About this guide

Welcome to ITU-T; this guide is designed to help you set up quickly and make the most of your time with us.

Newcomers will find below a comprehensive description of ITU-T's organization and working methods. More experienced delegates may use this guide to pinpoint source material, guidelines and further reading covering all aspects of our work.

Newcomers – Getting started

TIES account: You will need to register online for an ITU TIES account in order to access meeting documents and other network resources essential to your work. Learn more: www.itu.int/TIES.

ITU-T website: www.itu.int/ITU-T is a portal for all of our publications, information and resources.

Least developed countries: ITU-T provides extra support for participants from the least developed countries. Please contact a member of the secretariat staff for more information: www.itu.int/ITU-T/go/who

Visiting ITU


Building access requires a delegate badge, which can be collected from the Montbrillant building.

Meeting room allocation: Shown on monitors throughout the ITU buildings, and also listed here: www.itu.int/events.

WiFi: Connect to ITUwifi, security code: itu@GVA1211: www.itu.int/TIES/services/wifi.pdf.
1.1 IMPORTANCE OF GLOBAL STANDARDS

1.2 VISION: COMMITTED TO CONNECTING THE WORLD

2 MEMBERSHIP

2.1 LEAST DEVELOPED COUNTRIES (LDCs)

3 HOW ITU-T WORKS

3.1 STRUCTURE AND ORGANIZATION
   3.1.1 World Telecommunication Standardization Assembly (WTSA)
   3.1.2 Telecommunication Standardization Advisory Group (TSAG)
   3.1.3 Telecommunication Standardization Bureau (TSB)
   3.1.4 Study groups
      3.1.4.1 Current study group structure
   3.1.5 Working parties
   3.1.6 Questions
   3.1.7 Special projects
   3.1.8 Focus groups
   3.1.9 Joint Coordination Activities (JCAs)
   3.1.10 Global Standards Initiatives (GSIs)
   3.1.11 Workshops
   3.1.12 Regional groups

3.2 STUDY GROUP ROLES
   3.2.1 Management team
   3.2.2 Study group chairmen (appointed delegates)
   3.2.3 Working party chairmen (appointed delegates)
   3.2.4 Rapporteurs (appointed delegates)
   3.2.5 Liaison rapporteurs (appointed delegates)
   3.2.6 Editors (appointed delegates)
   3.2.7 Delegates
   3.2.8 Counsellors (TSB secretariat)
   3.2.9 Assistants (TSB secretariat)

3.3 APPROVAL AND AGREEMENT
   3.3.1 Traditional approval process (TAP)
   3.3.2 Alternative approval process (AAP)
   3.3.3 Agreement
   3.3.4 Prepublication, editing and publication

3.4 INTELLECTUAL PROPERTY RIGHTS (IPR)

3.5 WORK ITEM LIFE CYCLE

3.6 DRAFTING GUIDELINES

4 COORDINATION ACTIVITIES

4.1 INTERNAL COORDINATION

4.2 COOPERATION WITH OTHER ORGANIZATIONS

5 MEETINGS

5.1 PARTICIPATION

5.2 PHYSICAL MEETINGS
   5.2.1 Online registration
   5.2.2 Arrival at ITU headquarters, Geneva
   5.2.3 Room allocation
   5.2.4 Study group meetings
   5.2.5 Working party meetings
   5.2.6 Rapporteur group meetings
   5.2.7 Focus group meetings
   5.2.8 Meetings outside Geneva

5.3 LANGUAGES
   5.3.1 Interpretation
   5.3.2 Translation of meeting documents

5.4 VIRTUAL MEETINGS
6 DOCUMENTS

6.1 FORMAL MEETING DOCUMENTS
   6.1.1 Contributions
   6.1.2 TDs
   6.1.3 Collective letters
   6.1.4 Circulars
   6.1.5 Reports
   6.1.6 Liaison statements

6.2 WORKING DOCUMENTS

7 ITU-T PUBLICATIONS

7.1 RECOMMENDATIONS
   7.1.1 Modifying/deleting Recommendations
   7.1.2 Recommendation languages

7.2 SUPPLEMENTS

7.3 IMPLEMENTERS’ GUIDES

7.4 TUTORIALS AND TECHNICAL PAPERS

7.5 FOCUS GROUP TECHNICAL SPECIFICATIONS

7.6 AD-HOC PUBLICATIONS

7.7 ITU-T SOFTWARE

8 ELECTRONIC WORKING METHODS (EWM)

8.1 WEB PAGES

8.2 WIRELESS AND WIRED NETWORK ACCESS

8.3 TELECOMMUNICATION INFORMATION EXCHANGE SERVICE (TIES)

8.4 MAILING LIST SUBSCRIPTION SERVICE (EMAIL REFLECTORS)

8.5 INFORMAL FTP AREAS

8.6 DOCUMENT SUBMISSION
   8.6.1 Submission guides and templates
   8.6.2 Direct document posting (DDP)
   8.6.3 Alternative submission methods

8.7 AAP TOOLS

8.8 VIRTUAL MEETING SUPPORT
   8.8.1 Conference calls
   8.8.2 GoToMeeting
   8.8.3 Hybrid meetings

8.9 WEB-ACCESSIBLE DATABASES
   8.9.1 Liaison statement database
   8.9.2 Work programme database
   8.9.3 Test signal database
   8.9.4 Formal description database
   8.9.5 Other databases

8.10 DISCUSSION FORUMS

8.11 NEWS AND RSS

8.12 iCALENDAR

9 GUIDING TEXTS

9.1 BASIC TEXTS

9.2 WTSA RESOLUTIONS

9.3 A-SERIES RECOMMENDATIONS

10 BEST PRACTICE

10.1 MEETING CONDUCT

10.2 CONSENSUS AND VOTING
   10.2.1 Decision-making processes and terminology

11 ABBREVIATIONS

12 REFERENCES AND FURTHER READING
1 Introducing ITU-T

The ITU Telecommunication Standardization Sector (ITU-T) is the place for governments and the private sector to coordinate development of the telecommunication networks and services that connect the world. We are the oldest of the United Nations organizations (established as the International Telegraph Union in 1865), yet we are more relevant and forward-looking today than ever.

The work of ITU-T is driven by its membership (comprising around 200 national governments and over 700 private companies and universities) and coordinated by a dedicated secretariat. Through consensus, we produce timely, stable worldwide standards (called Recommendations) and a variety of informative material covering all fields of telecommunication. Most published Recommendations are publicly available for download at no cost (see: www.itu.int/ITU-T/publications); Recommendations that are still under development can be accessed only by members of ITU-T.

Activities from A to Z: www.itu.int/ITU-T/go/atoz.

Learn more: www.itu.int/ITU-T/go/about.

1.1 Importance of global standards

Global telecommunication standards are increasingly important for manufacturers, network operators and consumers, since they:

- enable international communication;
- reduce technical barriers to trade (www.wto.org/english/tratop_e/tbt_e/tbt_e.htm);
- drive competitiveness;
- facilitate efficiency and innovation; and
- lower prices and increase availability.

1.2 Vision: Committed to connecting the world

ITU-T is driven to remain the pre-eminent worldwide telecommunication standards body and to respond quickly to the demands of industry and membership: Connecting the World, Bridging the Standardization Gap (BSG) and extending international cooperation in telecommunication.

We constantly look ahead to address future needs, such as climate change, cybersecurity, accessibility, emergency telecommunications, home networking, Next Generation Networks (NGN), interoperability, Internet issues, broadband access and high-speed optical networking.

2 Membership

ITU-T membership represents a cross-section of the global information and communication technology (ICT) sector from governments (Member States) to the private sector (Sector Members, Associates) and Academia, and from the world’s largest manufacturers and carriers to small, innovative companies working with new and emerging technologies.

ITU-T members participate in some or all of the study groups, conferences and assemblies. They can present their views in person and by submitting written contributions, thus driving forward the production of international standards (Recommendations).

ITU-T membership categories are as follows:

Member States: Governments and regulatory bodies

Member States have the right to participate in all activities of ITU (i.e., in all Sectors); the right to make contributions to all meetings; and the right to vote.
Sector Members: Companies from the private sector and regional/international organizations

Sector Members have the right to participate in all activities of ITU-T, including chairing groups; the right to take part in progressing work; the right to take part in most consensus-based decisions; the right to take part in all but the final Member State-only step of TAP and AAP (when needed); and the right to make contributions to all meetings of ITU-T.

Associates: Private companies who wish to focus their work in one study group

Associates have the right to participate in the one study group they join, including chairing groups; however, they cannot take part in decision-making nor liaison activities.

Academia: Academic institutions, universities and their associated research establishments

Academia and their research institutions can participate in all ITU-T study groups (broader than Associate rights); however, they cannot take part in decision-making.

Learn more: www.itu.int/ITU-T/membership.

Member rights presentation: www.itu.int/dms_pub/itu-t/oth/06/5B/T065B00000A0002PDFE.pdf

Comparison table of membership types: www.itu.int/en/ITU-T/membership/Pages/sector.aspx

2.1 Least developed countries (LDCs)

The least developed countries (LDCs) are defined as low-income countries that are suffering from long-term handicaps to growth; in particular, low levels of human resource development and/or severe structural weaknesses.

ITU supports the participation of LDCs through membership incentives, regional groups and fellowships (details of fellowships are described in the Collective letters calling meetings), and offers practical support such as the loan of laptop computers during meetings and discounts on paid-for publications.

Learn more: www.itu.int/ITU-D/ldc/listldcs.html.

3 How ITU-T works

ITU is organized into a general secretariat and three Sectors: Radiocommunication, Development and Standardization. This guide focuses on the ITU Telecommunication Standardization Sector (ITU-T).

ITU-T is tasked by its membership with the development of non-discriminatory telecommunication standards, and its work is organized and conducted as described below according to the principles of openness and consensus-building.

3.1 Structure and organization

3.1.1 World Telecommunication Standardization Assembly (WTSA)

The World Telecommunication Standardization Assembly (WTSA) meets every four years to set the overall direction and structure for ITU-T; the period between such meetings constitutes a "study period". WTSA defines the general policy for the Sector, establishes and reorganizes the study groups, approves the expected work programme for the next four-year study period, and appoints study group chairmen and vice-chairmen.

Learn more: www.itu.int/ITU-T/wtsa-08.
3.1.2 Telecommunication Standardization Advisory Group (TSAG)

The Telecommunication Standardization Advisory Group (TSAG) provides ITU-T with flexibility between WTSAs, meeting approximately every nine months in order to:

– maintain ITU-T’s position as the most attractive place to do standards work;
– review priorities, programmes, operations, financial matters and strategies for the Sector;
– follow up on the accomplishment of the work programme;
– establish, restructure and guide the study groups;
– advise the Director of TSB regarding strategic matters; and
– develop A-series Recommendations on organization and working procedures.

TSAG/study group tutorial: www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010014PPTE.ppt.

Learn more: www.itu.int/ITU-T/tsag.

3.1.3 Telecommunication Standardization Bureau (TSB)

The Telecommunication Standardization Bureau (TSB) provides secretariat support for ITU-T members, disseminates telecommunication information worldwide, and establishes agreements with many international standards development organizations. The secretariat's key role is to ensure fair and correct application of the processes defined by WTSA and TSAG.

The TSB secretariat comprises around 70 multinational staff members based at ITU headquarters in Geneva, equipped with state-of-the-art meeting facilities to support both traditional and electronic working methods.

Delegates typically deal directly with the relevant secretariat staff in the Study Group Department, supported by:

– The Operations and Planning Department: editing, publication and software support services; document distribution and handling; meeting logistics; database maintenance; and other web-based services.
– The Telecommunication Standardization Policy Department: guidance, support and coordination of study group activities; registrar services; organization of workshops and promotion of ITU-T's achievements; external coordination; and monitoring of emerging technologies suitable for future standardization.


3.1.4 Study groups

Standardization work is carried out by a series of study groups (SGs) in which representatives of the ITU-T membership develop Recommendations (standards) for the various fields of international telecommunications. The work is driven primarily in the form of study Questions, which address technical studies in a particular area of telecommunication standardization.

Learn more: www.itu.int/rec/T-REC-A.1 (clause 1).

3.1.4.1 Current study group structure

The study groups for Study Period 2009-2012 are as follows:

**Study Group 2:** Operational aspects of service provision and telecommunications management

**Study Group 3:** Tariff and accounting principles including related telecommunication economic and policy issues

**Study Group 5:** Environment and climate change
Study Group 9: Television and sound transmission and integrated broadband cable networks
Study Group 11: Signalling requirements, protocols and test specifications
Study Group 12: Performance, QoS and QoE
Study Group 13: Future networks including mobile and NGN
Study Group 15: Optical transport networks and access network infrastructures
Study Group 16: Multimedia coding, systems and applications
Study Group 17: Security

NOTE – For a brief description of each study group, click "at a glance" on the respective study group home page.

3.1.5 Working parties

Study groups are often divided into a number of working parties specializing in distinct areas of study, which in turn coordinate a number of study Questions on a related theme, e.g., Working Party 3 of Study Group 16 deals with all Questions relating to media coding of speech, audio and video. Working Parties are referred to by their number followed by the study group number (e.g., WP3/16).

3.1.6 Questions

The Question is the basic project unit within ITU-T and is clearly bounded within an area of study. Its scope and mandate are defined by the "text" of the Question, which is approved either by the WTSA or by the study group itself: Questions may be established, revised, moved or terminated only with the support of the membership. Questions are referred to by their number followed by the study group number (e.g., Q1/16).

A rapporteur group is a team of experts working on a specific Question to determine what Recommendations are required, and to draft and maintain their texts (see Rapporteur (interim) meetings).

A list of Questions is on the home page of the parent study group: www.itu.int/ITU-T/go/sg.

Guidelines for drafting Question texts: www.itu.int/oth/T0A0F000005/en.

3.1.7 Special projects

A special project focuses on a wider-ranging technical subject than a Question. It aims to coordinate studies across the whole of ITU and to eliminate gaps and overlaps. Special projects can also involve work carried out in other standards development organizations (SDOs). A number of ITU-T study groups manage special projects, e.g., Study Group 17 coordinates the ASN.1 Project.

Learn more: www.itu.int/ITU-T/special-projects.

3.1.8 Focus groups

Focus groups augment the study group system in order to react quickly to ICT standardization needs. Recommendation ITU-T A.7 defines the flexible working methods and procedures that allow focus groups to work effectively through the participation of both members and non-members. Each focus group has a parent body within ITU-T.

Focus groups study well-defined areas within a specified time-frame; their output can remain as stand-alone focus-group deliverables (e.g., technical specifications or technical reports), or may be progressed to the study groups in order to be considered for adoption as traditional ITU-T products (typically, Recommendations and supplements).

Current focus groups: www.itu.int/ITU-T/focusgroups.
3.1.9 Joint Coordination Activities (JCAs)

Joint Coordination Activities (JCAs) bring together groups of experts representing various ITU-T study groups, standards development organizations, academia and forums to identify and coordinate activity on a certain study area. They may also provide a contact point in ITU-T to establish collaboration with ITU-R, ITU-D and external bodies. A Convener of the JCA is appointed by the parent study group or TSAG.

See Coordination activities.


3.1.10 Global Standards Initiatives (GSIs)

A Global Standards Initiative (GSI) is a package of work conducted through colocated meetings of study Questions from different study groups under the umbrella of a coordinated work plan managed by a JCA. These initiatives are highly responsive to market needs and provide an internationally visible focus for the work. The related standardization activities benefit from the presence of experts who come from different backgrounds and work in different specialist areas.

If needed, a technical and strategic review (TSR) mechanism might be established – and a TSR coordinator appointed – to identify technical and strategic issues during a GSI event and to report to the related Joint Coordination Activity for appropriate action.

Current GSI work focuses on the Internet of Things (IoT), Internet Protocol Television (IPTV) and Next Generation Networks (NGN).

See Coordination activities.

Learn more: www.itu.int/ITU-T/gsi.

3.1.11 Workshops

ITU-T organizes a number of workshops, symposia and seminars for expert engineers and high-level management to progress existing work areas and explore new ones in all areas of ICT.

Learn more: www.itu.int/ITU-T/worksem.

3.1.12 Regional groups

Regional groups form part of ITU's drive towards Bridging the Standardization Gap (BSG) by encouraging greater participation of developing countries. These groups are organized by experts within a geographical region to discuss specific topics within the mandate of the parent study group.

Current regional groups: www.itu.int/en/ITU-T/others.


3.2 Study group roles

3.2.1 Management team

The management team of a study group is composed of the chairman and vice-chairmen of the study group, the chairmen (sometimes also the vice-chairmen) of the working parties, and the TSB counsellor(s). The team's roles are: to coordinate work with other groups; to establish an appropriate structure (assignment of Questions to working parties, etc.); to coordinate and plan meetings; and to promote both the study group and ITU-T in general.

The term "study group officials" is sometimes used to describe the management team plus rapporteurs and liaison rapporteurs.
3.2.2 Study group chairmen (appointed delegates)

The chairman and vice-chairman (or vice-chairmen, plural) of a study group are appointed at a WTSA and with a mandate that normally lasts four years. The role of the chairmen and vice-chairmen of study groups is to ensure the smooth and efficient running of the study group. Chairmen and vice-chairmen may serve in their position for two terms.

3.2.3 Working party chairmen (appointed delegates)

Each study group appoints the chairmen of each of the working parties; their role is to provide technical and administrative leadership for the various Questions assigned to the working party. Study group vice-chairmen may also be appointed as working party chairmen; however, this is not a requirement.

3.2.4 Rapporteurs (appointed delegates)

The study group or working party delegates responsibility to rapporteurs for the detailed study of issues within individual Questions or small groups of Questions. Their role is to lead discussion and coordinate/report activity to ensure that experts make progress on the work wherever possible.

Rapporteurs are responsible for liaison with other groups inside and outside ITU (see Coordination activities) and, in particular, for the quality of the texts of Recommendations and other deliverables.

In order to manage the considerable amount of highly technical work, rapporteurs often delegate some tasks to associate rapporteurs, vice-rapporteurs, liaison rapporteurs and/or editors. Note, however, that delegation does not transfer responsibility.

Rapporteurs are appointed for a term related to the work to be done, not the interval between WTSAs.

Manual for rapporteurs and editors: www.itu.int/oth/T0A0F000006.


Learn more: www.itu.int/rec/T-REC-A.1 (clause 2.3).

3.2.5 Liaison rapporteurs (appointed delegates)

Liaison rapporteurs may be appointed under certain circumstances, either to represent the study group elsewhere or to represent external groups within the study group (these are not necessarily the same person).

Liaison rapporteurs are sometimes called "liaison officers" or "liaison representatives".

NOTE – Associates may not be appointed as liaison rapporteurs.

3.2.6 Editors (appointed delegates)

Editors are proposed by the Rapporteur and appointed by the working party or study group to manage the progress of individual work items, or several related work items, as decided by the rapporteur group. The role of the editor is to keep the draft text(s) up to date and in line with the latest agreements of the group.

While the rapporteur's role is to maintain issues lists and coordinate discussions, the editor's role is to produce clearly written text that reflects the rapporteur group's agreements. Editors are appointed for a term related to the work to be done, not the interval between WTSAs.

Manual for rapporteurs and editors: www.itu.int/oth/T0A0F000006.

3.2.7 Delegates

Delegates represent their Member State, Sector Member, Associate or Academic Institution during the development of draft texts. The rights of membership to make contributions or decisions is described at: www.itu.int/en/ITU-T/membership/Pages/sector.aspx.

Delegates who are appointed to the roles described above no longer directly represent the interests of their organization, they instead adopt a coordination function as described in the sections below on Guiding texts and Best practice.

3.2.8 Counsellors (TSB secretariat)

The counsellor (Note) is a secretariat staff member who advises delegates and assists in coordinating study group activities and the production of output documents (Recommendations, reports, liaison statements, etc.). The key role of the counsellor is to facilitate the development of world-class standards through administrative support and technical knowledge.

The counsellor is also responsible for the logistical arrangements for study group and working party meetings, checking and authorizing the allocation of meeting rooms and the processing, printing, posting and distribution of documents.

The counsellor must be consulted regarding any decision involving the responsibility of the Director of TSB.

NOTE – Counsellors, advisors and engineers all fulfil the same function in their respective groups, but their title is dictated by their level of experience (counsellors being the most experienced). For simplicity, the term "counsellor" is commonly understood to represent all three job titles.

Contact details for the TSB secretariat can be found from the respective study group home page.

3.2.9 Assistants (TSB secretariat)

Study group assistants work closely with their counsellors to provide administrative support to the management team and delegates. They are often the first point of contact for delegates and coordinate much of the routine work of the study group.

Contact details for the TSB secretariat can be found from the respective study group home page.

3.3 Approval and agreement

All new or revised Recommendations – incorporating their annexes, amendments and corrigenda – are "normative texts" (i.e., they define international standards), and as such must be formally approved by the membership.

There are two approval routes that are applied, depending on the nature of the content: the traditional approval process (TAP) – mainly for Recommendations that may have policy or regulatory implications – and the alternative approval processes (AAP) – for Recommendations that do not have policy or regulatory implications. The study group selects which procedure to use when new work is initiated, and the selection may be changed as appropriate prior to consent or determination (see Resolution 1, Section 8; www.itu.int/pub/T-RES-T.1-2008).

"Non-normative texts" (i.e., those that do not define international standards) are formally agreed by the study group, and therefore do not need to follow TAP or AAP.

3.3.1 Traditional approval process (TAP)

The traditional approval process (TAP) is used mainly for Recommendations that are considered to have policy or regulatory implications. TAP requires approval at a study group meeting, with prior initiation (determination) at a previous study group meeting or working party meeting, and announcement by a Circular before the approval meeting. The process is defined in section 9 of Resolution No. 1 (www.itu.int/pub/T-RES-T.1-2008).
This was the approval process prior to WTSA-2000, and is now only used for a small number of Recommendations. Typical approval times are six to nine months.

**TAP texts approved/under approval:** [www.itu.int/ITU-T/tap](www.itu.int/ITU-T/tap).

**TAP tutorial:** [www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010006PPTE.ppt](www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010006PPTE.ppt).

### 3.3.2 Alternative approval process (AAP)

Since WTSA-2000, AAP has been the approval process used for most Recommendations (i.e., those without policy or regulatory implications) – this process was adopted to satisfy market and membership needs for quick and efficient standardization. Currently, more than 95 per cent of draft new or revised Recommendations are approved under AAP within six weeks of "consent" at a study group or working party plenary meeting (see Note 1).

Once the draft AAP text is sufficiently mature, it is submitted for consent at the closing plenary session of a *study group meeting* or *working party meeting*, which signals the start of the approval process. Following consent, texts will ultimately be: approved without change (A); approved with typographical corrections (AT); approved with substantial changes (AC), not approved (NA), referred to the study group (SG), or moved to TAP (see clause 5.2 of Recommendation ITU-T A.8).

**Last call (mandatory):** The consented text is posted on the [ITU-T website](http://www.itu.int) and an announcement made that AAP is in progress. There is then a four-week "last call" (LC) period, during which members may submit comments (see Note 2), which are posted alongside the draft text on the [ITU-T website](http://www.itu.int). If any comments are received, they undergo "comment resolution" by the responsible rapporteur and other experts to establish the next course of action. If no substantive comments are received, the text is then considered approved. If comments of a substantive nature are received, the draft text will be modified and will then proceed to "additional review".

**Additional review (conditional):** When the rapporteur and other experts have resolved all comments to the satisfaction of the relevant appointed officials, the comment resolution log and corresponding additional review text are posted on the [ITU-T website](http://www.itu.int). There is then a three-week "additional review" (AR) period, announced by an [AAP notification](http://www.itu.int/rec/T-REC-A.8), during which members may submit comments (see Note 2), which are posted alongside the draft text on the [ITU-T website](http://www.itu.int). If no substantive comments are received, the text is considered approved. If comments of a substantive nature are received, the draft text is returned to the *study group* for consideration.

**Approval at a study group plenary meeting:** The decision to approve a Recommendation at a study group meeting is announced by the Director of TSB. During the meeting, the study group reviews the draft text and associated comments, and modifies the text as necessary. The meeting may decide to approve the Recommendation, to proceed with consideration under TAP (see Note 1), to return the text to the beginning of an AAP, or to take other action as necessary.

**NOTE 1** – Once a Recommendation has been consented, the selection of its approval process may not be changed (see clause 8.3 of Resolution 1).

**NOTE 2** – Member States and Sector Members may comment during last call and additional review. Associates and Academic Institutions may comment during last call, but they may not comment during additional review nor take part in the decision-making process.

All significant changes in the status of draft Recommendations are announced by the TSB Director on a fortnightly basis: [www.itu.int/ITU-T/aap/AAPAnnouncements.aspx](http://www.itu.int/ITU-T/aap/AAPAnnouncements.aspx).


**Consented texts under AAP:** [www.itu.int/ITU-T/aap/AAPStatusBySG.aspx](http://www.itu.int/ITU-T/aap/AAPStatusBySG.aspx).

**AAP tutorial:** [www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010007PPTE.ppt](www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010007PPTE.ppt).
3.3.3 Agreement

Non-normative texts (i.e., appendices, handbooks, implementer's guides, supplements, etc.) do not need to follow the formal approval procedure used for Recommendations. It is sufficient to reach agreement by the study group, which is normally done during the closing plenary session of study group meetings.

3.3.4 Prepublication, editing and publication

Most published Recommendations are publicly available for download free of charge on the ITU-T website: www.itu.int/ITU-T/recommendations.

Prior to publication, approved/agreed texts undergo editorial review by the secretariat to ensure the high quality of ITU-T standards. Since this process takes time, the approved text is posted as a provisional "prepublished" version, available free of charge to ITU-T members, but not available to the public.

3.4 Intellectual Property Rights (IPR)

Intellectual Property Rights (IPR) are legal rights that protect creations and inventions resulting from intellectual activity in the industrial, scientific, literary or artistic fields. IPR include patents, copyrights, marks and trade secrets. The first three categories may impact the development and utilization of technology associated with the subject of ITU-T Recommendations.

A patent provides IPR that protects certain inventions by granting the holder the exclusive right, for a limited period of time, to stop others from making, using or selling the patented invention without authorization from the holder. A copyright provides IPR that protects literary and artistic works (e.g., ITU-T Recommendation, software, etc.) insofar as they are original and expressed in a particular form. A mark (often a “trademark”) protects IPR derived from a commercial sign that distinguishes the goods or services of one organization from those of other organizations.

Many issues arise when a study group decides that it is technically prudent to incorporate an entity’s intellectual property in the text of an ITU-T Recommendation. The issues that arise vary according to the nature of the intellectual property. When the intellectual property that is included is protected by an approved or pending patent, the study group must comply with the Common Patent Policy for ITU-T/ITU-R/ISO/IEC and the related “Guidelines for Implementation of the Common Patent Policy for ITU-T/ITU-R/ISO/IEC”.

NOTE 1 – Chairmen have a duty to remind participants of their obligation to disclose IPR, the use of which may be required to implement ITU-Recommendations.

The ITU-T Software Copyright Guidelines provide guidance to a study group that decides to incorporate intellectual property protected by copyright law. The ITU-T Software Copyright Guidelines are intended to assist study groups in determining the relevant issues that they will need to address when a contributor submits software code and asserts its proprietary copyright interest.

NOTE 2 – Chairmen must ensure that software owned outside ITU is contributed only if the copyright holder agrees to comply with the Software Copyright Guidelines.

ITU-T Guidelines related to the inclusion of Marks in ITU-T Recommendations provide guidance to ITU-T study groups in their consideration of the use of trademarks, service marks and certification marks in ITU-T Recommendations on actions to be taken should the study group decide to reference any such marks.

NOTE 3 – Chairmen must ensure that trademarks owned outside ITU are not included in ITU-T Recommendations.


IPR tutorial: www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010009PPTE.ppt.

3.5 Work item life cycle

Work items often originate as a contribution to a meeting in response to market/technical needs and the group's strategic direction. New work is also identified through Technology Watch, which scouts for entirely new areas of standardization.

Once the appropriate organ (WTSA, TSAG or study group) commits resources to a new work item, development begins within Questions comprising at least one editor and a group of experts. Progress is carefully coordinated with groups working in related fields until the work item is sufficiently mature to be approved.

After an initial approval, Recommendations are maintained through the development of amendments, corrigenda, supplements and implementers' guides. From time to time, new complete revisions are approved that consolidate and enhance the base Recommendation, which then follow the same maintenance schedule.

Responsibility for a work item may shift within or between study groups as formally agreed by membership. When a work item is superseded or replaced, it may be withdrawn by formal agreement by the study group.

The work programme database tracks all ongoing and historical work items: www.itu.int/ITU-T/go/wpd.

3.6 Drafting guidelines

Rapporteurs and editors should avoid using personal versions of draft Recommendations, and should work closely with the TSB secretariat to ensure everyone works from the same baseline text (e.g., wherever possible, the published version of a text should form the base for subsequent amendments, corrigenda and new versions). If a published version is not available, ask the TSB secretariat what document to use as the baseline document.

NOTE 1 – All texts for publication are considered to be "draft" until they are approved or agreed by the study group.


Author's guide for drafting Recommendations: www.itu.int/oth/T0A0F000004.

ITU style guide and terminology database: www.itu.int/SG-CP/info/terminology.html.

ITU English Language Style Guide: www.itu.int/SG-CP/docs/styleguide.doc.

Considering end-user needs in developing Recommendations: www.itu.int/oth/T0A0F000003.

4 Coordination activities

The issue of coordination is central to the work of ITU-T; it forms an essential part of the following:

– Internal cooperation and Cooperation with other organizations;
– Joint Coordination Activities (JCAs);
– Global Standards Initiatives (GSIs);
– Special projects;
– Roles, particularly the main duties of chairmen, rapporteurs, liaison rapporteurs, editors and counsellors.

4.1 Internal coordination

A lead study group (nominated by WTSA or TSAG) is given responsibility for coordinating all ITU-T work on subjects that are common to a number of study groups. The lead study group is
usually the one with the greatest focus on that subject: e.g., Study Group 5 is lead study group on ICTs and climate change.

See also Joint Coordination Activities and Global Standards Initiatives.

Learn more: www.itu.int/ITU-T/go/sg.

4.2 Cooperation with other organizations

ITU-T cooperates with other standards development organizations (SDOs) such as the International Organization for Standardization (ISO), the International Electrotechnical Committee (IEC) and the Internet Engineering Task Force (IETF). There is also active cooperation with other SDOs, forums and consortia, and ITU-T has a Memorandum of Understanding (MoU) with: IEC, ISO, UNECE, ETSI and IEEE.

The following A-series Recommendations describe formal cooperation with other organizations:

ITU-T A.4 Defines the procedures for communicating with forums and consortia.
ITU-T A.5 Deals with situations where ITU-T wishes to make reference in its own Recommendations to standards from forums and consortia or other SDOs.
ITU-T A.6 Addresses cooperation and exchange of information between ITU-T and national and regional standards development organizations.
ITU-T A.23 Describes collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) on information technology.

The list of qualified organizations according to the above Recommendations is available at: www.itu.int/net/ITU-T/lists/qualified.aspx.

External cooperation: www.itu.int/en/ITU-T/extcoop

5 Meetings

Meetings are held when and where necessary to coordinate activities, discuss important issues and make high-level decisions. These formal meetings are supported by extensive use of virtual meetings, remote participation and other Electronic working methods.

Schedule of meetings: www.itu.int/ITU-T/go/meetings.

5.1 Participation

Delegates may participate as determined by their membership type. Access to working documents and other resources is provided through the Telecommunication Information Exchange Service (TIES).

5.2 Physical meetings

ITU headquarters in Geneva provide extensive state-of-the-art meeting facilities for formal and informal collaboration. General information about logistics and infrastructure can be found at: www.itu.int/SG-CP/info/togeneva.html (meetings may also be held outside Geneva).

The Helpdesk Service (helpdesk@itu.int) has prepared a limited number of laptops for those who do not have one.

High-volume printers are available to delegates throughout the ITU premises. Details can be found at: www.itu.int/oth/T3702000001.
5.2.1 Online registration

All meeting registrations are carried out online, as described in the Collective letter calling the meeting. Registration links for study group meetings and working party meetings are listed on the home page of the appropriate study group. While the TSB secretariat does not organize or provide support for rapporteur meetings, links on the study group web page are posted and disseminated as needed within rapporteur groups.

5.2.2 Arrival at ITU headquarters, Geneva

General information about ITU logistics and infrastructure can be found at: www.itu.int/SG-CP/info/togeneva.html; and a plan of the buildings can be found at: www.itu.int/aboutitu/itu-plan.pdf.

On arrival at the Montbrillant building on the first day of a meeting, participants are given RFID badges (swipe cards) that provide the following access during the meeting period:
– Physical access to the Montbrillant, Varembé and Tower buildings.
– Use of electronically controlled lockers in the Montbrillant reception and Tower basement.

NOTE – Badges is valid from the moment it is received until one day after the meeting finishes.

5.2.3 Room allocation

The schedule of meetings and allocation of rooms is published on the electronic monitors throughout the ITU buildings, and also online at: www.itu.int/events.

5.2.4 Study group meetings

Each study group normally meets approximately once every nine months, most often at ITU headquarters in Geneva; details for forthcoming meetings are listed on the relevant study group’s home page. Major meetings generally last one or two weeks, allowing the study group to develop technical work, coordinate its activities, discuss strategic matters and make formal decisions.

Study group meetings are announced in a Collective letter – available via the respective study group home page – which outlines how the meeting will be run and invites participation from membership.

Plenary sessions (involving all study group participants) open and close the study group meetings. The opening plenary sets out the ongoing issues and presents the work plan for the rest of the meeting. The closing plenary summarizes the progress made, provides a forum for formal decision-making, and allows approval/agreement of texts and outgoing liaison statements.

Subordinate group meetings are held between the two plenary sessions, bringing together experts to discuss detailed matters relating to working parties, Questions or Recommendations, or to discuss more far-reaching issues.

5.2.5 Working party meetings

Working parties normally meet during the parent study group meeting; however, in exceptional cases and as approved by the study group, working parties may meet in between study group meetings to progress work, to consent/determine draft Recommendations or agree certain non-normative texts, as appropriate.

When they are held separately, working party plenary sessions progress work that requires a formal decision; they are typically held several months before study group meetings in order to allow the necessary time for approval processes and drafting between major meetings. To aid collaboration, several working parties may meet simultaneously.

Working party meetings may be preceded by rapporteur group meetings, which produce input documents for discussion/decision. Rapporteur groups do not meet during study group or working party meetings.
5.2.6 Rapporteur group meetings

Rapporteur groups normally work independently, often meeting outside Geneva. The parent study group, in consultation with the TSB secretariat, must previously give agreement for recognized rapporteur group meetings, which are then listed on the study group web page.

In general, the rules that apply to documentation for study group meetings or working party meetings do not apply when a rapporteur group is meeting independently. In this situation, each rapporteur group can determine its own rules for handling contributions and other meeting documents. For transparency and easy reference, the rapporteur posts all documents on the informal FTP area of the study Question.

Delegates who wish to participate in the work of a particular rapporteur group should consult with the rapporteur (contact information for the rapporteur can be found on the appropriate study group web page). Rapporteurs are required to maintain a list of collaborators on their Question.

Since TSB Secretariat staff are not present at rapporteur meetings, the rapporteur must submit a report before the next meeting of the parent group, recording details of meeting results and any liaison statements sent.

5.2.7 Focus group meetings

Focus group meetings, as with all of their other activities, are conducted on a relatively flexible basis as decided by group members. Details of the frequency, location and logistics of these meetings is described on the corresponding focus group home page: www.itu.int/ITU-T/focusgroups.

5.2.8 Meetings outside Geneva

Meetings may be hosted outside Geneva at the invitation of a member or by a non-member (when supported by a Member State). Such invitations must be submitted to WTSA or a study group meeting and fulfil certain logistics and finance requirements.

Details of meetings outside Geneva are given in the Collective letter convening the meeting.

5.3 Languages

Meetings are normally run in English with support – at the request of membership – for the other official languages of the ITU: Arabic, Chinese, French, Russian and Spanish.

Details regarding interpretation are given in the Collective letter convening the meeting.

5.3.1 Interpretation

Selected formal meetings – such as WTSA/TSAG, and during opening and closing plenary sessions at study group meetings – are supported by interpretation into the official languages requested by the Member States participating in the meeting. Depending on agreement and budget, interpretation may be provided for other meetings, upon request at least one month before the first day of the meeting.

Details of the interpretation provided during formal meetings are given in the Collective letter calling the meeting.

5.3.2 Translation of meeting documents

Certain documents (such as the main bodies of Circulars and Collective letters, determined texts under TAP, etc.) are always translated; however, to avoid unnecessary delays, the original language version is often posted on the website before the other languages are available.

Contributions from members may be translated, on request, if they are provided at least two months before the meeting in question. The conditions for such translation are described in the Collective letter calling the meeting.
5.4 Virtual meetings

The TSB secretariat provides tools and support for virtual meetings, including dial-in conference calls and web conferencing.

6 Documents

6.1 Formal meeting documents

Formal meeting documents are vital tools to ensure that study group work is effectively communicated, coordinated and documented.

All formal meeting documents can be downloaded via the associated study group home page or accessed through the informal FTP area. To view all formal documents for the current study period, see: www.itu.int/ITU-T/meetingdocs/index.asp.

Learn more: www.itu.int/ITU-T/edh/faqs-docs.html.

6.1.1 Contributions

Contributions to a meeting are proposals from one or several members (either Member States or Sector Members) representing their position on specific subjects. All contributions must be allowed discussion time during the appropriate session (as determined by appointed study group officials) during study group meetings and working party meetings.

Contributions normally include: a brief abstract summarizing the aim of the contribution; a rationale discussing and justifying the conclusions; and a concrete proposal for further action. Supplementary sections may be added if necessary.

They should ideally be submitted two months before the meeting, and no later than 12 calendar days before the start of the meeting (the current trial period set by TSAG) – there is no longer a formal system for "delayed contributions".

Learn more: www.itu.int/rec/T-REC-A.2.

6.1.2 TDs

TDs constitute the second major set of documents considered during study group meetings or working party meetings, along with contributions. TDs may only be submitted by an appointed individual, i.e., a member of the study group management team, rapporteur, editor, or by the TSB secretariat.

TDs include:

– reports of rapporteur group meetings and ad-hoc groups;
– latest drafts of texts that will ultimately be published;
– liaison statements to/from other study groups or standards development organizations (SDOs); and
– documents produced by TSB.

TDs are grouped and posted according to their applicability, as determined by the appointed study group officials:

TD/PLEN: Documents for consideration by study group plenary session, e.g., documents for agreement and approval.

TD/GEN: General documents for consideration by Questions within more than one working party.

TD/WP[x]: Documents for consideration only by a single working party and/or relevant Questions.
6.1.3 Collective letters

Each major meeting is announced by the TSB secretariat in a Collective letter, which provides the following information: contribution deadlines; registration information; a draft agenda; and additional practical information.

Collective letters can be downloaded from the relevant study group home page.

6.1.4 Circulars

Circulars are sent by the TSB secretariat to inform membership about a wide range of important events: e.g., the ITU-T workshop and meeting schedules; the intention to approve TAP Recommendations; the approval of AAP Recommendations; the approval of new or revised Questions; the deletion of Recommendations; the promotion of questionnaires, etc.

Circulars can be downloaded at: www.itu.int/ITU-T/go/circulars, or from the relevant study group home page.

6.1.5 Reports

Reports constitute the official record of meetings, describing the main conclusions reached and the approval of interim meetings, liaison statements, etc.

Study group and working party reports can be downloaded from the relevant study group home page; reports from all other meetings are posted as TDs.

6.1.6 Liaison statements

Liaison statements are documents used to coordinate study group or working party activities with other ITU working groups and external organizations. Since they may have significant technical or political implications, they are generally drafted by chairmen or rapporteurs and must be agreed to by the responsible group (or an appointed representative) before being sent.

All incoming or outgoing liaison statements are recorded as TDs, and they may also be viewed using the liaison statement database at: www.itu.int/net/itu-t/ls.

6.2 Working documents

Informal working documents are used extensively, particularly by rapporteur groups, outside of study group meetings and working party meetings. While they do not have the same status as formal meeting documents, they are carefully managed by working groups using the informal FTP areas.

7 ITU-T publications

The main products of ITU-T are Recommendations – standards defining all aspects of the operation and interworking of telecommunication networks. Other types of publication include: supplements, implementers’ guides, handbooks, manuals, guides, tutorials, technical papers, technical specifications and software.


7.1 Recommendations

ITU-T Recommendations (international standards) are grouped into themed series (e.g., A-series Recommendations describe the organization of ITU-T's work, G-series Recommendations cover transmission systems and media, digital systems and networks, etc.).

Compliance with an ITU-T Recommendation is voluntary; however, levels of compliance are high due to international applicability and the high quality of ITU-T Recommendations.
The lifecycles of Recommendations are decided according to the wishes of membership; new Recommendations are developed, refined, updated and withdrawn only when requested by members.

Download Recommendations: www.itu.int/ITU-T/recommendations.

7.1.1 Modifying/deleting Recommendations

From time to time, Recommendations may need to be modified, either by approval of a complete revision, or by one of the following:

**Amendment:** Contains only the changes, additions or deletions to content in an already-published ITU-T Recommendation. If an amendment is integral to the Recommendation, it is approved using the same approval process as the Recommendation; if it is not integral to the Recommendation, it is agreed to by the study group.

**Corrigendum:** Contains corrections to an already-published ITU-T Recommendation. If the corrections are obvious, a corrigendum may be published by the TSB secretariat with the concurrence of the Study group chairman; otherwise, it is approved using the same approval process as the Recommendation.

**Deletion:** Deletion is considered on a case-by-case basis when a Recommendation has been superseded or has become obsolete. The mechanism for deletion depends on the approval process used for the Recommendation.

See also supplements and implementers' guides.

7.1.2 Recommendation languages

Recommendations approved by TAP are translated into the six official UN languages (Arabic, Chinese, English, French, Russian and Spanish) after "determination" but before the decision meeting. Recommendations approved under AAP are published in English only.

7.2 Supplements

A supplement to a Recommendation (or a series of Recommendations) is a non-normative text containing illustrative or supplementary information that has been agreed by the study group. Such information could alternatively be included as an appendix to a Recommendation if it is directly related to that Recommendation; however, separate publication as a supplement is warranted when the information has wider applicability to a series of Recommendations.

Download supplements: www.itu.int/ITU-T/recommendations.


7.3 Implementers' guides

An implementers' guide is a non-normative document that is an historical record of all identified defects (e.g., typographical and editorial errors, ambiguities, omissions or inconsistencies, and technical errors) associated with a Recommendation or a series of Recommendations, and their status of correction from identification to final resolution.

Information in an implementers’ guide may be incorporated at a later stage when a revision of the Recommendation is approved.

Download implementers' guides: www.itu.int/ITU-T/recommendations.

7.4 Tutorials and technical papers

Tutorials and technical papers are non-normative texts on various topics, published with minimal delay by a study group in a light, electronic-only format for easy consumption and with small editorial overhead.
Learn more: www.itu.int/pub/T-TUT.

7.5 Focus group technical specifications

Focus group technical specifications are non-normative texts that are produced quickly in response to the findings of the focus group; as such, they are usually produced and published within a short time-frame. In many cases, these specifications are passed to the parent study group to be progressed as draft Recommendations.

Learn more: www.itu.int/pub/T-TUT.

7.6 Ad-hoc publications

Various handbooks, manuals, guides, directives and informative texts are published on different subjects, as requested by membership through WTSA, TSAG and the study groups.

Learn more: www.itu.int/publications/Pages/default.aspx.

7.7 ITU-T software

ITU-T software is always associated with a Recommendation. Such software varies in nature and includes: various test material for verifying implementation performance or conformance aligned to the Recommendation; source code that can be used to assist implementers in developing products according to a Recommendation; diagrams and other descriptive language representing data structures (e.g., ASN.1) or procedural flows (e.g., SDL). In several cases, source code is used as the formal description of a Recommendation.


Test signal database: www.itu.int/net/itu-t/sigdb.

Find Recommendations that contain software: www.itu.int/ITU-T/recommendations.

8 Electronic working methods (EWM)

To facilitate participation by all members and to support ITU’s commitment to paperless working, delegates are offered an expanding suite of electronic working methods. Some services are publicly available, while others are provided to members only using the Telecommunication Information Exchange Service (TIES). TIES accounts are available to delegates representing Member States, Sector Members, Associates (for access to documentation of the study group they join) and participants from Academic Institutions.

Between meetings, study group work is progressed primarily using mailing lists, informal FTP areas and virtual meetings, which are managed by the TSB secretariat's EWM support staff.

Learn more: www.itu.int/ITU-T/edh/index.html.

8.1 Web pages

The ITU-T website provides access to all of the resources and services described below. In particular, the home pages for study groups and other working groups provide links to the appropriate contact information, meeting documents and other resources.

To get started, follow the links on the left of the ITU-T home page: www.itu.int/ITU-T.

8.2 Wireless and wired network access

Wireless Internet access is available by connecting to “ITUwifi”, security code: itu@GVA1211 (www.itu.int/TIES/services/wifi.pdf).
Wired Ethernet is available in the meeting rooms in the Montbrillant and Tower buildings.

Learn more: [www.itu.int/ITU-T/edh/faqs-support.html](http://www.itu.int/ITU-T/edh/faqs-support.html).

### 8.3 Telecommunication Information Exchange Service (TIES)

The Telecommunication Information Exchange Service (TIES) is a set of networked information resources and services offered to members of ITU, including:

- conference, assembly and [meeting documents](http://www.itu.int/ITU-T/edh/faqs-support.html);
- [draft, prepublished and published](http://www.itu.int/ITU-T/edh/faqs-support.html) Recommendations, and [other publications](http://www.itu.int/ITU-T/edh/faqs-support.html);
- [electronic working methods](http://www.itu.int/ITU-T/edh/faqs-support.html) services; and
- Internet services (email, [FTP](http://www.itu.int/ITU-T/edh/faqs-support.html), [www](http://www.itu.int/ITU-T/edh/faqs-support.html), newsgroups, etc.).

Learn more: [www.itu.int/TIES](http://www.itu.int/TIES).

### 8.4 Mailing list subscription service (email reflectors)

The mailing list subscription service enables TIES users (and selected guests) to self-subscribe/unsubscribe to email reflectors (colloquially known as "exploders"), allowing experts to be included in group discussions. They are typically set up for each [working party](http://www.itu.int/ITU-T/edh/faqs-support.html) or [Question](http://www.itu.int/ITU-T/edh/faqs-support.html), and special mailing lists can also be created by request to the [study group](http://www.itu.int/ITU-T/edh/faqs-support.html).

Archives of all discussions that have taken place on email reflectors are available via the relevant study group's home page (follow the link to "Mailing lists").

Subscribe to email reflectors: [www.itu.int/ITU-T/services](http://www.itu.int/ITU-T/services).

Learn more: [www.itu.int/ITU-T/edh/faqs-support.html](http://www.itu.int/ITU-T/edh/faqs-support.html).

### 8.5 Informal FTP areas

This mechanism of remote file sharing is available to [members](http://www.itu.int/ITU-T/edh/faqs-support.html) as a repository and exchange facility for documents under development. The informal FTP area is typically organized to reflect the needs of [rapporteur groups](http://www.itu.int/ITU-T/edh/faqs-support.html) and is, therefore, aligned with the [mailing list subscription service](http://www.itu.int/ITU-T/edh/faqs-support.html).

To assist bulk download, the [formal meeting documents](http://www.itu.int/ITU-T/edh/faqs-support.html) (contributions, TDs, etc.) listed on a study group's home page are mirrored on the FTP site.

Documents can be accessed as follows:

**Web access:** Provides access to both [formal meeting documents](http://www.itu.int/ITU-T/edh/faqs-support.html) and [working documents](http://www.itu.int/ITU-T/edh/faqs-support.html).

Follow the link to "Informal FTP area" from the associated study group home page ([TIES](http://www.itu.int/ITU-T/edh/faqs-support.html) access required), or see: [www.itu.int/ITU-T/edh/faqs-ifa.html](http://www.itu.int/ITU-T/edh/faqs-ifa.html).

**FTP client:** Provides access to both [formal meeting documents](http://www.itu.int/ITU-T/edh/faqs-support.html) and [working documents](http://www.itu.int/ITU-T/edh/faqs-support.html).

Configuration is described at: [www.itu.int/ITU-T/edh/faqs-ifa.html](http://www.itu.int/ITU-T/edh/faqs-ifa.html).

**Sync tool:** The sync tool synchronizes [formal meeting documents](http://www.itu.int/ITU-T/edh/faqs-support.html) for current meetings from the ITU server to your local drive.


NOTE – Informal directories (i.e., [working documents](http://www.itu.int/ITU-T/edh/faqs-support.html)) cannot be accessed using the sync tool.
8.6 Document submission

Formal meeting documents may only be submitted by appropriate individuals, as follows:

Contributions: May be submitted by any current member and, exceptionally, by non-members. Contributions must be submitted before the deadline mentioned in the Collective letter calling the meeting.

TDs: May only be submitted by an appointed study group official or by TSB.

8.6.1 Submission guides and templates

Except for directly posted documents (described immediately below), contributions and TDs should be submitted using the ITU-T Basic Template (www.itu.int/oth/T0A0F00000A).

Learn more: www.itu.int/ITU-T/edh/faqs-docsub.html.

8.6.2 Direct document posting (DDP)

A direct posting system for contributions is now available on-line allowing TIES users to reserve contribution numbers and to upload/revise contributions directly to the ITU-T web server.

The document template and guidance on use of the system are available on the appropriate study group home page.

Learn more: www.itu.int/oth/T0A0F000012.

8.6.3 Alternative submission methods

Contributions and TDs may also be submitted by email (the preferred alternative method), mail or fax to the relevant study group as described in the Collective letter calling the meeting.

Learn more: www.itu.int/ITU-T/edh/faqs-docsub.html.

8.7 AAP tools

All consented texts currently under AAP are listed at: www.itu.int/ITU-T/aap/AAPStatusBySG.aspx; click on a work item to see detailed information about its status.

Last call or additional review comments should be submitted through the web page for the item under AAP (click on "Submit Comment" and follow the on-screen instructions). Alternatively, AAP comments may be submitted by email to the responsible study group.

8.8 Virtual meeting support

Virtual meeting support is described below, and guidelines for e-meetings can be found at: www.itu.int/dms_pub/itu-t/oth/0A/0F/T0A0F0000070001PDFE.pdf.

8.8.1 Conference calls

Conference calls and telephone bridges are available on request from the relevant study group secretariat. A call-back facility is available for participants who can provide a direct-dial telephone number.


8.8.2 GoToMeeting

GoToMeeting is a web conferencing tool (shared white-boarding and audio) that allows you to meet, collaborate on documents and present information online.

Larger groups may use GoToWebinar, a similar system that can accommodate a larger audience.

8.8.3 Hybrid meetings
The audio component of GoToMeeting can be replaced by a conference call bridge in cases where not all participants are connected to the Internet. GoToMeeting plus a separate conference call bridge can also be used to support combined physical/remote meeting participation.
These meetings can be arranged on request by the relevant study group secretariat.

8.9 Web-accessible databases

8.9.1 Liaison statement database
Liaison statements can be found in the relevant TD series for the study group, or via the new liaison statement database: [www.itu.int/itu-t/ls](http://www.itu.int/itu-t/ls).

8.9.2 Work programme database
A detailed list of all approved texts and work in progress is available from the study group home page, including expected timescales, a pointer to the latest draft and contact information for those responsible for the texts.

8.9.3 Test signal database
Some Recommendations contain test signals intended to test end-to-end quality of telecommunications systems and to assess implementation conformity to specific Recommendation provisions. These test data cover the different types of media: video, audio, still images, IP data streams, etc.
The large collection of test signals constitutes a worldwide reference for assessing the different components of telecommunications systems. They can be downloaded free of charge at: [www.itu.int/net/itu-t/sigdb/menu.htm](http://www.itu.int/net/itu-t/sigdb/menu.htm).

8.9.4 Formal description database
Formal description techniques are extensively used in Recommendations to define system behaviour, structure and data, in order to produce precise and unambiguous formal specifications that are essential to the quality of the Recommendations and their implementation.

8.9.5 Other databases
Access to databases of Recommendations, AAP and IPR can be found at:
AAP database: [www.itu.int/itu-t/aap](http://www.itu.int/itu-t/aap).
Patent statement database: [www.itu.int/itu-t/ipr](http://www.itu.int/itu-t/ipr).

8.10 Discussion forums
"Standards Q&A" is a public forum for questions concerning ITU-T's standardization work. It offers a unique opportunity to engage with the experts that develop the standards that underpin ICTs. This forum is moderated, so posted information/questions may only be visible after moderation (users who sign-in with a TIES account can post directly to the forum).
Learn more: [www.itu.int/ITU-T/edh/faqs-efs.html](http://www.itu.int/ITU-T/edh/faqs-efs.html).
8.11 News and RSS

Track specific fields of study, find out more about ITU-T’s work and follow the latest news on the website or using Really Simple Syndication (RSS).

ITU-T promotional material: www.itu.int/oth/T0B.

8.12 iCalendar

Many meetings listed on the ITU-T website are associated with iCalendar events, these can be added directly to users' electronic schedules.

Search iCalendar events: www.itu.int/events.
Learn more: www.itu.int/ITU-T/edh/faqs-icalendar.html

9 Guiding texts

ITU-T membership and the TSB secretariat must abide by the ITU Constitution, Convention, General Rules of Conferences, Assemblies and meetings of the Union, and Resolutions; the WTSA Resolutions; and the A-series Recommendations. These documents detail the working methods, cooperation activities, regulatory aspects, study group responsibilities and mandates, approval procedures, publication policy, etc.

9.1 Basic Texts

The Basic Texts of ITU (including ITU-T), adopted by the ITU Plenipotentiary Conference, establish a binding global framework that describes the structure and activities of ITU. In addition to the Constitution and Convention, the consolidated Basic Texts include the Optional Protocol on the settlement of disputes, the Decisions, Resolutions and Recommendations in force, as well as the General Rules of Conferences, Assemblies and Meetings of the Union.

Basic Texts tutorial: www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000100004PPTE.ppt.
General Rules: www.itu.int/net/about/basic-texts/rules.aspx.
Learn more: www.itu.int/pub/S-CONF-PLEN-2011.

9.2 WTSA Resolutions

ITU-T Resolutions outline principles and instructions relating to finance, working methods, the overall work programme, external cooperation, and other strategic and technical matters. These texts are adopted at the WTSA to reflect the strategic wishes of Member States.

Resolutions tutorial: www.itu.int/dms_pub/itu-t/oth/2B/02/T2B02000010003PPTE.ppt.
Learn more: www.itu.int/pub/T-RES.
9.3 A-series Recommendations

A-series Recommendations describe the organization of the work of ITU-T, as follows:

<table>
<thead>
<tr>
<th>Rec. No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITU-T A.1</td>
<td>Work methods for study groups of the ITU Telecommunication Standardization Sector (ITU-T)</td>
</tr>
<tr>
<td>ITU-T A.2</td>
<td>Presentation of contributions to ITU-T</td>
</tr>
<tr>
<td>ITU-T A.4</td>
<td>Communication process between ITU-T and Forums and Consortia</td>
</tr>
<tr>
<td>ITU-T A.5</td>
<td>Generic procedures for including references to documents of other organizations in ITU-T Recommendations</td>
</tr>
<tr>
<td>ITU-T A.6</td>
<td>Cooperation and exchange of information between ITU-T and national and regional standards development organizations</td>
</tr>
<tr>
<td>ITU-T A.7</td>
<td>Focus groups: Working methods and procedures</td>
</tr>
<tr>
<td>ITU-T A.8</td>
<td>Alternative approval process for new and revised ITU-T Recommendations</td>
</tr>
<tr>
<td>ITU-T A.11</td>
<td>Publication of ITU-T Recommendations and WTSA proceedings</td>
</tr>
<tr>
<td>ITU-T A.12</td>
<td>Identification and layout of ITU-T Recommendations</td>
</tr>
<tr>
<td>ITU-T A.13</td>
<td>Supplements to ITU-T Recommendations</td>
</tr>
<tr>
<td>ITU-T A.23</td>
<td>Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) on information technology</td>
</tr>
<tr>
<td>ITU-T A.31</td>
<td>Guidelines and coordination requirements for the organization of ITU-T seminars and workshops</td>
</tr>
<tr>
<td>ITU-T A.Sup2</td>
<td>Guidelines on interoperability experiments</td>
</tr>
<tr>
<td>ITU-T A.Sup3</td>
<td>IETF and ITU-T collaboration guidelines</td>
</tr>
</tbody>
</table>

10 Best practice

Within the framework described in the guiding texts above, there is latitude in terms of the organization of ITU-T and its working practices. Membership and the TSB secretariat focus a great deal of energy on establishing and implementing best practice.

Best practice tutorial: www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010005PPTE.ppt.

10.1 Meeting conduct

All meetings should proceed according to an agenda that should be established and distributed well in advance.

It is the meeting chairman's role to ensure that the meeting starts and finishes on time, that everyone wishing to express an opinion has an opportunity to do so, and that no speaker dominates a discussion – participants must request (or be offered) the floor before speaking, and respect the rights of others to participate.

Meeting participants should speak clearly and slowly enough to be understood by other delegates – many of whom may not be speaking their mother tongue – and to allow interpreters to keep up.

Learn more: www.itu.int/rec/T-REC-A.1 (clause 1.4).
10.2 Consensus and voting

One of the fundamental principles of ITU-T is the search for consensus. There is therefore a need for concessions to be made by each party. Applying the principle of consensus helps meetings move forward on controversial subjects.

Although recourse to a vote is not excluded in study group meetings, it is strongly recommended that the practice of agreement by consensus be maintained. If it is used, the relevant rules defined in the Convention and General Rules must be followed, particularly in regard to eligibility. ITU is a United Nations Specialized Agency, and therefore only Member States have the right to vote. However, agreement of Sector Members is important for approval of Recommendations.

10.2.1 Decision-making processes and terminology

Decisions to enable progression of work (i.e., “soft” criteria):

- Study groups agree to start a new work.
- Study groups decide to establish a Focus Group.
- Study groups determine that a draft Recommendation is sufficiently mature (TAP).
- Study groups reach consent that a draft Recommendation is sufficiently mature (AAP).
- Study groups selects the relevant approval procedure by consensus.
- TSAG endorses Questions proposed by the study group.

Definitive decisions for approvals (i.e., “hard” criteria):

- 70% affirmative of the Member States responding to formal Consultation to authorize a study group to approve a Recommendation under the Traditional Approval Process (TAP).
- Unopposed agreement of Member States present to approve a Recommendation under TAP.
- No more than one Member State present being in opposition to approve a Recommendation under the Alternative Approval Process (AAP).

Consensus tutorial: www.itu.int/dms_pub/itu-t/oth/06/5B/T065B00000A0005PDFE.pdf
11 Abbreviations

AAP  Alternative Approval Process
AR   Additional Review
BSG  Bridging the Standardization Gap
DB   Database
DDP  Direct Document Posting
DSL  Digital Subscriber Line
FTP  File Transfer Protocol
GSI  Global Standards Initiative
ICT  Information and Communication Technology
IEC  International Electrotechnical Committee
IoT  Internet of Things
IP   Internet Protocol
IPR  Intellectual Property Rights
IPTV Internet Protocol Television
JCA  Joint Coordination Activity
LC   Last Call
LDC  Least Developed Country
LS   Liaison Statement
MoU  Memorandum of Understanding
NGN Next Generation Network(s)
QoE  Quality of Experience
QoS  Quality of Service
RFID Radio Frequency Identification
ROA  Recognized Operating Agency
RSS  Really Simple Syndication
SDO  Standards Development Organization
SG   Study Group
TAP  Traditional Approval Process
TIES Telecommunication Information Exchange Service
TSB  Telecommunication Standardization Bureau (ITU-T secretariat)
TSAG Telecommunication Standardization Advisory Group
TSR  Technical and Strategic Review
WP   Working Party
WTSA World Telecommunication Standardization Assembly
WiFi Wireless Fidelity (wireless network connection)
12 References and further reading

Visiting ITU headquarters

Practical information  
www.itu.int/SG-CP/info/togeneva.html

Building plan  
www.itu.int/aboutitu/itu-plan.pdf

Wifi access  
www.itu.int/TIES/services/wifi.pdf

Printers for delegates  
www.itu.int/oth/T3702000001

Meetings

Meetings/registration  
www.itu.int/ITU-T/go/meetings / tsbreg@itu.int

Meeting room allocation  
www.itu.int/events

Delegate resources  
www.itu.int/ITU-T/go/delegates

iCalendar  
www.itu.int/ITU-T/edh/faqs-icalendar.html

ITU-T overview

About ITU-T  
www.itu.int/ITU-T/go/about

ITU-T home page  
www.itu.int/ITU-T

ITU-T secretariat  
www.itu.int/ITU-T/go/who

Membership  
www.itu.int/ITU-T/membership

ITU-T Strategic Plan  
www.itu.int/en/ITU-T/stratops/Pages/strategicplan.aspx

ITU: Committed to connecting the world  
www.itu.int/net/about/vision.aspx

Bridging the Standardization Gap  
www.itu.int/ITU-T/gap

Least Developed Countries  
www.itu.int/ITU-D/ldc/listldcs.html

ITU and Accessibility  
www.itu.int/themes/accessibility

Activities A to Z  
www.itu.int/ITU-T/go/atoz

History of ITU-T  
www.itu.int/ITU-T/50/history.html

ITU-T news  
www.itu.int/ITU-T/go/news

ITU-T promotional material  
www.itu.int/oth/T0B
ITU-T structure

World Telecommunication Standardization Assembly (WTSA-08)  www.itu.int/ITU-T/wtsa-08
Telecommunication Standardization Advisory Group (TSAG)  www.itu.int/ITU-T/tsag
Study groups and working parties  www.itu.int/ITU-T/go/sg
Focus groups  www.itu.int/ITU-T/focusgroups
Joint Coordination Activities  www.itu.int/en/ITU-T/jca
Global Standards Initiatives  www.itu.int/ITU-T/gsi
Workshops  www.itu.int/ITU-T/worksem
Regional groups  www.itu.int/en/ITU-T/others

Tutorials, guides and presentations

ITU-T tutorials  www.itu.int/pub/T-TUT
WTSA tutorials  www.itu.int/pub/T-RES
Study group tutorial  www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010003PPTE.ppt
Traditional Approval Process  www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010014PPTE.ppt
Alternative Approval Process  www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010006PPTE.ppt
Intellectual Property Rights  www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010009PPTE.ppt
Manual for rapporteurs and editors  www.itu.int/oth/T0A0F000006
Rapporteur/editor tutorials  www.itu.int/ITU-T/studygroups/tutorials/201111/programme.html
Member rights  www.itu.int/dms_pub/itu-t/oth/06/5B/T065B00000A0002PDFE.pdf
Author's guide for drafting Recommendations  www.itu.int/oth/T0A0F000004
English language style guide  www.itu.int/SG-CP/docs/styleguide.doc
Considering end-users when developing standards  www.itu.int/oth/T0A0F000003
Document submission guide  www.itu.int/ITU-T/edh/faqs/docsub.html
Direct Document Posting guide  www.itu.int/oth/T0A0F000012
E-meeting guidelines  www.itu.int/dms_pub/itu-t/oth/0A/0F/T0A0F000070001PDFE.pdf
Overview of the Constitution, Convention and General Rules  www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010004PPTE.ppt
Best practice  www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010005PPTE.ppt
Consensus-building  www.itu.int/dms_pub/itu-t/oth/06/5B/T065B00000A0005PDFE.pdf
Guidelines for drafting Question texts  www.itu.int/oth/T0A0F000005/en
Download documents

Download Recommendations
www.itu.int/ITU-T/recommendations

All publications
www.itu.int/ITU-T/publications

Meeting documents
www.itu.int/ITU-T/meetingdocs/index.asp

Focus group technical specifications
www.itu.int/pub/T-FG

ITU-T basic template
www.itu.int/oth/T0A0F00000A

Online databases

Work Programme
www.itu.int/ITU-T/go/wpd

Terminology database
www.itu.int/SG-CP/info/terminology.html

Test signal database
www.itu.int/net/itu-t/sigdb

Formal description database
www.itu.int/ITU-T/formal-language

Texts under approval processes

Traditional Approval Process
www.itu.int/ITU-T/tap

Alternative Approval Process
www.itu.int/ITU-T/aap/AAPStatusBySG.aspx

Guidelines

Basic Texts
www.itu.int/net/about/basic-texts
http://www.itu.int/pub/S-CONF-PLEN-2011

Resolutions
www.itu.int/pub/T-RES

Intellectual Property Rights
www.itu.int/en/ITU-T/jpr

Partnership and External Cooperation
(A.4, A.5, A.6)
www.itu.int/net/ITU-T/lists/qualified.aspx

External cooperation
www.itu.int/en/ITU-T/extcoop

Electronic working methods

TIES information
www.itu.int/TIES

Electronic Working Methods
www.itu.int/ITU-T/go/emethods
www.itu.int/ITU-T/edhb/faqx-docs.html

Email reflectors
www.itu.int/ITU-T/services

Informal FTP areas
www.itu.int/ITU-T/edhb/faqx-email.html
www.itu.int/ITU-T/edhb/faqx-ifa.html

Virtual meeting support
www.itu.int/ITU-T/edhb/faqx-gotomeeting.html

RSS (really simple syndication)
www.itu.int/ITU-T/info/rss.html
Specific study areas

ASN.1 project                     www.itu.int/ITU-T/asn1
Broadband                         www.itu.int/en/broadband
Conformity and interoperability   www.itu.int/net/ITU-T/cdb
Cybersecurity                     www.itu.int/cybersecurity
Emergency Telecommunications      www.itu.int/ITU-D/emergencytelecoms
Home Networking                   www.itu.int/ITU-T/jca/hn
Internet of Things                www.itu.int/en/ITU-T/gsi/iot
Internet Protocol Television (IPTV) www.itu.int/en/ITU-T/gsi/iptv
IPv6                              www.itu.int/net/ITU-T/ipv6
ITU-T and Climate Change          www.itu.int/ITU-T/climatechange
Next Generation Networks          www.itu.int/ITU-T/gsi/ngn
Special projects                  www.itu.int/ITU-T/special-projects
Technology Watch                  www.itu.int/ITU-T/techwatch

Contact information

ITU-T secretariat                 www.itu.int/ITU-T/go/who / tsbmail@itu.int
Membership                        ITU-Tmembership@itu.int
tbsg[xx]@itu.int (where "[xx]" is the study group number)
Information technology helpdesk   helpdesk@itu.int
Electronic Working Methods        tsbedh@itu.int