link to it) at the start of each project and/or maintenance cycle.

This TC 65 reference document is available for viewing and downloading on the IEC TC 65 “Dashboard”

This GWP document will be updated on a three-year cycle to coincide with every second TC 65 Plenary.

INDUSTRIAL PROCESS MEASUREMENT, CONTROL AND AUTOMATION – Committee Good Working Practice (GWP)

1 Scope

This TC 65 Good Working Practice document details agreed committee working practices for the organisation, communication, and the drafting of standards in its committees. In the following text “TC 65” includes its subcommittees.

It is intended to promote a common approach:

- To the drafting of standards,
- To the working practices, organisation and communication of Chair, Secretaries and Convenors of Working Groups (WG) and Maintenance Teams (MT).

Experts and officers of TC 65 should submit any ideas they have to the TC 65 Secretary for consideration to be included in the Good Working Practice document. The inclusion in the document may initially be in draft form for later discussion by TC 65. In some instances, the inclusion or idea might only be a topic for discussion.

In the following text the term “Standard” used in this document designates also other deliverables such as Technical Reports (TR), Technical Specifications (TS) and PAS (Publicly Available Specification).

2 Normative references

The following documents are referred to in the text in such a way that some or all their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

The latest and current copies of documents are available from the IEC Reference Material page as follows:

- Reference Material | Statutes / Directives / Agreement includes https://www.iec.ch/members_experts/refdocs/governing.htm
    - ISO/IEC Directives, Part 1 + IEC Supplement
    - ISO/IEC Directives, Part 2
    - ISO/IEC Directives, JTC 1 Supplement
    - Statutes and Rules of Procedure
    - IEC Code of Conduct for technical work
    - Guidance and process for addressing misconduct and breaches of the Code of Conduct
    - Meetings Guidance
    - Guide for hosting TC meetings
    - Change Request form for the ISO/IEC Directives

- The following list of Guides, plus others can be found at https://www.iec.ch/dyn/www/f?p=103:84:00
    - ISO/IEC GUIDE 17, Guide for writing standards taking into account the needs of micro, small and medium-sized enterprises

- ISO/IEC GUIDE 51, Safety aspects — Guidelines for their inclusion in standards
- ISO/IEC GUIDE 59, ISO and IEC recommended practices for standardization by national bodies
- ISO GUIDE 64, Guide for addressing environmental issues in product standards
- IEC GUIDE 104, The preparation of safety publications and the use of basic safety publications and group safety publications
- IEC GUIDE 103, Guide on dimensional co-ordination
- IEC GUIDE 107, Electromagnetic compatibility – Guide to the drafting of electromagnetic compatibility publications
- IEC GUIDE 108, Guidelines for ensuring the coherence of IEC publications – Horizontal functions, horizontal publications and their application
- IEC GUIDE 109, Environmental aspects – Inclusion in electrotechnical product standards
- IEC GUIDE 116, Guidelines for safety related risk assessment and risk reduction for low voltage equipment
- IEC GUIDE 118, Inclusion of energy efficiency aspects in electrotechnical publications
- IEC GUIDE 119, Preparation of energy efficiency publications and the use of basic energy efficiency publications and group energy efficiency publications
- IEC GUIDE 120, Security aspects – Guidelines for their inclusion in publications
- ISO/IEC 75, Strategic principles for future IEC and ISO standardization in industrial automation
- ISO/IEC77-1, Guide for specification of product properties and classes -- Part 1: Fundamental benefits
- ISO/IEC 77-2, Guide for specification of product properties and classes -- Part 2: Technical principles and guidance
- ISO/IEC 77-3, Guide for specification of product properties and classes -- Part 3: Experience gained.

IEC virtual meetings security and best practices, including a link to the IEC Virtual Meetings Guide is available from https://www.iec.ch/iec-virtual-meetings-security-and-best-practices

ISO/IEC have also published a guidance document “Gender Responsive Standards Guidance for ISO and IEC technical committees” available at https://www.iec.ch/resources/tcdash/smb/ISOIEC_JSAG_GRS.pdf

Inclusive terminology guidance is under joint ISO/IEC development and expected to be published in 2024, however ISO has provided some interim direction at https://www.iso.org/ISO-house-style.html#iso-hs-s-text-r-s-inclusive

3 Terms, definitions, abbreviations and acronyms

For the purposes of this document, the terms and definitions given in ISO/IEC Directives Part 1 + IEC Supplement and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: The World's Online Electrotechnical Vocabulary, available at https://www.electropedia.org/

  - IEC Products and Services Portal: https://products.iec.ch/home (replaces the IEC Glossary link below which only contains terms until 2015)
  - IEC Glossary: https://std.iec.ch/terms/terms.nsf/welcome?OpenForm
- ISO Online browsing platform: available at https://www.iso.org/obp

3.1 Terms and definitions

The roles described below are referenced from the IEC Website “Role and Responsibilities” page https://www.iec.ch/standards-development/roles-and-responsibilities that points to the ISO/IEC Directives Part 1 for further role descriptions.

3.1.1
Convenor
Project Team Leader
appointed leader of Working Group or Maintenance Team

Note 1 to entry: In this document convenor can also be a Project Team leader.

3.1.2
Expert
active participating member nominated from a NC into a Working Group, Maintenance Team or Project Team

Note 1 to entry: Experts, while managed by the NC in the system, do not reflect the National committee view but their view of expertise. WGs, MTs and PTs are made up of experts, never delegates, and country affiliation is not shown here.

Note 2 to entry: Experts can also be nominated through a TC/SC in liaison with TC.

3.1.3
Maintenance Team
MT
group of experts designated to keep a publication or set of publications up to date

Note 1 to entry: An MT is typically derived from a disbanded working group or project team upon completion of their work.

Note 2 to entry: An MT is responsible for one or several BUT ONLY maintenance projects.

Note 3 to entry: If a new project is proposed to the group of people that is currently a MT then it will have to be converted to a WG first via an INF or AC if there is a need for Call for Experts. Existing experts of the WG will be transferred by IEC SEC to the MT.

Note 4 to entry: See ISO/IEC Directives Part 1+ IEC Supplement, 2.9.1.5 (modified by the addition of notes).

3.1.4
Project Leader
appointed team member responsible for directing completion of a specific task within a Working Group, Maintenance Team or Project Team

Note 1 to entry: See ISO/IEC Directives Part 1, 2.1.8.

3.1.5
Project Team
group of experts responsible for one document related to new work (first edition)

Note 1 to entry: Project teams are for a single project and automatically get disbanded at the FDIS stage.

Note 2 to entry: Project Teams can directly report to their parent committee, rather than via a WG/MT Convenor. The committee will make such direct reporting requirements clear to the PT when it is established. In such cases, the Project Leader of the Project Team takes on the same responsibilities as a Convenor.

Note 3 to entry: The work can be developed inside or outside of a WG structure.

Note 4 to entry: See ISO/IEC Directives Part 1, 1.12.1.

3.1.6
Task Force
subset of experts from a WG/MT/PT managing a specific deliverable within the scope of its WG/MT/PT

Note 1 to entry: The WG/MT/PT can determine a task force leader, who coordinates the communication, activities and internal meetings, if needed.

Note 2 to entry: Task force leaders should report to the WG/MT/PT convenor. The convenor is the only individual who communicates with the Secretary.

Note 3 to entry: Task forces are normally established to prepare content for use by the WG/MT/PT to make more efficient and informed decisions.

Note 4 to entry: See ISO/IEC Directives Part 1, 2.5.6.

3.1.7
Working Group
WG
group of experts responsible for developing new work or maintenance of existing standards

Note 1 to entry: A Working Group may or may not be a permanent body depending on its work program.

Note 2 to entry: A WG is responsible for one or multiple projects that can be either new projects or maintenance projects.

Note 3 to entry: A WG can be disbanded after completing all its projects or converted to a MT if no new projects are planned.

Note 4 to entry: A WG reports to its parent technical committee through a Convenor.

Note 5 to entry: See ISO/IEC Directives Part 1.

3.1.8
test specification
specifies requirements for testing including provisions and processes, to have a harmonized basis for conformity assessment of a product or a service based on an IEC IS

Note 1 to entry: IEC TCs are responsible for the test-specification.

Note 2 to entry: IECEE is responsible for third party conformity assessment.

3.2 Abbreviated terms

Below is a list of abbreviations, acronyms used in this document. A complete list of “abbreviations, acronyms and codes” used by IEC can be found at https://www.iec.ch/members_experts/refdocs/abbreviations.htm

CC: Compilation of Comments

CD: Committee Draft

CDV: Committee Draft for Vote

CMYK: Cyan Magenta Yellow Key (Black) colour palette

DA: Draft Agenda

DC: Document for Comment

DTR: Draft Technical Report

Ed: Editorial comment

FDIS: Final Draft International Standard

Ge: General comment

GWP: Good Work Practice

IEC: International Electrotechnical Commission

INF: Information document

IS: International Standard

ISO: International Standards Organisation

MRS: Meeting Registration System

MT: Maintenance Team

NC: National Committee

NP: New work item Proposal

O-member: Observer member

OBP: Online Browsing Platform

P-member: Participating member

PAS: Publicly Available Specification

PL: Project Leader

PT: Project Team

PWI: Proposed Work Item

RGB: Red Green Blue colour palette

RVC: Report of Voting

SC: Sub Committee

SDO: Standards Developing Organisation

TC: Technical Committee

Te: Technical comment

TO: Technical Officer

TR: Technical Report

TS: Technical Standard

WG: Working Group

4 Guidance for Chair, Secretaries and Convenors

4.1 WG/MT/PT Organization

4.1.1 General

WG/MT/PT's should optimize the use of experts by organizing the work into sub-groups if necessary. The WG/MT/PT could, for example, have small specialist groups of experts (task force) having a knowledge that could address those issues delegated to a task force and report back to the WG/MT/PT thus saving time and making decisions easier to reach.

For large WG/MT/PTs more than one Convenor can be appointed.

NOTE When more than one convenor is appointed, they may be referenced as co-convenors.

Individual editors can be assigned by the WG/MT/PT to assist with document drafting.

4.1.2 WG/MT/PT participation

[SOURCE: ISO/IEC Directives Part 1, 1.7]

Convenor/PL should review the participation of the WG/MT/PT experts at regular intervals and in particular at the end of each maintenance cycle. Inactive experts should be contacted to confirm their ongoing participation. For further steps refer to ISO/IEC Directives Part 1, 1.12.3.

Guests wishing to attend a meeting must have prior approval from the Convenor/PL. In some cases, the number of guests may be restricted due to meeting room constraints. The convenor decides the level of participation of guests at the meeting. [SOURCE: ISO/IEC Directives Part 1, 1.12.2]

Invited guests must be recorded in the meeting minutes.

4.1.3 JWG

In special cases a joint working group (JWG) may be established to undertake a specific task in which more than one ISO and/or IEC technical committee or subcommittee is interested. [SOURCE: ISO/IEC Directives Part 1, 1.12.7]

When the lead of the JWG is by a TC 65 committee, the convenor is responsible for organizing and leading the meetings.

NOTE Documents developed by a JWG can be published as a dual or multi logo standard.

4.1.4 Succession planning

4.1.4.1 General

Many roles within TC 65 do not have a term limit, however it is still beneficial to identify and help potential successors be prepared to assume roles when the incumbent retires.

Chairs have a maximum term of 9 years (six years plus option to renew for 3 additional years), and therefore at the midpoint of the first term consideration should be given to identifying a successor. The nomination process of Chair is described in the ISO/IEC Directives Part 1.

Though not defined as a role in the ISO/IEC Directives Part 1, many WGs/PTs/MTs have an individual other than the convenor who takes on the role of WG/PT/MT Secretary, this person/role is a good way to develop a succession plan.

4.1.4.2 Convenors

TC 65 uses the procedures of ISO/IEC Directives Part 1, SL.3.5 for the nomination of convenors at plenaries.

The following procedure is to be used when a convenor is to be replaced between plenaries.

A call for convenors is circulated as an Administrative Circular (AC) (with or without a proposed convenor).

NOTE In some cases, a call for convenors can be skipped provided that the committee has a valid justification to skip this stage. In this case, the committee is required to add the justification as background information in the questionnaire.

A questionnaire is then circulated for approval (either for a single proposed convenor or for multiple proposed convenors.) When multiple candidates are nominated by the P-members, the P-members of the committee will be asked within the questionnaire to express their preference for one of the candidates.

The result of the questionnaire (RQ) includes approval of the appointment.

4.2 IEC TC/SC Officers training

This training is available for IEC TC/SC's chair, vice-chair, secretaries and convenors. It gives the opportunity for new members to familiarise themselves with their main tasks and relevant procedures in conducting their IEC related activity. For experienced chairs, secretaries and convenors, it is an easy way to refresh and update their knowledge.

The training is modular giving flexibility for the structure, content, and duration. When taken in IEC premises it gives the possibility to meet with most IEC SEC individuals involved in the specific tasks of TC/SCs officers.

IEC Secretariat e-learning platform is available for convenors and project leaders.

Access to the "Online learning platform" (requires sign-in to the IEC member site) is accessible from https://www.iec.ch/academy/online-learning-platform

4.3 IEC List of "Country Codes"

The list of IEC Members – National Committees and assigned, country codes to be used when referencing a particular country can be found at https://www.iec.ch/national-committees#nclist

4.4 TC 65 Plenary meetings

4.4.1 General considerations

The location of the plenary meeting normally rotates through the following regions: EMEA, Americas, Asia.

TC 65 plenaries are in person with remote support format.

4.4.2 Host National Committee considerations

The Host National Committee should be confirmed a minimum of 1-year prior to the start of the plenary with the invitation being send to IEC Secretariat via the NC.

Based on historical participation levels the meeting rooms for the SC and TC meeting require capacity, preferably in a U-shaped arrangement for 60 – 80 in person participants.

Meeting room also requires Wi-Fi access to support the remote participation option.

The four SC's typically meet for 4-hours each on Monday morning, Monday afternoon, Tuesday morning, and Tuesday afternoon. The TC 65 plenary is all day (8 hours) on Friday.

TC 65 AG14 meets on Wednesday in closed session and therefore is a smaller group of 15 – 20 people.

4.4.3 Automation Forum

Automation Forum is a full day mini-symposia event on Thursday with the program jointly developed by TC 65 and the Host National Committee.

Presentation slots are split evenly between TC 65 topics and technical content related to Industrial Automation of interest to the hosting NC.

4.4.4 Meeting Registration System (MRS)

Registration of delegates can be monitored in the "List" tab of the MRS web pages for the meeting.

One or two weeks before the meeting, check delegates registered for the meeting (select "Participants by meeting").

- If not yet approved, ask P-Member delegates and Convenors/Team Leaders to contact their NC for approval.
- If a registered NC has no assigned Head of Delegation (HoD), ask NC delegates to contact their NC representatives to properly register the assigned HoD. HoD changes can be done via MRS, of if MRS access is closed, by sending an e-mail to the TC/SC Technical Officer and Secretariat).
- Email lists for delegates are available under "Overview of current status of registrations".

Shortly before the meeting, country nameplates and attendance/sign sheets should be downloaded from MRS (in the "List" tab, select "Overview of current status of registrations").

NOTE Printing of nameplates is normally done by the Host National Committee

- If the MRS is closed for registration, meeting information can still be accessed by going directly to the general "TC tools" page of IEC at: https://www.iec.ch/standards-development/tc-tools

4.4.5 Document circulation

4.4.5.1 Summary

Table 1 summarises the required tasks and associated deadlines associated with TC 65 Plenary meetings.

NOTE Tasks and deadlines in red are required per the ISO/IEC Directives Part 1, others are corresponding intermediate steps with recommended target dates. Tasks in italic are optional.

Table 1 – Delivery dates of Plenary Meeting documents

Task	Due	Responsible
Before the Plenary meeting		
Circulation of TC 65 AC for meeting announcement (location and dates) Creation of TC 65 meeting area in the MRS	6 months before	IEC SEC
Setup of TC 65 MRS meeting area with meeting details	4 months before	Host NC
Circulation of TC 65 AC for meeting registration	16 weeks before	IEC SEC
Circulation of draft agendas (DA)	16 weeks before	TC/SC Secretary & IEC SEC
Send report templates to convenors (optional)	*12 weeks before*	*TC/SC Secretary*
Send report templates to liaisons (optional)	*10 weeks before*	*TC/SC Secretary*
Get feedback on resolutions & program adjustments	9 weeks before	TC/SC Secretary
Latest submission to IEC SEC of INF docs for decision (resolutions, work program adjustments)	8 weeks before	TC/SC Secretary
Send presentation templates to convenors and liaisons (optional)	*8 weeks before*	*TC/SC Secretary*
Provide draft INF for WG, PT and liaison reports	7 weeks before	Convenors & liaisons
Provide draft INF for Secretary report document(s)	6 weeks before	TC/SC Secretary
Circulation of INF docs for decisions	6 weeks before	TC/SC Secretary & IEC SEC
Latest submission to IEC SEC of final agenda & INF reports	5 weeks before	TC/SC Secretary
Circulation of final agenda & INFs	4 weeks before	TC/SC Secretary & IEC SEC
Provide presentations for WG, PT and liaison reports (optional)	*2 weeks before*	*Convenors and liaisons*

Task	Due	Responsible
Provide updated or late Secretary, WG, PT and liaison reports (optional)	*2 weeks before*	*TC/SC Secretary, convenors & liaisons*
Prepare updated agenda with latest document references	2 weeks before	TC/SC Secretary
Post updated agenda with updated and late reports in the Collaboration Platform	1 week before	TC/SC Secretary
After the Plenary meeting		
Post draft decision list in the Collaboration Platform for review	48 hours after	TC/SC Secretary
Circulation of Decision List with Actions (DL)	1 week after	TC/SC Secretary & IEC SEC
Submission of RSMB input to TC Secretary	3 weeks after	SC Secretary
Submission of full RSMB report to IEC SEC	4 weeks after	TC Secretary
Circulation of meeting minutes (RM, optional MTG)	4 weeks after	TC/SC Secretary & IEC SEC

4.4.5.2 Prior to Plenary

The first draft agenda shall be circulated a minimum of 16 weeks before the meeting.

All documents requiring discussion and/or decision (e.g., drafts, schedule adjustments, proposed resolutions) shall be circulated a minimum of 6 weeks before the meeting as INF documents.

All informative documents (reports) relevant for the meetings are circulated a minimum of 4 weeks before the meeting as INF documents, but no later than together with the final "A" agenda.

Revised agenda ("A" version) and all other available documents (RM, INF) will be packaged in a zip file (“meeting folder”) which is circulated to NCs and posted in the Meetings area of the TC/SC Dashboard 4 weeks before the meeting.

The revised agenda shall only mention documents already distributed (RM, INF), or distributed as part of the "meeting folder".

No further revision of the agenda is allowed after the “A” version distributed 4 weeks before (there shall not be a "B'' version).

Documents available after the 4 weeks deadline should be posted in the Collaboration Platform (with a notification message) but will have no “official” status.

- Meeting documents circulated after the 4-week deadline (i.e., not circulated as an INF) shall carry a reference composed of the number of the technical committee or subcommittee, the place of the meeting and the origin of the document, followed by a meeting serial number (e.g., "65C(LONDON/SEC)02", 65(LONDON/WG23)15, 65(LONDON/SMITH)27, "65A(LONDON/Germany)22"
- The revised agenda "A" shall not include any “provisional” reference to these late documents, even if they are expected.
- An informal revised agenda "B" referring to these late documents may be posted on the Collaboration Platform shortly before the meeting.
- These late documents may be presented and discussed during the meeting, but they should not be used as a basis for decisions. However, reports of SC Plenaries which are generated during the SC plenary and presented at the TC meeting of the same Plenary meeting can be used for decisions in the TC 65 plenary.

If the status of a Working Group has changed since its report was distributed 4 weeks before the plenary as an INF (e.g., because of a WG meeting the week before the Plenary), an updated version of the WG report may be posted to the Collaboration Platform.

NOTE If needed, an "A" version of the INF could be circulated after the Plenary. Circulation of an “A” version is normally not necessary since most observations and decisions are noted in the official meeting report (RM)

Check contents of INF provided at least 4 weeks before by IEC Secretariat related to NC participation in particular:

- Note any discrepancies for correction during the Plenary.
- Consider analysing actual NC contribution to TC/SC work (e.g., active experts).

One week before a remote or hybrid plenary, post introductory slides on virtual meeting code of conduct in the Collaboration Platform with notification.

4.4.5.3 Plenary Meeting guidelines

The following suggestions can help in making Plenary meetings run more smoothly:

- At the beginning of the meeting, ask for NC consent to recording the meeting (if relevant to assist in preparation of the meeting minutes)
- At the beginning of the meeting, circulate the prepared attendance/sign sheet.
- Monitoring of partial remote attendance is not needed during the meeting, since Zoom provides a detailed report of connections.
- For a remote or hybrid meeting, someone (Chair, Secretary or Technical Officer) should monitor raised hands and chat messages.
- Agreement on decisions/resolutions is normally solicited in the following order: "Oppose", "Abstain" (all others are then implicitly "Approve").
    - Instead of the above, any NC HoD or the Chair can request a formal approval vote in which each NC is formally asked to register their vote.
    - Voting should be done by Heads of Delegation raising their country nameplate (for in person meetings), or their "virtual" hand (for a remote or hybrid meeting).
- Consider using a break in the meeting to do a group picture. For remote participants, they can be included by asking them to turn their camera on and take a screen shot of all.

4.4.5.4 Following Plenary

A decision list with actions should be posted to the Collaboration Platform within 48 hours (including resolutions, actions, and changes to the Work Program, stability dates, or liaison representatives) of the conclusion of the plenary meeting for comment prior to the official distribution to NCs.

The official Decision List with Actions (DL) document should be circulated within one week after the meeting. [ISO/IEC Directives Part 1, §1.9.2 c) 3)]

Minutes of the meeting (RM) shall be circulated within 4 weeks after the meeting. [ISO/IEC Directives Part 1; 1.9.2 c) 4)]

- If required by the Secretariat of the TC/SC, the RM may be circulated together with an MTG zip file which may include all late documents only available in the Collaboration Platform, provided that they were presented during the meeting and are referred to in the RM. The MTG zip file shall not include INF documents.

TC report for the SMB (RSMB) should be prepared within 4 weeks after the meeting. For SCs meeting held concurrently with their parent TC Plenary, SC input for the RSMB should be

submitted to the Secretariat of the parent TC within one week earlier. [ISO/IEC Directives Part 1, 1.9.2 c) 5)]

4.5 Use of editing marks

Editing marks (track changes) should be used during the document drafting process. This is for ease of understanding of what has been changed, added, or removed thus saving time.

It is useful to circulate draft CD/CDV/FDIS texts (possibly including editing marks) within the WG/MT/PT, prior to submission to the TC 65 Secretary, to allow a final review prior to circulation to NCs.

4.6 CDV publication without FDIS

If at CDV stage, there are no negative votes and no technical changes it is the responsibility of the Chair and Secretary to decide if publication without an FDIS is appropriate. They will consider advice from the Convenor before deciding to publish with or without an FDIS stage. The Chair and Secretary only intend to publish without an FDIS stage if CDV comments are minor editorial only. [SOURCE ISO/IEC Directives Part 1, 2.6.4]

NOTE The ISO/IEC Directives Part 1 allows skipping the FDIS stage if the approval criteria are met but is not recommended if negative votes have been cast.

4.7 Redline standards

Standards can also be published as redline versions, which provide a quick and easy way to compare all the changes between the standard and its previous edition. For key standards, it is the preferred position of TC 65 to have a redline version.

NOTE Key standards are those documents which are expected to be referenced in other standards as it is important to be able to recognize what has changed as it may impact the contents of the other standard.

It is recognised that where there are major or many changes to a standard, a redline version may be so full of changes it is not useful. In this case the convenor should recommend whether the changes between one edition of a standard and the next justify the publication of a redline version.

4.8 Commented Version

The Commented version (CMV) of an IEC official publication provides comments on main changes between the new IEC edition of a Standard and the previous edition.

The CMV is a value-added product based on the Redline Version which is a pre-requisite for the development of a CMV.

CMV development is a collaborative work between TC/SC experts and IEC SEC.

The CMV provides comments on main changes between the new IEC Standard edition and the previous edition.

Comments should add contextual relevant information, give rationale for the change, provide information for implementing the change and should be consensus-based.

At CCDV stage, IEC SEC checks if a CMV is feasible and contacts TCs. If TCs agree to develop the CMV, the collection of comments from the expert(s) can start.

4.9 IEC supporting information

IEC technical support information including access to forms and templates can be found and downloaded from the IEC website “Standards development” page:
https://www.iec.ch/standardsdev/

5 Document Types

5.1 Types of documents

IEC has several different document types, and each has a slightly different use, and requirements regarding development.

IEC Technical Committees publish four main different types of documents.

NOTE 1 Other IEC entities may publish other types of documents, such as Guides.

NOTE 2 New forms of providing standardized content to the market are data bases and code components. An example of such databases is the IEC CDD. Code component examples include XML files which could be directly used in a software product.

5.2 International Standard (IS)

An International Standard is a standard adopted by an international standards organization and made available to the public. The definition given in all IEC standards reads: "A normative document, developed according to consensus procedures, which has been approved by the IEC National Committee members of the responsible committee in accordance with Part 1 of the ISO/IEC Directives."

NOTE An IS (or TS) does not need to have normative requirements or recommendations. Common examples include documents containing terms and definitions, concepts, etc. for a series, which are suitable as an IS (or TS).

More information on International Standard (IS) preparation is available at https://www.iec.ch/publications/international-standards

5.3 Technical Specification (TS)

Technical Specifications (TS) https://www.iec.ch/publications/specifications are often published when the subject under question is still under development or when insufficient consensus for approval of an International Standard is available.

Technical Specifications approach International Standards in terms of detail and completeness but have not yet passed through all approval stages either because consensus has not been reached or because standardization is seen to be premature.

5.4 Technical Reports (TR)

Technical Reports (TR) https://www.iec.ch/publications/technical-reports are entirely informative in nature and shall not contain matter implying that they are normative.

Technical Reports contain collected data of a kind different from that normally published as an International Standard, for example data obtained from a survey carried out among national committees, data of work in other international organizations or data on "the state of the art" in relation to standards of national committees on a particular subject.

5.5 Publicly Available Specification (PAS)

A Publicly Available Specification is typically a publication responding to an urgent market need as defined in the ISO/IEC Directives Part 1, 3.2.1.

A Publicly Available Specification shall not conflict with an International Standard however competing Publicly Available Specifications on the same subject are permitted.

The objective of a Publicly Available Specification is to speed up standardization in areas of rapidly evolving technology.

A PAS shall remain valid for an initial maximum period of 3 years in ISO and 2 years in IEC. The validity may be extended for a single period up to a maximum of 3 in ISO and 2 years in IEC. During the validity period, withdrawal of a PAS is decided by the committee. At the end of the validity period, the PAS shall be transformed with or without change into another type of normative document or shall be automatically withdrawn. [SOURCE: ISO/IEC Directives Part 1, 3.2.4]

NOTE 1 Converting a PAS to another type of document is done by circulating an NP.

NOTE 2 Though distributing the intended PAS document directly as a CD is allowed by the ISO/IEC Directives Part 1, it is presently not possible in the IEC project management interface, a DC and follow-up INF for comments may be used as a work around.

[SOURCE: ISO/IEC Directives Part 1, 3.2]

The URL with additional information on Technical Specification (TS) and Publicly Available Specification (PAS) is https://www.iec.ch/publications/specifications

6 Initiating a Project

6.1 New project

A Preliminary Work Item (PWI) is used when more preparatory work is required before initiating a project or when a committee wishes to add a project to the committee roadmap. A PWI requires P Member approval. A PWI does not formally start the work and has a limited lifetime.

NOTE 1 A PWI can be approved by a Questionnaire or a resolution during a plenary meeting.

NOTE 2 A PWI is triggered by the Secretary directly from the project dashboard.

To formally start an IS or a TS, a draft New Work Item Proposal (NP) form is proposed by a National Committee with P member status or the Committee secretariat itself (e.g. at the request of a WG Convenor) to the IEC Secretariat. TC 65 AG14 then check the relevance of the NP prior to the Secretary submitting the NP to the system via the project dashboard. The NP is then circulated for approval. An NP also calls for experts to the Committee. [SOURCE: ISO/IEC Directives Part 1, 2.3.5]

In TC 65 initiation of a TR is usually done by circulating a DC document to the P & O members announcing the work and calling for experts. Then the IEC project dashboard allows a TR to be first circulated as a committee draft (CD) or directly as a DTR for voting.

Initiation of a PAS for a preliminary document (to be developed by the committee prior to a full IS) is done by circulating a NP, which will require simple majority approval of the P-members voting, and the same participation criteria as for an IS. Within TC 65 a CD will be then circulated to allow for comments prior to distribution of the DPAS for voting.

Further information regarding the progression of all work may be found in the ISO/IEC Directives Part 1, Clause 2.

6.2 Maintenance project

There are two options to seek the opinion of the P-Members about the need for maintenance:

1) The Secretary can add this topic to a plenary agenda. At such meetings, the report of the WG convenors may include recommendations for maintenance which can also trigger the process. If the topic was announced 6 weeks in advance of the plenary, a formal committee decision can be made. The text of corresponding resolution shall include a request for the Secretary to circulate a RR and preferably the scope of the maintenance project (what needs to be updated).
2) Circulate a DC or a Q document to ask the P-Members if they support the maintenance project and which elements of the standard need to be updated. With a DC, the secretary will have the flexibility to evaluate if there is consensus. and then circulate a Q accordingly for formal approval. If there is a simple majority of approvals as a result of the Q, the committee is approved to start the maintenance project.

Once consensus is reached about the need for a maintenance, the review report (RR) is circulated formally initiating the project. The RR should summarise the items to be revised (project description). Such items will become the mandate given to the WG responsible for the project.

For maintenance projects, there is no minimum number of Experts, like we have for an NP.

7 Document Preparation

7.1 General

When drafting a standard:

- Standard developers shall conform to ISO/IEC Directives Part 2. Specific points of attention are the General Principles (Clause 5), Verbal forms for expressions of provisions (Clause 7) and the Reference documents and sources for drafting (Annex E).
- Standard developers should use internal document hyperlinks for all cross-references.
- The latest version of the template available from the IEC website with the Microsoft Word Add-in (Macros need to be enabled) should be used.

TC 65 recommendation for preparation of Test Specifications is that they be prepared in a separate document than the source standard.

[SOURCE: ISO/IEC Directives Part 2, 18.1]

Standards development timescales should be set by the Technical Committee but in some instances may need to align with another liaison group.

The average time to produce an IEC standard is 32 months. If the project takes longer than five years, it will be necessary to restart the project.

NOTE A new project (Edition 1) will be restarted with a new NP, a revised project (Edition 2 or more) will be restarted with a new RR.

7.2 Forewords

Significant changes between editions should be included in the foreword to standards. These should be written in a meaningful form that makes the change evident. When possible, references to specific Clauses or subclauses should be provided. The changes should be collected throughout the drafting process and by careful comparison of the changes at CDV/FDIS stage with the published edition. The default text of the Foreword may be extended by additional information pointing to other parts of the series, or on the use of colour.

[SOURCE: ISO/IEC Directives Part 2, Clause 12]

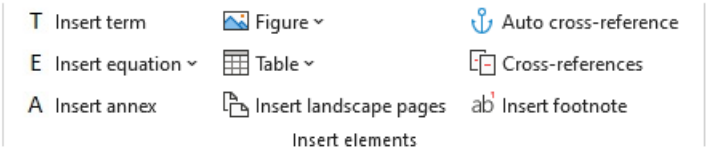
7.3 Table of Contents

This defaults on the template to three levels (two levels for Annexes). Formatting of the document and heading of clauses as well as titles, should be done in a way that provides meaningful information in the table of contents. In exceptional cases it may be possible to index to more levels.

If additional levels are required, a comment requesting for this to be kept is required when submitting the document, so that IEC Secretariat layout services retain the requested number of levels.

7.4 Automatic cross-references and hyperlinks

Automatic cross referencing requires automatic numbering of Tables, Figures, Equations and Bibliographic entries through use of the proper entries from the “insert elements” section in the IEC tools tool bar menu.



Use the IEC template’s “cross-reference” menu option from the IEC Tools menu to create cross references.

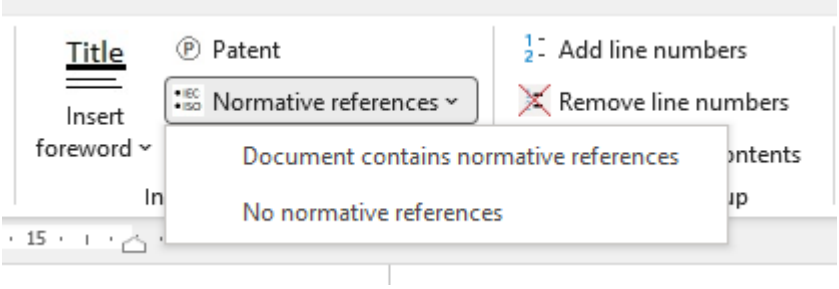
The “Auto cross-reference” option macro allows you to type a hard coded reference, and then automatically add the hyperlink. This ensures the reference element numbers can be automatically updated if the original element number changes.

Hyperlinks shall be used in documents for cross-referencing to other clauses, Tables, Figures, equations and (numbered) bibliographic entries. This makes navigating the documents easier.

Detailed guidance on adding cross-references with hyperlinks is provided in the IEC Template User Guide (subclause 6.6).

7.5 Normative references of standards

Insert the standardized version of the boilerplate for the normative references clause from the IEC Template by clicking on the "IEC Tools” menu, selecting the menu choice “Insert boilerplate text / Normative references”, and then selecting the appropriate dropdown.



References to other standards should, wherever possible, be of a general nature, so that reference to the standard can be an undated reference. If a specific clause or other element number needs to be identified, the normative reference to the standard needs to be a dated reference, because element numbers can change between editions. Consequently, the reader

will need to obtain an earlier version of the standard than the current issue to get the information on which the reference was based.

7.6 Terms and definitions of standards

7.6.1 Opening paragraph

Insert the standardized version of the boilerplate for the terms and definitions clause from the IEC Template by clicking on the "IEC Tools" menu, selecting the menu choice "Insert boilerplate text", and then choosing the appropriate introduction to this clause from the list.

When the introduction includes reference to a specific standard, for example to reference common terms, and definitions for a series, this document shall be included as a normative reference.

When a document is only cited as a SOURCE within a definition, the SOURCE document shall be listed in the Bibliography.

7.6.2 Definitions

Creation of new definitions is discouraged.

If there is an existing definition that can be used as is or slightly modified, that is preferred rather than creating a new definition.

[SOURCE: ISO/IEC Directives Part 2, 16.5.10]

The use of notes to clarify a definition for a particular standard, rather than changing a definition should be encouraged.

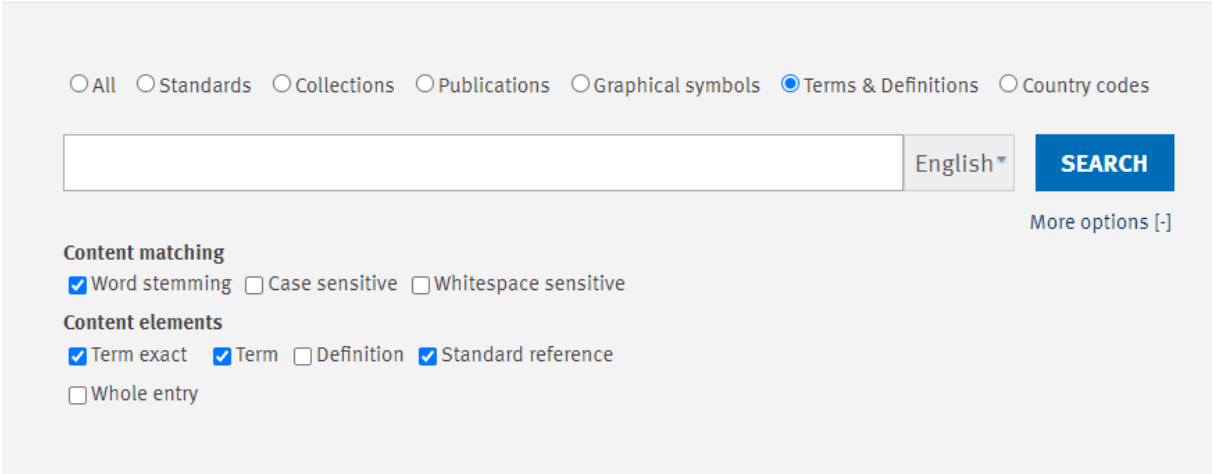
The following on-line dictionaries should be used as a starting point:

IEC 60050 (Electropedia: http://www.electropedia.org/

NOTE 1 IEC 60050-351 Control technology is maintained by TC 65.

ISO Online Browsing Platform (OBP): https://www.iso.org/obp/ui/#home

NOTE 2 When using the OBP for terms and definitions, as shown below, select that option, as well as the "term exact" and "term" boxes in the more options section of the home screen.



IEC Products and Services Portal: https://products.iec.ch/home

NOTE 3 Since the IEC Glossary has not been updated since 2015, when using the IEC Glossary verify the reference is to the most recent edition of the Standard.

Requirements for creation of a definition are described in ISO/IEC Directives Part 2, Clause 16.

The IEC Template provides an embedded tool to generate a properly formatted term & definition entry.

ISO/IEC Directives Part 2 indicate “Terms and definitions should preferably be listed according to the hierarchy of the concepts (i.e., systematic order). Alphabetical order is the least preferred order.”. However, TC 65 encourages all standards to be written with definitions in alphabetical order as it is easier to follow.

NOTE 4 A hierarchical order presupposes some understanding of a hierarchy, which isn’t necessarily the case. The hierarchy of the alphabet can always be assumed.

7.6.3 Definitions for parts of a series

Whether or not definitions are included in the parts of a series are determined by the following:

- if the standard being drafted is a part of a series which includes a base part with common definitions for the series, only new terms not included in the base part are to be added,
- If an unaltered base standard term is used in the part, then the definition is not to be included in the part definitions list.
- Definitions used in the base part shall not be fundamentally altered.
- If the definition of a term from the base part needs to be fundamentally altered, then a different term shall be used and included with the altered definition.
- If the definition needs to be slightly altered, follow the guidance in ISO/IEC Directives Part 2, 16.5.10
- Definitions that differ only editorially from those in base part should not be added.

Wherever possible, definitions appearing in different parts should be harmonized with the definition that appears in the base part, and not included in the part definitions list.

7.6.4 Common definitions

TC 65 officers should be informed if terms are defined which may be relevant for TC 65 and subcommittees, especially if they appear in multiple documents. They can then be considered by IEC TC 65 WG1 who may also propose these terms to be added to the IEV.

7.7 Common requirements in series

To ensure consistency of approach, parts are not to change the common requirements specified in the base part.

This constraint is to minimise ‘experts’ being distracted from dealing with technical issues in meetings and to ensure consistency across the series. If when drafting a part, an issue with a common requirement, this should be communicated to the project leader of the base part for consideration.

7.8 Document control practices

7.8.1 General

This clause is intended to give direction to IEC TC 65, Working Group (WG), and Maintenance Team (MT) Convenors as well as Project Team leaders on how to effectively control and handle changes to documents during the maintenance cycle process on IEC TC 65 technical standards.

7.8.2 Drafting

7.8.2.1 Drafting general requirements

For existing publications, the initial electronic text to be used in a revision or amendment shall be the IEC published text of this existing publication, not the FDIS text from the previous edition or any other pre- publication version. This is the actual text to be altered, which will avoid unnecessary editing. This text is to be obtained from IEC SEC via the Secretary.

Have a copy or access to the ISO/IEC Directives Part 1 and Part 2 handy for reference. The most recent copies are always available from:
https://www.iec.ch/news-resources/reference-material#governing

To avoid corruption of the document and template and to maintain control of the changes, only the Project Leader, or a person nominated by the Project Leader, Convenor and/or the Secretary as the document editor shall revise the working documents electronically and integrate inputs from multiple experts.

NOTE The final draft from the editor may be further corrected by the Project Leader, Convenor, and / or Secretary.

The latest IEC Standard Template and its User guide can be downloaded from the IEC web site Writing & formatting: https://www.iec.ch/standards-development/writing-and-formatting

To support proper attachment of the template for everyone using the document, the template should be installed in a root directory on your computer. The suggested path is C:\IEC_TC65_templates. When submitting the document to IEC Secretariat specify the expected location of the template to avoid unintentional changes to the document layout.

For instructions on how to install the template refer to the IEC Template User Guide located on the same web page as the template itself.

Apply this latest IEC standard template initially and each time you open a draft document for the first time, for example, when a document is sent to you as Convenor after revision by the Secretary or a person nominated by you.

7.8.2.2 Editing revisions

The document modification process has been found to be most effective when during comment resolution both the revised document and “Observations of the secretariat” column in the compilation of comments is developed simultaneously and “on-screen” during the WG/MT/PT meeting.

It is also often useful to have the original PDF document open for reference (as line numbers in the Word document can change during the editing process) and to verify the original text while editing.

It is also recommended that while editing to incorporate comments the “Track Changes” feature be used on working documents to show how the document has been revised.

Editors may also consider reflecting all comments received and their resolution as “Word comments” with cross reference to the source comment number. The screen capture below shows an example of how this can be done.

149 of activity and the intended operational environment.

150 **5.7.2 Rationale and supplemental guidance**

151 A contextual mapping is not intended to undermine principles and concepts of the underlaying
152 IEC 62443 standard(s).

153 **5.8 P07: No new requirements**

154 **5.8.1 Requirement**

155 The cyber security profile shall not introduce new requirements in addition to the requirements
156 specified in the selected IEC 62443 standard(s) (see Clause 5.5).

157 **5.8.2 Rationale and supplemental guidance**

158 When specifying a cyber security profile, it is important to ensure that no new requirements are
159 introduced, in addition to those already specified in the selected IEC 62443 standard(s) (e.g.
160 by a contextual mapping).

161 **5.9 P.08: No modification of requirements**

162 **5.9.1 Requirement**

163 The cyber security profile shall not alter / modify the definition or the corresponding rationale
164 of a selected requirement (see Clause 5.5).

165 **5.9.2 Rationale and supplemental guidance**

166 When specifying a cyber security profile and mapping requirements, it is important not to modify
167 the selected requirements.

168 **5.10 P.09: Maturity level**

169 **5.10.1 Permission**

170 The cyber security profile may select a minimum maturity level for

171 • individual requirements:

IT 05:
This and previous requirement conflict with the same concept developed by NIST.
NIST SP 800-37 and 800-53B refer to "organizationally-tailored control baselines" ("...providing an opportunity to add or eliminate controls to accommodate organizational requirements while continuing to protect information commensurate with risk. Organizations can use tailored baselines and overlays to customize control baselines by describing control applicability and by providing interpretations for specific technologies; types of missions or business functions, operations, systems, environments of operation, and operating modes; and statutory or regulatory requirements").
Of course, it is not mandatory to match NIST, but, since the concepts are essentially the same, may be worth thinking about a proper rationale, added to 5.9.2.
Not Accepted
It is the intention of this scheme explicitly prohibit the modification of the requirements selected from the other parts of the series.

ISA99 73:
Unclear how this shall differ from the previous contextual mapping. Need precision.
Change title of P.08 to: "No modification of requirement rationale"
Accepted in Principle
The description of P.05/P.06 will be amended to clarify, that a contextual mapping is not a modification of the related IEC 62443 requirement and its rationale. The sentence in line 163 refers not only to the rationale but also to the definition of the requirement.

7.8.2.3 Figures

Preference is for figures to be black and white. Different shapes and line styles should be considered before using colour when possible.

Colours in figures, tables or text shall only be used where they facilitate the use of the document. Colours must serve a purpose in helping the user to easily understand and interpret the data and explanations given.

The use of colour for purely aesthetic purposes is not permitted. Consider using grey scale instead.

Further guidance use of colours and grey scale can be found at:
https://www.iec.ch/standards-development/graphics-figures#article-header-id-5733-colour-recommendations

When colour is used and required for understanding of the document the following statement must be included in the document foreword.

> IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

When specific colours have an associated meaning across one or more drawings, add a comment for use by IEC Secretariat, next to the Figure, with the RGB or CMYK colour key for each line or fill where colour is important and has meaning.

7.8.2.4 IEC edited versions of CDV/DTS/DTR

At the first enquiry / approval stage the IEC carries out an editing review of the document to align this with the ISO/IEC Directives Part 2. Therefore, once the document has completed CDV / DTS or DTR then the convenor / author of the document will receive the IEC edited version from the committee Secretary. The convenor/author is required to review the IEC editorial changes and approve or not before incorporating the comments received in the RVC/RVDTS/RVDTR form.

NOTE IEC editorial comments can be rejected but need to be justified.

If the IEC Edited version is not used as the basis of the next stage, it will be rejected by IEC Secretariat.

If it is necessary to revise a Figure after it has been edited by IEC, remove the IEC footer from the affected document to indicate that it has been amended/modified.

Refer to Annex A for additional guidance on how to manage Figures between the CDV and FDIS stage including potential revision of the Figures.

7.8.3 Comment preparation and submittal to ballots

7.8.3.1 General

Ensuring quality comments is critical to the standards preparation process especially as despite the use of internet-based meeting tools, not all experts or comment contributors are able to attend all the comment review meetings.

Each comment should be numbered, and properly cross-referenced (line number and clause number).

Comments shall only address one topic / proposed change per entry.

NOTE If the document has line numbers, this is the minimum cross reference.

Use the official PDF circulated for comments as the reference for addressing comments. This facilitates keeping comment line numbers consistent as editing of the new document occurs.

An example and detailed instructions on how to complete the comment forms are provided in Annex E.

7.8.3.2 Voting

If a National Committee has no position on the document, the recommended vote should be to Abstain (ISO/IEC Directives Part 1, 0.7 c)). Submitting Abstain as a ballot counts towards the NC participation statistics.

NOTE 1 If an NC votes to abstain on an NP, the NC is unable to nominate experts towards the NP approval participation requirement, either during the ballot or the 4 weeks following closure of the ballot. Nomination of experts for the NP requires the NC to vote to Approve. [SOURCE: ISO/IEC Directives Part 1 + IEC Supplement, 2.3.5]

NOTE 2 Being an expert on a WG or PT does not ‘automatically’ carry over for new work items of that WG or PT and convenors/project leaders should encourage their members to put their names forward as experts.

If the NC has no comment other than agreement with the document, it is helpful to include a General (ge) comment with the NC Approval to confirm agreement.

7.8.3.3 Comment types

Comments are classified as Editorial, Technical, or General to assist the group when resolving comments to prioritise the scope and impact of the comment to the document.

Editorial: Should be reserved for simple editorial corrections to spelling, grammar, punctuation, or formatting.

NOTE 1 Rule of thumb: Would a typical grammar teacher without technical knowledge related to the standard have marked it incorrect?

EXAMPLE 1 (Ed) Correct bullet labelling throughout document to match IEC template.

Technical: All other changes to the content of a provision, including modifications “for clarification”, new provisions, proposals for removing provisions, etc.

EXAMPLE 2 (Te) Formula is incorrect, x_2 should be x^2.

General: Used for comments that apply to broad concepts and direction of the document.

Assign Comments (editorial, technical, and general) that apply to the entire document to line 0 with “General" as the Clause/ Subclause column entry.

EXAMPLE 3 (Ge) This document is incomplete as several clauses are missing, and therefore a second CD should be distributed.

NOTE 2 General comments are assigned line number 00.

NOTE 3 General comments can also apply against specific clauses or sections of a document.

7.8.4 Line number references

Line numbers should be used for all documents in ballot except FDIS as this facilitates the comment review process.

If the secretary, convenor, or project leader makes changes to the comments, (the first five columns of the comment form), use strikethrough of the original and identify the change made, in red, so that the change is clearly visible.

All documents (including internal working group documents) circulated for comments should be circulated in PDF format.

NOTE 1 Creation of the PDF file should be to use the native program “Save as PDF” feature as this provides better integrity of line numbering and other features / layout of the source document.

NOTE 2 Distributing in PDF format will maintain line numbers. Line numbers can shift due to differences in paper size between ISO (e.g. A4) on which the IEC template is based, and North America (e.g. 8½ x 11).

7.8.5 Comment resolution

Comments received from National Committees or other sources (i.e. Liaison) are compiled by the Secretary on circulated documents then sent to the WG/MT Convenor or Project Leader (PL) by the Secretary on the IEC Comment form.

NOTE 1 Documents downloaded from the dashboard at the close of ballot, may be incomplete (e.g. liaison comments are not included).

The Secretary submits the compiled comments to the IEC Secretariat who then circulates the final compiled comments (original and PDF).

The Convenor shall circulate a copy of the final compiled comments, using the Collaboration Platform, to the WG/MT/PT for their initial review.

NOTE 2 The comments are distributed as an unabridged and sorted (by line number) copy to the WG/MT/PT members for their initial review.

To enhance the efficiency of the WG in the meeting and to expedite their deliberations, the Convenor/PL is allowed to draft an initial proposal to answer the comments in the observation’s column. This document shall be circulated within the WG prior the meeting. Observations could include:

- a proposed reply for obvious or unambiguous comments (e.g. editorial comments), if any.
- any useful information or suggested replies for comments that need to be solved by the WG during the meeting, if any.

NOTE 3 Only editorial comments should be addressed in this manner. Technical comments should be carefully considered with the full committee.

Convenors and PL's are usually delegated by the Secretary to be responsible for ensuring the completion of the "Observations of the secretariat" column of the compilation of comments. Such comments should have been reviewed and discussed by the WG/MT/PT, either in meetings or by correspondence and represent the consensus position.

The Convenor/PL shall then send the completed comment resolution draft document to the Secretary who will finalize and send it to the IEC Secretariat for distribution to the National Committees.

NOTE 4 If observations can be provided before the circulation deadline (4 weeks for CC, 12 weeks for RVC) a single distribution to NC's will be sufficient.

For consistency, the dispositions of comments shall be as follows (acronyms shall not be used):

a) Accepted.

The comment was acceptable as presented.

b) Not Accepted

This disposition indicates that the comment will not be incorporated into the document. All rejections shall have the justification for rejection, whether technical or editorial and documented as part of this disposition.

c) Accepted in Part

This disposition indicates that some parts of the comment will be accepted and incorporated into the document. An explanation of how the accepted part is to be incorporated into the document shall be given. The parts that have not been accepted shall have the justification for doing so, whether technical or editorial, documented as part of this disposition.

NOTE 5 This type of disposition is used when the commenter submits several issues in one comment.

d) Accepted in Principle

This disposition indicates that the principle of the comment was accepted but was incorporated into the document in a different manner than that suggested by the commenter. Explanation of how this is to be incorporated into the document shall be included along with the justification for the decision.

e) Held for Next Edition

This disposition is to be used for major technical comments received for the CDV and last stages of the various development cycles that has had a positive vote but have merit for consideration. Due to the impact the comment might have on the document at this late stage of the development cycle it should be held until the next maintenance cycle of the document.

f) Noted

This is used where there is no action required on the comment.

In cases b), c) and d), the justification provided should clearly convey the specific reasons why the comment was not acceptable. This will allow the commenter the opportunity to provide additional information and justification at the next stage of review for those cases where, perhaps because of language barriers or interpretation difficulties, the commenter believes that the WG/MT/PT did not fully understand the proposal.

When cross-referencing to another comment, include the referenced comment number (e.g. see CA 0nn, see JP 0nn) in the Observations of the secretariat / resolution column.

The Convenor/PL shall then send the modified draft to the Secretary.

Resolution of FDIS comments are the responsibility of the Convenor and Secretary since changes can only be editorial at the FDIS stage or archived for consideration for the next revision. The entire WG/MT/PT is generally not involved in reviewing and resolving FDIS comments. This is also the case, if approval is obtained at CDV stage, with no need for technical changes in the draft and the Chair and Secretary as advised by the Convenor agree to publish without a FDIS stage. [SOURCE: ISO/IEC Directives Part 1, 2.6.4]

NOTE 6 Unanimous vote at CDV is not required, only approval as per IEC rules at CDV, however direct publication should be avoided in case of negative votes indicating potential issues with the technical contents.

NOTE 7 These comment resolution process also applies for the last stages of other development cycles.

7.8.6 Implementation of resolutions (applying revisions to working document)

For implementing the necessary modifications, it is recommended to edit the standard document live during the meeting, after agreeing on the “Observations of the Secretariat” in the CC document.

Only the Convenor, Project Leader, or a person nominated by them (Editor) and/or the Secretary, should revise this working document text electronically to avoid corruption of the template and to maintain control of the changes.

The final working document, including last modifications, should be circulated by the Convenor for approval by the WG//PT before sending it to the Secretary.

7.8.7 Final FDIS check

Prior to publication experts should check the contents of the circulated FDIS against the original draft submitted to identify any potential errors or discrepancies introduced during the final editing process by IEC Secretariat.

7.9 WG/MT/PT meetings and agendas

7.9.1 Role of the convenor

Once set up, the WG/MT/PT is under the responsibility of the convenor who is expected to:

- be responsible for the process of drafting new standards or maintaining old standards, addressing comments and votes from National Committees, while finding the best consensus within the WG and respecting IEC rules;
- manage the development of the project;
- organize and chair the working group meetings;
- report to the TC/SC secretary and chair on the progress/delays;
- report to the TC/SC secretary and chair on any significant problem affecting the project;
- follow through the project until publication.

7.9.2 Role of the experts

Individually appointed experts are brought together to deal with the specific task allocated to the WG/MT/PT.

The experts act in a personal capacity and not as the official representative of the organization by which they were appointed. However, it is recommended that they keep close contact with their organization (National Committee or other International Organization in liaison) in order to inform them about the progress of the work.

7.9.3 Role of liaisons

Refer to Subclauses 1.15. 1.16, and 1.17 of ISO/IEC Directives Part 1 for more information on different liaison roles.

One challenge faced by liaisons is to assist the convenor with incorporating comments from the liaison organization into the IEC document. Refer to Clause 7.8.3 and 7.8.4 for guidance on preparation of comments.

The liaison should also assist the convenor by checking and submitting liaison organization comments with correct line number cross-references on the proper IEC forms.

7.9.4 WG/MT/PT meetings

7.9.4.1 General

Conduct of meetings shall observe antitrust laws. Agendas shall be provided in advance, and care taken for any other items raised to assure that no issues related to pricing, competitive strategy, market share and so on are discussed. It is the responsibility of participants to ensure that only non-confidential technical details required to produce the standards are discussed.

All new members (experts, liaison officer, guests, etc.) shall be informed by the convenor/PL that they must respect the IPR and copyright policies of IEC. In case of a dual (multi) logo project, the processes of all involved SDOs apply.

7.9.4.2 Types of meetings

IEC has four different meeting formats as described below:

1) In person – face to face meeting where attendees physically meet.
2) In person with option to connect remotely – in person meeting that supports remote participation but giving preference to those attending in person, which allows for an 8-hour meeting during normal business hours of the physical location. For TC and SC meetings, IEC Secretariat serves as host for the virtual part of the meeting.
3) Hybrid – in person and remote limited to 4-hours duration with requirement to rotate time zones to share the early and late day changes. For TC and SC meetings, IEC Secretariat serves as host for the virtual part of the meeting.

NOTE When registering for a Hybrid meeting, individuals still need to register in the Meeting Registration System (MRS) and select the remote connectivity option.

4) Virtual – fully remote meeting limited to 4-hours duration with requirement to rotate time zones to share the early and late day changes. For TC and SC meetings, IEC Secretariat serves as host for the meeting.

7.9.4.3 Calling meetings

The Convenor should consider other WG/MT/PT meetings with possible overlap of experts before calling a meeting. This is to ensure that it does not take place at the same time as another meeting that would conflict with the experts being able to attend. It is also to optimize the travelling time and costs of the experts, for example by calling meetings in conjunction with other meetings at the same location and time frame that the experts will be attending.

Sub-group invitations shall address all group experts. For all experts it should be allowed to attend all sub-group meetings.

When calling a meeting the Convenor shall ensure that the latest member list of experts generated by the IEC Expert Management System is used and as appropriate include the approved liaison members in the distribution list.

Using the Collaboration Platform to distribute meeting invitations and WG/MT/PT documents is required by IEC and will ensure distribution to all IEC Experts.

Experts are encouraged to inform the WG/MT/PT Convenor of their intention to attend the meeting well in advance (preferably at least two weeks before a virtual meeting and four weeks for face-to-face meetings) to support the company hosting and organizing the meeting.

WG/MT/PT meetings held in conjunction with a TC Plenary must use the IEC Meeting Registration System (MRS) and will need to be coordinated with TC management.

NOTE MRS is being revised to support organisation of all WG/MT/PT meetings.

7.9.4.4 Length of meetings

When deciding how many days may be necessary for resolution of comments the following should be considered:

- estimating the complexity and how many comments on average that can be covered in one day;
- number of figures that have comments;
- experience has shown that 70 comments is the average that can be covered in one day;
- ‘attention span’ of participants in face-to-face meetings tends to fall of significantly beyond 3.5 days
- for the same reason, virtual meetings should not extend beyond 3 hours.

In general, it is recommended to work on the more complex issues such as figures during face-to-face meetings as other comments, especially review of editorial comments are more easily managed with internet-based meeting tools.

Where there are a very large number of comments to be discussed, it may not be practical to schedule a meeting with the time to consider each comment in detail. To improve efficiency, the TC/SC secretary or WG/MT/PT Convenor may include suggestions for the editorial comments in the Comment Form for confirmation by the meeting.

The Convenor/PL shall distribute any document that will be discussed during the meeting as soon as possible.

7.9.5 Meeting location

When selecting a meeting location, it is preferable to have one of your active members host the meeting as they will already be familiar with the requirements and logistics such as:

- size of meeting room(s)
- number of projectors
- Wi-Fi for remote call-in
- Audio requirements (room speaker and/or microphones for remote participants)

Because IEC is an international standards organization, when possible and depending on location of your experts consider rotating the meeting around to different regions. However, if doing so will negatively impact the ability of experts to participate for financial or other reasons this must be considered.

Generally, it is better to arrange for next meeting(s) prior to the conclusion of each meeting so that members can view their calendars together. If required, determination of meeting dates can be done using polling tools. Consideration should be given to hosting your meeting in conjunction with the TC plenary meetings.

NOTE If possible, planning for meetings should be arranged for two sessions or for one year in advance.

7.9.6 Remote conference considerations

Remote access for members unable to attend in person should be considered.

IEC provides a web meeting account for convenors and Project Team Leaders.

Remote access requires the following be considered:

1) How large is the room and will the hosts have any special audio equipment so that others will be able to hear the remote party comments and or the remote person can hear comments made in the meeting by the delegates present.
2) Practise/test the equipment and configuration before and on the day.
3) To avoid time wasting for those at the meeting, ensure the host and remote person is logging in several minutes before the start of the meeting.
4) If remote conferencing does not work at the start of the meeting, then make the executive decision to not use it or agree to try again at one of the breaks. It may also be wise to warn the remote party that whilst you will be doing your best to set remote conferencing up there is no guarantee that it will work on the day and that the remote delegate understands these risks.
5) Ideally you need someone other than the meeting chair to help to look at the screen for comments via the remote link.
6) Inform the other delegates in the room to not use the web meeting link as otherwise it will consume the bandwidth. As a minimum if they do log on to the meeting, they MUST have their system on mute.

7.9.7 WG/MT/PT meeting agendas

When calling a meeting the Convenor/PL shall ensure that they are using the most current list of experts by distributing the documents via the notification feature of the Collaboration platform.

NOTE 1 When using the Collaboration Platform notification feature, verify that the Secretary is included in the distribution list prior to sending the meeting notice.

All meeting agendas and minutes should be posted to the IEC Collaboration Platform.

Agendas shall include UTC start and end times for the meeting as a minimum, and if relevant corresponding meeting times for various locations as well.

It is also recommended to distribute a calendar (.ics) file with meeting details as this will account for attendee time zone differences.

Agendas and associated material for meetings including presentations should be provided as early as possible for discussion, and submission of supporting materials in advance.

If the meeting is held in conjunction with a plenary posting of the meeting announcement and logistics should be coordinated with the Secretary for inclusion on the IEC meeting registration site.

The Convenor/PL is recommended to circulate the final agenda (FA) and supporting material at least 1 week before the meeting and immediately upload the documents to the Collaboration Platform and use the notify Experts option so the link is sent to the experts.

NOTE 2 A single agenda with the details and discussion topics for multiple recurring meetings is an alternative to individual agendas for each meeting.

NOTE 3 Minutes of prior meetings can contain the planned discussion topics and details for future meetings.

Remote meeting agendas should include the meeting link (and if required password).

To help the preparation of meeting agendas on an IEC headed document, Annex B gives an example of a WG/MT/PT Draft Agenda which can be copied and modified to suit the meeting.

7.9.8 Meeting management

At the beginning of the meeting, the Convenor/PL shall present the code of conduct for meeting attendees.

Convenors/Project Leaders should ensure that the meeting time is kept and may intervene if discussions are too long or are digressing.

To decrease the risk of negative vote Convenors/PL's should strive to achieve the best possible consensus among the Experts in the WG. If a conflict arises, indicative informal polls may be conducted among the Experts present in the meeting to assess the amount of divergence. However, to the extent possible, decisions should not be based on majority: as per IEC rules consensus should always be sought.

7.9.9 Minutes

The Convenor/PL is expected to prepare the meeting minutes or appoint an Expert at the start of the meeting to do so.

The Convenor/PL should ensure that the minutes are reporting main decisions. It is recommended that experts can see the decisions on the screen while they are made. It is also recommended to make it a procedure to review all decisions before the end of the meeting.

Minutes shall be made at each meeting and distributed to WG/MT/PT members and the TC officers via the Collaboration Platform with a notification within four weeks of the end of the meeting.

Time permitting, for multi-day meetings provide draft minutes to be reviewed daily as this helps with adoption of final minutes and timely completion of any actions arising.

The Convenor/PL should ensure that the minutes contain an Action Plan with clear task description, task leader, and deadline, so that all Experts know what they must do for the next meeting. It is recommended to review the status of each task in the action plan at the next meeting to resolve or decide potential next actions accordingly.

NOTE The Action plan can be captured in a separate action log rather than in the minutes.

7.9.10 Action logs

A useful tool for ensuring all actions arising from meetings are captured and maintained without having to return to the archival minutes is a meeting action log.

An example of an Action Log is included in Annex D.

7.9.11 Meeting participation

When attending or participating in a meeting to make most effective use of the limited time of participants it is both polite and efficient to be prepared. Preparation includes the following:

- Review the agenda and the accompanying documents before the start of the meeting.

- Exchange points of view within your organization or mirror committee in your National Committee to get broader insights and to understand different viewpoints.
- Reach out and discuss contentious topics outside, preferably in advance of meetings to get a sense of the position of others. This can facilitate negotiation and lead to easier consensus building.

7.10 Document naming and numbering

7.10.1 General

Document numbering is important, and consistent way of doing so helps organise and retrieve documents. Document numbering also makes it possible to keep track of which is the most current version of a document and follow the history of how a document has reached it present state.

A document numbering scheme is required to uniquely identify any shared document.

Formal documents to/from IEC Secretariat will follow the file naming conventions defined in the ISO/IEC Directives.

Effective use of the file structure in the Collaboration tool workspace as described in Annex G also helps with documentation and revision tracking. The file structure itself can be used to place similar documents such as all files associated with a single meeting in the same location.

Every page of the document should have a header and/or footer containing both the document name as well as a page number.

7.10.2 Internal documents

To keep track of internal documents and to ensure the latest version is used, the files are to be uniquely identified using a consistent internal file naming convention.

Internal documents should be tracked to avoid duplication for example by listing them in a document continuously updated by the convenor/PL.

Documents should be posted to the Collaboration Platform.

Example document identification formats used by different working groups are provided in Annex G.

7.11 Electronic communications

Circulated documents either via e-mail or notifications generated by the IEC Collaboration Platform should make it clear in the subject line the source of the communique.

Messages sent from the Collaboration Platform normally indicate the Committee from which the message originate.

NOTE Collaboration Platform limits titles to 100 characters.

The following is the recommended prefix sequence to be used on all electronic communications:

[COMMITTEE] (Author) Descriptive subject title

The following table provides examples of committee and author.

Table 2 – Electronic communication descriptors

COMMITTEE	Author
TC65	Chair
SC65E WG10	Secretary
	Convenor
	Project Leader
	Editor
	Joe Smith

EXAMPLE 1 SC65E WG10 Meeting Minutes distributed by the Convenor would have the subject line: [SC65E WG10] (Convenor) Meeting Minutes April 15, 2019

EXAMPLE 2 SC65A MT61512 member Joe Smith commenting on Clause 4.3 in document would have the subject line: [SC65A MT61512] (Joe Smith) Edition 2 CDV Clause 4.3

8 Collaboration Platform

A comprehensive guide on the use of the collaboration platform can be found at CISPR https://www.iec.ch/dyn/www/f?p=103:173:0::::FSP_ORG_ID:1298 with a link to a PDF guidance document at https://www.iec.ch/members_experts/tools/pdf/CollaborationGuide.pdf. The Collaboration Platform is to be used to save all working documents including meeting documents, documents under discussion, formal circulation documents, etc.

When posting a document to the Collaboration Platform, the person doing so should also use the “notify” option so that affected individuals receive a direct e-mail communication in addition to the daily, weekly, summary where the document(s) of interest may be overlooked.

9 Internet meeting guidelines

9.1 General

With the increasing reliance and use of internet-based meeting tools and web conferencing procedures to make sure these meetings are run effectively can be found in Annex ‘F’.

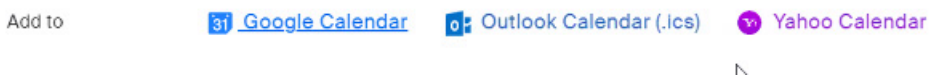
9.2 IEC Internet meeting tool

IEC uses the Zoom web conferencing tool with accounts available to Secretaries, Chairs and Convenors.

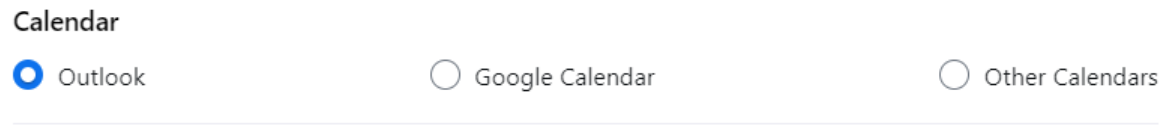
NOTE 1 Requests for IEC Zoom accounts are to be requested through the Secretary who will coordinate with IEC Secretariat (helpdesk@iec.ch).

Meeting organizers should generate a calendar meeting invitation (i.e. Outlook .ics file) which can be downloaded, then added as an attachment to the Collaboration Platform notification with distribution of the agenda.

Zoom has the feature to generate a calendar invite as part of the meeting invite prepared in the browser, the application only allows selection of one calendar option.



Zoom app screen



Meeting organizers should not rely on the notification from the Collaboration platform as the only way of informing participants of upcoming meetings but are encouraged to generate and send a separate calendar meeting invitation from the organizer's calendar to Committee Members.

NOTE 2 An advantage of sending as a calendar invite is to receive an indication of who will be attending the meeting. A calendar invite also adjusts to the correct time zone for the individual participants.

Information on this tool is listed as part of the normative references in Clause 2.

Annex A
(informative)

IEC Procedure for figures after CDV

This Annex A applies to the case when a Figure has been redrawn by the IEC Secretariat in the edited CDV which is returned at the end of the CDV report. The edited CDV contains both the original figure(s) and the new edited figure(s) in track change mode.

Case 1: Correct IEC Figure (and no changes between CDV and FDIS)

- No need for a change.
- The expert accepts the removal of the original figure and the addition of the IEC figure (with the IEC logo).
- No sending of new figure file with FDIS
- *The presence of the IEC logo is an indicator that the Figure has not been changed and is accepted.*

Case 2: IEC Figure to be modified by IEC Secretariat

- The expert indicates the changes to be made in the figure
  - Either the expert adds in the FDIS file a comment detailing the changes to be made
  - Either the expert forwards the necessary changes through a separate file (for example, drawing manually annotated then scanned (often faster and more understandable than text only, less risk of misunderstanding of corrections to be made)
- The expert accepts the removal of the original figure and puts a comment on the IEC Figure (ideally, possibility of cropping the png to remove the IEC logo)
- No sending of new figure file with FDIS

Case 3: IEC Figure to be modified by the expert, minor change (e.g. text)

- The expert changes the .pdf file of the figure (removing the IEC logo) and converts it into .png
- The expert accepts the removal of the original figure and rejects the addition of the IEC figure
- The expert inserts the .png of the modified figure (without the IEC logo)
- *The absence of the IEC logo indicates that the Figure has been modified*
- Sending of the modified figure with the FDIS: .pdf format only (without the IEC logo)
- *(The .png will be recreated internally by the IEC)*

Case 4: IEC Figure to be modified by the expert, significant change

- The expert prepares a new version of the figure in "native" format (e.g. Powerpoint, Visio,...) (removing the IEC logo)
- The expert accepts the removal of the original figure and rejects the addition of the IEC figure.
- The expert inserts the .png of the modified figure (without the IEC logo)
- *The absence of the IEC logo indicates that the Figure has been modified*
- Sending the modified figure with the FDIS: native format at least, .pdf in addition if possible
- *(The texts of the .pdf must be in editable format. If the expert wishes, the IEC can create the .pdf from the native file)*

Case 3 and 4, French version of the modified figure

An agreement was recently reached with AFNOR for the French (FR) version of the FDIS to be treated by them.

AFNOR have to make the changes made between the CDV and the FDIS in the FR version.

Annex B
(informative/normative)

Sample Meeting Agenda

(Edit to suit)

	xxx/xxxx/AA
For IEC use only	
	20YY-MM-DD

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Industrial-process measurement and control

TC 65 WGnn – Committee Name

MTnnnn: MT name (optional within a WG)

Meeting Type: (In person, in person with option to connect remotely, hybrid, virtual)

Estimated Breaks: Indication of duration of breaks and when they are planned

Meeting place:	**Meeting Date (date yyyy-mm-dd)**		
Location address details Virtual meeting link(s) should be provided for each day/session	Local Time zone plus UTC	Start	End
	Day 1		
	Day 2…		
Host:	**Convenor:**		
Organisation Responsible contact (host)			

NOTE To avoid possible confusion, times shall be reported using the 24-hour clock.

Item	Timing	Description	Responsible	Documents
1.	00:00 – 00:nn	Opening of the meeting Include logistics (fire exit, washrooms, etc.), IEC Code of conduct	Chair	
2.	00:nn – 00:mm	Approval of the agenda	Secretary	
3.	00:mm – 00:pp	Confirmation of minutes of meeting held in …	Expert Name	
4.	00:pp – 00:qq	Record attendance	Chair / Convenor	
5.	00:qq – etc.	Information from the Convenor / Chair	Chair / Convenor	
5.1		Standardization work general issues		
5.1.1		Relevant Administrative Circulars NOTE share particular updates of changes to IEC tools, Collaboration Platform, templates, etc.		
5.1.2		Relevant IEC TC news and SMB decisions		
6.		WG/MT work (i.e. 6nnnn-n)		
6.1		Review and complete 65/XXX/CDV		
6.2		Redraft document implementing the above and input from MT experts		
7.		6nnnn-n		
7.1		Review and complete 65/XXX/CD		
7.2		Redraft document implementing the above and input from WG/MT experts		
8.		Recommend the next stage in the progress of the documents		

Item	Timing	Description	Responsible	Documents
9.		Project Schedule Review Compare progress against plan on collaboration platform		
10.		Review of Action Log NOTE review of previous action log can also be included at the start of the meeting.		
11.		Agenda review (new) topics		
12.		Date, place and type of the next meeting(s)		
13.	End time	Close of meeting		

Annex C
(informative)

Sample Meeting Minutes

(Edit to suit)

	xxx/xxxx/AA
For IEC use only	
	20YY-MM-DD

INTERNATIONAL ELECTROTECHNICAL COMMISSION

Industrial-process measurement and control

TC 65 WGnn – Committee Name

MTnnnn: MT name (optional)

First name	Last name	Email	Role	NC	Day 1	Day 2	Day n
Lower	UPPER		Chair	DE	X		
			Secretary	FR	X		
			Convenor	FR			

X – attended meeting, R – regrets were received for that day W – web

Minutes shall follow the format of the agenda, using the item numbers for cross-referencing.

Subclauses C.1 to C.3 provide examples of how to represent identified elements of the agenda.

C.1 Project schedule review

The following table provides an example of how the project schedule should be reviewed and updated on a regular basis. If the Committee meets more frequently than quarterly, it should be reviewed at least quarterly to remind the committee of progress against plan.

IEC 6nnnn Ed n (Amd n)			
Item	**Location**	**Date**	**Status**
Maintenance (65x/nnnn/RR) / (65x/nnnn/RR)	N/A	202n-MM-DD	Completed
Meetings (CD preparation)	Remote	Multiple	Completed
CD circulation (12 weeks) (65x/nnnn/CD, 65x/nnnn/CC, 65x/nnnnA/CC)	N/A	202n-MM-DD 202n-MM-DD, 202n-MM-DD	Completed
Meetings (CDV preparation)	Remote	Multiple	Completed
French / other translation (6 weeks)	N/A	202n-MM-DD	Completed
CDV circulation (6 weeks[a]) (65x/nnnn/CDV, 65x/nnnn/RVC, 65x/nnnnA/RVC)	N/A	202n-MM-DD 202n-MM-DD, 202n-MM-DD	Completed
Meetings (FDIS preparation)	Remote	Multiple	Completed
IEC SEC editing	N/A	202n-MM	In progress
FDIS circulation (6 weeks) (65x/nnnn/FDIS, 65x/nnnn/RVD)	N/A	202n-MM	
Final editing	N/A	202n-MM	
IS published	N/A	202n-MM	
[a] 6 weeks plus 6 weeks for translation, so total of 12 weeks.			

C.2 Next meeting(s)

This section of the document should summarise both virtual and face-to-face meetings.

Virtual meetings should also include the meeting link.

F2F meetings should include host organisation information, such as address.

NOTE If using a hyperlink to a map, some countries block certain web tools.

C.3 Meeting documents

Optional informative section at the end of the document to list all the documents and their revision that are applicable to the meeting.

Document Number	Document Description	File Format
As per Annex H schema	Working Draft Master document	Word
Document 2	Action Log	Excel
Document 3	Document Figures	PowerPoint
CD on which comment review is based	65n/nnnnn/CD	PDF

Annex D
(informative)

Sample Action Log

The Action Log is normally an Excel™ file so that filters can be used to search and filter by actions complete, open, responsible individuals, etc.

The Action Log can be included within the meeting minutes or maintained as a separate document.

The following table shows a sample of the format of the document and suggested options in the various cells.

Table D.1 – Sample Action Log Table

Committee Name					**Print Date:**	20nn-MM-DD	Today's date
Action Log					**Open:**	#	Formula to count how many status items are 'Open"
	Updated:	20nn-MM-NN			**Closed:**	#	Formula to count how many status items are 'Closed"
A.I.	**Action**	**Date Assigned**	**Due Date**	**Assigned To**	**Late**	**Status**	**Comment**
Action Item number	Short summary of the action to remind the individual of the scope	Date of meeting when action was assigned	Date when action should be complete	Assigned individual(s)	Calculated from due date and present date. If present date is greater than due date a warning is shown	Options from dropdown menu: Open Closed Hold Decision	Resolution of the action is summarized here or if not completed updates can be put here following each meeting.

The top three rows contain summary statistics while the action log itself starts at the shaded cells, which are the header row across multiple pages, should the list reach that length.

Annex E
(informative)
Comment Form recommendations

The intent of the comment form is to allow the committee during its review to be able to locate the referenced part of the original circulated document, understand the reason for the comment, as well as the proposed change. Comments should be clear enough to allow the working group to understand and validate the comment and understand why the proposed change is being made.

If the working group cannot find the location or understand the comment, it is very likely that it will not be accepted. Additionally, a comment without a proposed change is less easy to understand and it will take far more time for the working group to resolve. Such comments may not be given full consideration and thus may be less likely to be accepted. For example, a comment to revise an entire section without proving alternate wording will be less likely to be accepted. However, if alternately wording is provided, members will have the opportunity to review the proposed text ahead of the working group meeting, and thus will be more likely to accept the need for a change.

The Comments entry should include the justification or rational / reason for the comment and why the change is being submitted. Again, this is so that in the event the person making the comment is not present for its resolution the Committee can understand why the requested change has been put forward.

Use a separate row for each comment and alternate proposed change.

Examples below show how the comment and proposed change for different types of comments should be presented while the final example shows a sample of a comment originally submitted as editorial and changed to technical by the convenor and secretary.

Though not required by IEC, it is very convenient that if one clause is ‘conditional’ or dependent on another clause, the cross-reference as shown in red above italics above is helpful.

Notes:

1. Enter the number of the document being reviewed, for example 65-nnn-NP, 65A-nnn-CD, etc.
2. Enter the IEC document number if one has been assigned (i.e. 63082)
3. MB / NC: Liaison Member (i.e. ISA) or National Committee (CA- Canada, US – USA, NL – Netherlands, JP – Japan, etc.). Each of the comments shall be assigned a sequential number by the NC prior to submittal. Blank rows are to be removed.

NOTE If comment numbers are not assigned, the IEC Secretary will assign sequential numbers using the line number to estimate the correct sequence.

4. It is CRITICAL as per the guideline that each row in the table be for a single comment.
5. When commenting always specify the line number if available, and preferably clause/subclause number as well since this information is used to confirm the source and sorting of comments from many NC’s for resolution by the WG/PT.

6. If the document does not have line numbers (e.g. for FDIS comments) then the clause and table/figure numbers must be used as reference for all comments.

7. Line Number: physical line number in document, for tables and figures use the line number of the Table or Figure title.

    a. **Only** for use when the document has line numbers (IEC documents will have line numbers)

    b. When referencing multiple lines do NOT use a range but use the first line number only as the line number is used to provide direction for where the comment starts. (i.e. for a comment referencing line 100 to 105, the line number should be 100)

8. Clause / Subclause: section heading of document.

    a. **Only** numbers should be inserted – no text. Do **NOT** insert Tables or Figures into the template, and do **NOT** change and/or merge the columns

    b. Put '00' in front of comments to the whole document (when sorted, they will appear in the beginning of the document)

    c. Put '00' in front of Introduction and Foreword (when sorted, they will appear in the beginning of the document)

    d. Put 'xx' in front of Bibliography (when sorted, they will appear at the end of the document

9. Paragraph / Figure / Table: number of Figure, Table, Equation if applicable. No other text than paragraph #, Figure #, Table #

10. Type of Comment: (refer to §7.8.3.3).

    a. ed = Editorial comment: A comment that does not affect the content of the document such as a spelling error, plural versus singular, capitalization, sentence grammar, and similar changes

    b. te = Technical comment: A comment that changes the intent of a clause and therefore requires further consideration of the committee. Clear examples include:

        i. an error in an equation or figure

        ii. changing a word between should, shall, may, can and must (refer to IEC ISO/IEC Directives Part 2, Clause 7)

        iii. removing or adding content

    c. ge = general comment: A comment that affects the entire document, for example multiple figures, a document formatting item (not compliant with ISO/IEC Directives Part 2 or changing order of clauses)

11. When cross-referencing to another comment, include the referenced comment number (i.e. see JP 0nn).

Note #	Explanation to fill in the commenting template correctly:	Correct	Incorrect
3	Two-letter country code (no numbers, personal names, etc.). When convenor receives comments from the Liaison Chair, they will assign a code (i.e. ISA nn) and merge the comments into the single combined comment log for committee resolution.	DK US DE	Denmark US 024 DIN
4	**Only** for use when the document has line numbers (mostly IEC documents)		Page 3
5	**Only** numbers should be inserted – no text Do **NOT** insert tables into the template, and do **NOT** change and/or merge the columns Put '00' in front of comments to the whole document (when sorted, they will appear in the beginning of the document) Put '00' in front of Introduction and Foreword (when sorted, they will appear in the beginning of the document) Put 'xx' in front of Bibliography (when sorted, they will appear at the end of the document)	1 A.3 3 4.2 00 Whole document 00 Introduction 00 Foreword xx Bibliography	Scope Annex A, A.3 Clause 3 4.2 Essential requirements Whole document Introduction Foreword Bibliography

Note #	Explanation to fill in the commenting template correctly:	Correct	Incorrect
6	No other text than paragraph #, Figure #, Table #	Table 1	Clause 4.2, Table 1
7	General = ge / Technical = te / Editorial = ed	ge	General

Template for comments and secretariat observations

Date:	Document: Note 1	Project: Note 2

MB/NC	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table (e.g. Table 1)	Type of comment	Comments	Proposed change	Observations of the secretariat
Note 3	Note 4	Note 5	Note 6	Note 7			
MB 001	00	00	Figures	ge	Use consistent colours and line styles for all Figures. In addition, explain or cross reference to other series document the significance or meaning of each colour or line style.	Add consistency and clarity across figures.	
MB 002	17	3.1		ed	Correct term is extend	Change "…. communications to extent the …" to "…. communications to extend the coexistence …."	
MB 003	240	4.2.1		ed	Move word 'also' in sentence	Revise sentence. "… density,). Application related parameters (e.g. transmission time) are also required…"	
MB 004	425	4.2	Equation 5	te	- $X_D^{(t)}$ should not have subscript 'D' as this makes the equation invalid and inconsistent with text (line 424)	Change equation to – $X^{(t)}$.	
MB 005	515	5.2.2.4		ed	Replace word 'to' with 'the'	Revise sentence. "… regarding the geographical…"	
MB 006	637	5.2.3.2		ed	Change 'used' to 'uses'	Revise sentence. "… of CCP uses the RD…"	
MB 007	831	5.3.1		te	1) "program" is not specific. *See MB nnn*	1) Modify the sentence as follows. An enterprise IDM program is developed for each enterprise taking into account its individual organizational context.	

MB/NC	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table (e.g. Table 1)	Type of comment	Comments	Proposed change	Observations of the secretariat
MB 008	831	5.3.1	2nd sentence	te	2) “based on its IDM policy and IDM objective(s)” is not appropriate and not necessary, because they seem parts of (enterprise) IDM program. *See MB nnn*	2) Move the sentence into the new subclause “5.3.2 Enterprise IDM program”.	
MB 009	831	5.3.1	2nd sentence	te	3) This sentence should be moved to the new subclause “5.3.2 Enterprise IDM program”. *See MB nnn*	2) Move the sentence into the new subclause “5.3.2 Enterprise IDM program”.	
MB 009	1207	6.4.2	1st sentence	te	Since “project” is not a phase of the facility lifecycle, the following sentence is strange. Facility lifecycles begin with a project. This subclause should focus on only types of projects and should not mention about the structure of the facility lifecycle.	Delete the sentence. “Facility lifecycles begin with a project.”	
MB 010	1429	7.3	Table 3	ed	Spelling ‘ling’ should be ‘line.	Revise “… per communication line”	
MB 011	1529	7.3.1		te	New set of phases for enterprise IDM program proposed based on ISO 31000 should be listed in text.	Add the following text. An enterprise IDM program consists of the following phases. - Mandate and commitment to IDM - Design of IDM program - Implementing IDM into facilities - Monitoring and review of IDM in facilities - Continual improvement of IDM program	Originally submitted as ‘ed’ comment. Editors changed to ‘te’ as it impacts intent of the clause.

If an NC submits duplicate numbers, the Secretary will append a letter to the number to maintain the original number while providing each comment a unique identifier.

Corrections to the Comment log “type of comment” (i.e., ed to te) made by the Project Leader, Convenor, or Secretary will be to strikethrough the original comment in red then add the new comment type in bold red.

Annex F
(informative)
Summary of actions and time guidelines for the development of new standards

To achieve the IEC target of completion of the document within 3 years, the following timeline provides guidance on milestones.

NOTE The time guidelines provided in this Annex F are based on the ISO/IEC Directives Part 1, 2023 edition.

Table F.1 – Project Milestone Guidelines

Project Milestones	Time guidelines
Circulation of Result on Vote for NP (RVN)	Start of the time counter
First Working Draft (WD) – Internal document to working group	6 months
First Committee Draft (CD)	12 months
Committee Draft for Vote (CDV)	24 months
Final Draft International Standard (FDIS)	33 months
Publication of the International Standard	36 months
Maintenance of the International Standard	Project finished before the stability date

All the forms in the tables below can be found at: https://www.iec.ch/standards-development/resource-area/forms_docs.

Directions on editing of documents can be found at “Drafting IEC publications” https://www.iec.ch/standards-development/drafting-iec-publications, including instructions on how to install the iecstd template, which includes macros.

Table F.2 – Project Document Circulation Time Guidelines

Action Description	Action by	Form	Time guidelines
Circulation of New Work Item Proposal (NP)	TC/SC Secretary	Form NP	
Vote on NP	P-members of TC/SC		12 weeks (default) 4 or 8 weeks possible
Research of experts	TC/SC Secretary		Maximum of 4 weeks after close of vote on NP
Circulation of Result on Vote for NP (RVN)	TC/SC Secretary		Maximum of 4 weeks after close of vote on NP
Availability of first Working Draft	Project Leader	iecstd	6 months after circulation of RVN
Send CD to CO for circulation	TC/SC Secretary		12 months after circulation of RVN
Comments on CD	P-members and O-members of TC/SC		8, 12 or 16 weeks as per circulation cover page
Compilation of comments on CD (CC)	TC/SC Secretary		Maximum of 4 weeks after close of comments
Send CDV to CO for translation then circulation	TC/SC Secretary		24 months after circulation of RVN
CDV draft available for translation by interested NC's	IEC Secretariat & NC's		CDV circulation to NC's starts 7 weeks after submission of the CDV by the Secretary to IEC Secretariat
Comment and Vote on CDV	All NCs (P-members mandatory)		12 weeks
Editing of CDV	IEC Secretariat		
Result of Vote on Committee draft (RVC)	TC/SC Secretary (including resolved comments)		Maximum of 12 weeks after close of vote on CDV
Send FDIS to CO for translation and circulation	TC/SC Secretary (Decision with Chair)		16 weeks after close of vote on CDV
Editing and circulation of FDIS	IEC Secretariat		Maximum of 12 weeks after FDIS accepted and registered by IEC Secretariat
Availability of FDIS	TC/SC		33 months after circulation of RVN
Vote on FDIS	All NCs (P-members mandatory)		6 weeks
Report of voting on FDIS (RVD)	IEC Secretariat prepares and circulates RVD		2 weeks after close of vote on FDIS
Publication of IS	IEC Secretariat		6 weeks after circulation of RVD
Availability of International Standard	TC/SC & IEC Secretariat		36 months after circulation of RVN
Maintenance of the International Standard	TC/SC Secretary		Project finished in accordance with the stability date

For comment documents (e.g. RVN, RVC, and CC), if the comment resolution/observations are not complete within the required deadline, a first version is circulated. A second “A” version is circulated upon completion of comment resolution.

Table F.3 – Summary of actions and time guidelines for the development of a Technical Specification (TS)

Action Description	Action by	Form	Time guidelines
Circulation of New Product Proposal (NP)	TC/SC Secretary	Form NP	
Vote on NP	P-members of TC/SC		12 weeks (default) 4 or 8 weeks possible
Circulation of Result on Vote for NP (RVN)	TC/SC Secretary		Maximum of 4 weeks after close of vote on NP
Send CD to CO for circulation (optional)	TC/SC Secretary		
Comments on CD	P-members and O-members of TC/SC		8, 12 or 16 weeks as per circulation cover page
Development of Draft TS (DTS)	TC/SC Working Group		
Send DTS to CO for translation then circulation	TC/SC Secretary		
Decision on French Translation of DTS	French NC		1 week after receipt of the DTS
Circulation of DTS	TC/SC Secretary		8 weeks
Vote on DTS	All NCs (P-members mandatory)		
Result of Vote on DTS (RVDTS)	IEC Secretariat prepares and circulates RVDTS		
Provide final TS to IEC Secretariat	TC/SC Secretary	iecstd	16 weeks after close of vote
Editing and Distribution of TS	IEC Secretariat		
Document Maintenance	TC/SC	Form RR	Review 3 years after publication

Table F.4 – Summary of actions and time guidelines for the development of a Publicly Available Specification (PAS)

Action Description	Action by	Form	Time guidelines
Send CD to CO for circulation (optional)	TC/SC Secretary		
Comments on CD	P-members and O-members of TC/SC		8, 12 or 16 weeks as per circulation cover page
Development of Draft PAS (DPAS)	TC/SC Working Group		
Circulation of Draft PAS (DPAS)	TC/SC Secretary	Form DPAS	
Vote on PAS	All NCs (P-members mandatory)		8 weeks
Result of Vote on PAS (RVDPAS)	IEC Secretariat prepares and circulates RVDPAS		
Editing and Distribution of PAS	IEC Secretariat		
Document Validity	TC/SC		2 years, extendable once for 2 additional years

Table F.5 – Summary of actions and time guidelines for the development of a Technical Report (TR)

Action Description	Action by	Form	Time guidelines
Circulate a Committee Draft (optional)	TC/SC		
Comments on CD	P-members and O-members of TC/SC		8, 12 or 16 weeks as agreed by TC/SC
Proposal of Draft Technical Report (DTR)	TC/SC Secretary		
Decision on French Translation of DTR	French NC		1 week after receipt of the DTR
Vote on DTR	P-members		8 weeks
Result of Vote on DTR (RVDTR)	IEC Secretariat prepares and circulates RVDTR		
Provide final TR to IEC Secretariat	TC/SC Secretary	iecstd	16 weeks after close of vote
Editing and Distribution of TR	IEC Secretariat		
Document Maintenance / Withdrawal	TC/SC	Form RR	

Annex G
(informative)

Document numbering schemes

G.1 Introduction

It is unlikely that a single numbering scheme will work for all committees and all situations, however because it is important to be able to track the development of a document and be confident that the committee is working with the most recent and current version of any document some system for tracking documents is required.

This Annex G provides examples of different schemas that have been proven to work for a variety of committees within various TC's.

G.2 ISO Based - 1

Adopt the ISO numbering convention plus a compatible and optional field for document type, according to the convention:

Without optional "file type":

IEC-TCxxx-SCxx-WGxx_Nnnnn_Free title

With optional "file type":

IEC-TCxxx-SCxx-WGxx_Nnnnn(Type)_Free title

EXAMPLES

IEC-SyCSM-OF1_N0006_ISO-IEC-SM2TF_Standards list_2018-12-19(16-15)

IEC-SyCSM-OF1_N0007(MTG)_ISO-IEC-SM2TF meeting minutes France 2019-05

The ISO numbering convention is:

ISO-TCxxx-SCxx-WGxx_Nnnnn_Free title

Without an automatic number generating system, the committee document manager, potentially the convenor, of the repository area (Collaboration Platform directory) would need to manually administer the "Nnnnn" numbering which will be padded with zeros to the agreed upon length of the number.

A 'master' directory similar to the system used in ISO could be implemented in a specific 'dedicated' directory called "D-Documents List" or similar on the Collaboration Platform.

This optional field to identify the document type consistent with the alphabetic IEC working documents list as specified in ISO/IEC DIR IEC SUP Annex SI without addition by substituting (type) with the appropriate document type acronym.

G.3 ISO Based – 2

Use “TCxxx” or “SCxxN” (instead of “TCxxx-SCxxN” for an SC), since the TC number is always included in the SC number.

To provide more consistency between different Committees, more detailed indications / guidance for the use of corresponding abbreviations for the (type) follow:

(Type)	Description
R	Report
MTG	Meeting Minutes
AGD	Agenda
WD	Working Draft
CC	Committee Comments

Instead of relying on the title to identify the relationships between the files, consecutive revisions of a document (e.g. typically the agenda, meeting minutes, intermediate working drafts and comment resolutions) will keep the same number, with a predefined revision code.

The title should not repeat the information already provided as an existing part of the file name (i.e. committee identification). This will simplify the G.2 numbering scheme by removing “ISO-IEC-SM2TF” from the title thus reducing the overall file name length as this descriptor is redundant with the “title” of the committee itself “IEC-SyCSM-OF1”.

To avoid the confusion sometimes created by the various software interfaces which may change the original date of a file when saving it to another location append the date (year-month-day) at the end of the file name in the international largest-to-smallest format (YYYY-MM-DD).

G.4 Committee-Name option

File names are created by ‘compiling’ different elements together to form a consistent naming convention that allows for identification of related documents by the document number.

<PREFIX> ::= AG

<file name> ::= [‘Preliminary’ ‘_’] <Document Identification>

<Document Identification> ::= <PREFIX> ’_‘ <N document number> [‘_v‘ <Version number>] [<Date of doc or version>] [<Document type> ‘_’] <Document name>

<N document number> ::= ‘N’ immediately followed by a sequentially monotonically increasing number assigned by the project-leader or convenor or secretary not stepping on each other

<Document Type> ::= ‘WD’<number> | ‘CD’ <number> | ‘CDV’ | ‘DIS’ | ‘DTR’

<Document name> ::= whatever desired, should match name in the document title, using underline or dash

<Date of doc or version> ::= ‘_‘ yyyy-mm-dd ‘_‘

<Version number> ::= a sequentially monotonically increasing number assigned by the document editor, when revising the same <N document number>

EXAMPLES

JWG17_N098_v01_2019-06-14_ Logistics_Seoul_2019-07-07_08_Meeting.docx

JWG17_N099_v01_2019-06-14_ Agenda_Seoul_2019-07-07_08_Meeting.docx

Preliminary_JWG17_N100_v01_2019-07-07_Minutes_Seoul_2019-07-07_08_Meeting.docx

G.5 Document Name-Number option

G.5.1 Document naming

Document names are of the form shown below (name items are separated by “-“ dashes):

WorkingGroupName – MeetingNumber - DocumentNumber[Revision] – DocumentSource - FurtherDescription

Where each document name specifies:

- WorkingGroupName: the working group/task force,
- MeetingNumber: the meeting at which the document was presented or discussed or promised,

  NOTE 1 (number 00 is reserved for documents of general scope, independent from a meeting),
- DocumentNumber: the document number, with the numbers [00–08] reserved for standard documents produced by each meeting,

  NOTE 2 Document numbers are assigned by the convenor or task force leader.
- Revision: the (optional) document revision, starting with the lower-case letter "a",
- DocumentSource: the document source, either the presenting WG/TF member or another standards organization or some other source,
- FurtherDescription: any further description that helps identify the document to someone who is reading this file or the folder table of contents.

  NOTE 3 elements in the " FurtherDescription" field should preferably be separated by low dashes "_".

G.5.2 Document numbering

For meeting documents, the first few document numbers are reserved:

- 00 meeting announcement and hotel information
- 01 draft agenda
- 01a, 01b… final agenda (if different)
- 02 documents list
- 03 approved meeting minutes from previous meeting
- 04, 04a… updated specification
- 05 official log of comments from NCs (RVN, CC, RVC, RVD…)
- 05a, 05b… resolution of comments (sorted by NC/clause)
- 06 aggregate meeting minutes (no separate files for daily minutes)
- 07 official meeting report
- 08, 08a… action list and follow up

The remaining document numbers are assigned during (or after) the meeting to cover all the documents presented or discussed at the meeting:

- 09, 09a… first contribution (and updates if appropriate)
- 10, 10a… second contribution