

## ITU-T delegate guide

### 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](http://www.itu.int/TIES).

**ITU-T website:** [www.itu.int/ITU-T](http://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](http://www.itu.int/ITU-T/go/who)

### Visiting ITU

**Getting to ITU:** Access to ITU headquarters is at: [www.itu.int/SG-CP/info/togeneva.html](http://www.itu.int/SG-CP/info/togeneva.html), and a plan of the buildings is at: [www.itu.int/aboutitu/itu-plan.pdf](http://www.itu.int/aboutitu/itu-plan.pdf).

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](http://www.itu.int/events).

**WiFi:** Connect to ITUwifi, security code: itu@GVA1211: [www.itu.int/TIES/services/wifi.pdf](http://www.itu.int/TIES/services/wifi.pdf).

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## 1 Introducing ITU-T

The ITU Telecommunication Standardization Sector (ITU-T) 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](http://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](http://www.itu.int/ITU-T/go/atoz).

**Learn more:** [www.itu.int/ITU-T/go/about](http://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](http://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](http://www.itu.int/ITU-T/membership).

**Member rights presentation:** [www.itu.int/dms\\_pub/itu-t/oth/06/5B/T065B00000A0002PDFE.pdf](http://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](http://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](http://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](http://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 WTSA's, 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](http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010014PPTE.ppt).

**Learn more:** [www.itu.int/ITU-T/tsag](http://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.

**Who's who:** [www.itu.int/ITU-T/go/who](http://www.itu.int/ITU-T/go/who).

**Learn more:** [www.itu.int/en/ITU-T/info/tsb](http://www.itu.int/en/ITU-T/info/tsb).

### 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](http://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](http://www.itu.int/ITU-T/go/sg).

**Guidelines for drafting Question texts:** [www.itu.int/oth/T0A0F000005/en](http://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](http://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](http://www.itu.int/ITU-T/focusgroups).

**Learn more:** [www.itu.int/rec/T-REC-A.7](http://www.itu.int/rec/T-REC-A.7).

### 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](#).

**Learn more:** [www.itu.int/en/ITU-T/jca](http://www.itu.int/en/ITU-T/jca).

### 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](http://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](http://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](http://www.itu.int/en/ITU-T/others).

**WTSA Resolution 54:** [www.itu.int/pub/T-RES-T.54-2004](http://www.itu.int/pub/T-RES-T.54-2004).

## 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](#).



**Learn more:** [www.itu.int/rec/T-REC-A.1](http://www.itu.int/rec/T-REC-A.1).

### 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](http://www.itu.int/oth/T0A0F000006).

**Rapporteur/editor tutorials:** [www.itu.int/ITU-T/studygroups/tutorials/201111/programme.html](http://www.itu.int/ITU-T/studygroups/tutorials/201111/programme.html)

**Learn more:** [www.itu.int/rec/T-REC-A.1](http://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](http://www.itu.int/oth/T0A0F000006).

**Rapporteur/editor tutorials:** [www.itu.int/ITU-T/studygroups/tutorials/201111/programme.html](http://www.itu.int/ITU-T/studygroups/tutorials/201111/programme.html)

### 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](http://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](http://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](http://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](http://www.itu.int/ITU-T/tap).

**TAP tutorial:** [www.itu.int/dms\\_pub/itu-t/oth/2B/02/T2B020000010006PPTE.ppt](http://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](#) 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](#). 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](#). There is then a three-week "additional review" (AR) period, announced by an [AAP notification](#), during which members may submit comments (see Note 2), which are posted alongside the draft text on the ITU-T website. 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).

**Recommendation ITU-T A.8 describes AAP:** [www.itu.int/rec/T-REC-A.8](http://www.itu.int/rec/T-REC-A.8).

**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](http://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](http://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 database:** [www.itu.int/ipr/IPRSearch.aspx](http://www.itu.int/ipr/IPRSearch.aspx).

**IPR tutorial:** [www.itu.int/dms\\_pub/itu-t/oth/2B/02/T2B020000010009PPTE.ppt](http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010009PPTE.ppt).

**Learn more:** [www.itu.int/en/ITU-T/ipr/Pages/default.aspx](http://www.itu.int/en/ITU-T/ipr/Pages/default.aspx).

### 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](http://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.

NOTE 2 – Joint texts follow alternative drafting guidelines set out in [Recommendation ITU-T A.23](#).

**Author's guide for drafting Recommendations:** [www.itu.int/oth/T0A0F000004](http://www.itu.int/oth/T0A0F000004).

**ITU style guide and terminology database:** [www.itu.int/SG-CP/info/terminology.html](http://www.itu.int/SG-CP/info/terminology.html).

**ITU English Language Style Guide:** [www.itu.int/SG-CP/docs/styleguide.doc](http://www.itu.int/SG-CP/docs/styleguide.doc).

**Considering end-user needs in developing Recommendations:** [www.itu.int/oth/T0A0F000003](http://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](http://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](http://www.itu.int/net/ITU-T/lists/qualified.aspx).

**External cooperation:** [www.itu.int/en/ITU-T/extcoop](http://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](http://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](http://www.itu.int/SG-CP/info/togeneva.html) ([meetings may also be held outside Geneva](#)).

The Helpdesk Service ([helpdesk@itu.int](mailto: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](http://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](http://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](http://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, Varembe 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](http://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](http://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](http://www.itu.int/ITU-T/meetingdocs/index.asp).

**Learn more:** [www.itu.int/ITU-T/edh/faqs-docs.html](http://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](http://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](http://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/lis](http://www.itu.int/net/itu-t/lis).

## 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](#).

**Catalogue of publications:** [www.itu.int/ITU-T/publications](http://www.itu.int/ITU-T/publications).

### 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](http://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](http://www.itu.int/ITU-T/recommendations).

**Learn more:** [www.itu.int/rec/T-REC-A.13](http://www.itu.int/rec/T-REC-A.13).

## 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](http://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](http://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-FG](http://www.itu.int/pub/T-FG).

## 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](http://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.

**Software Copyright guidelines:** [www.itu.int/en/ITU-T/ipr](http://www.itu.int/en/ITU-T/ipr).

**Test signal database:** [www.itu.int/net/itu-t/sigdb](http://www.itu.int/net/itu-t/sigdb).

**Find Recommendations that contain software:** [www.itu.int/ITU-T/recommendations](http://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](http://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](http://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](mailto:itu@GVA1211) ([www.itu.int/TIES/services/wifi.pdf](http://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](#);
- [draft, prepublished and published](#) Recommendations, and [other publications](#);
- [electronic working methods](#) services; and
- Internet services (email, [FTP](#), www, 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](#) or [Question](#), and special mailing lists can also be created by request to the [study group](#).

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-email.html](http://www.itu.int/ITU-T/edh/faqs-email.html).

### 8.5 Informal FTP areas

This mechanism of remote file sharing is available to [members](#) as a repository and exchange facility for documents under development. The informal FTP area is typically organized to reflect the needs of [rapporteur groups](#) and is, therefore, aligned with the [mailing list subscription service](#).

To assist bulk download, the [formal meeting documents](#) ([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](#) and [working documents](#).

Follow the link to "Informal FTP area" from the associated study group home page ([TIES](#) 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](#) and [working documents](#).

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](#) for current meetings from the ITU server to your local drive.

Follow the link to "Sync Application" from the associated study group home page, or see: [www.ifa.itu.int/t/2009/sg17/exchange/sync/2011-08/User%20Guide.pdf](http://www.ifa.itu.int/t/2009/sg17/exchange/sync/2011-08/User%20Guide.pdf).

NOTE – Informal directories (i.e., [working documents](#)) 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](http://www.itu.int/oth/T0A0F00000A)).

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

**Learn more:** [www.itu.int/ITU-T/edh/faqs-gotomeeting.html](http://www.itu.int/ITU-T/edh/faqs-gotomeeting.html) (section 6) or [www.cavoon.com](http://www.cavoon.com).

### 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.

**Learn more:** [www.itu.int/ITU-T/edh/faqs-gotomeeting.html](http://www.itu.int/ITU-T/edh/faqs-gotomeeting.html) or [www.gotomeeting.com](http://www.gotomeeting.com).

### 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/net/itu-t/lis](http://www.itu.int/net/itu-t/lis).

### 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.

**Work programme database:** [www.itu.int/ITU-T/go/wpd](http://www.itu.int/ITU-T/go/wpd).

### 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.

**Formal description database:** [www.itu.int/ITU-T/formal-language](http://www.itu.int/ITU-T/formal-language).

### 8.9.5 Other databases

Access to databases of [Recommendations](#), [AAP](#) and [IPR](#) can be found at:

**Recommendations database:** [www.itu.int/ITU-T/recommendations](http://www.itu.int/ITU-T/recommendations).

**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 news:** [www.itu.int/ITU-T/go/news](http://www.itu.int/ITU-T/go/news).

**ITU-T promotional material:** [www.itu.int/oth/T0B](http://www.itu.int/oth/T0B).

**RSS:** [www.itu.int/ITU-T/edh/faqs-rss.html](http://www.itu.int/ITU-T/edh/faqs-rss.html) and [www.itu.int/ITU-T/info/rss.html](http://www.itu.int/ITU-T/info/rss.html).

## 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](http://www.itu.int/events).

**Learn more:** [www.itu.int/ITU-T/edh/faqs-icalendar.html](http://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/T2B020000010004PPTE.ppt](http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010004PPTE.ppt).

**General Rules:** [www.itu.int/net/about/basic-texts/rules.aspx](http://www.itu.int/net/about/basic-texts/rules.aspx).

**Learn more:** [www.itu.int/pub/S-CONF-PLEN-2011](http://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/T2B020000010003PPTE.ppt](http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010003PPTE.ppt).

**Learn more:** [www.itu.int/pub/T-RES](http://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:

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

## 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](http://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](http://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](http://www.itu.int/dms_pub/itu-t/oth/06/5B/T065B00000A0005PDFE.pdf)

## 11 Abbreviations

AAP	<a href="#">Alternative Approval Process</a>
AR	<a href="#">Additional Review</a>
BSG	<a href="#">Bridging the Standardization Gap</a>
DB	<a href="#">Database</a>
DDP	<a href="#">Direct Document Posting</a>
DSL	Digital Subscriber Line
FTP	File Transfer Protocol
GSI	<a href="#">Global Standards Initiative</a>
ICT	Information and Communication Technology
IEC	International Electrotechnical Committee
IoT	Internet of Things
IP	Internet Protocol
IPR	<a href="#">Intellectual Property Rights</a>
IPTV	Internet Protocol Television
JCA	<a href="#">Joint Coordination Activity</a>
LC	<a href="#">Last Call</a>
LDC	<a href="#">Least Developed Country</a>
LS	<a href="#">Liaison Statement</a>
MoU	Memorandum of Understanding
NGN	<a href="#">Next Generation Network(s)</a>
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	<a href="#">Study Group</a>
TAP	<a href="#">Traditional Approval Process</a>
TIES	<a href="#">Telecommunication Information Exchange Service</a>
TSB	<a href="#">Telecommunication Standardization Bureau (ITU-T secretariat)</a>
TSAG	<a href="#">Telecommunication Standardization Advisory Group</a>
TSR	Technical and Strategic Review
WP	<a href="#">Working Party</a>
WTSA	<a href="#">World Telecommunication Standardization Assembly</a>
WiFi	Wireless Fidelity (wireless network connection)

## 12 References and further reading

### Visiting ITU headquarters

Practical information	<a href="http://www.itu.int/SG-CP/info/togeneva.html">www.itu.int/SG-CP/info/togeneva.html</a>
Building plan	<a href="http://www.itu.int/aboutitu/itu-plan.pdf">www.itu.int/aboutitu/itu-plan.pdf</a>
Wifi access	<a href="http://www.itu.int/TIES/services/wifi.pdf">www.itu.int/TIES/services/wifi.pdf</a>
Printers for delegates	<a href="http://www.itu.int/oth/T3702000001">www.itu.int/oth/T3702000001</a>

### Meetings

Meetings/registration	<a href="http://www.itu.int/ITU-T/go/meetings/">www.itu.int/ITU-T/go/meetings/</a> <a href="mailto:tsbreg@itu.int">tsbreg@itu.int</a>
Meeting room allocation	<a href="http://www.itu.int/events">www.itu.int/events</a>
Delegate resources	<a href="http://www.itu.int/ITU-T/go/delegates">www.itu.int/ITU-T/go/delegates</a>
iCalendar	<a href="http://www.itu.int/ITU-T/edh/faqs-icalendar.html">www.itu.int/ITU-T/edh/faqs-icalendar.html</a>

### ITU-T overview

About ITU-T	<a href="http://www.itu.int/ITU-T/go/about">www.itu.int/ITU-T/go/about</a> <a href="http://www.itu.int/ITU-T/info/tsb">www.itu.int/ITU-T/info/tsb</a>
ITU-T home page	<a href="http://www.itu.int/ITU-T">www.itu.int/ITU-T</a>
ITU-T secretariat	<a href="http://www.itu.int/ITU-T/go/who">www.itu.int/ITU-T/go/who</a>
Membership	<a href="http://www.itu.int/ITU-T/membership">www.itu.int/ITU-T/membership</a>
ITU-T Strategic Plan	<a href="http://www.itu.int/en/ITU-T/stratops/Pages/strategicplan.aspx">www.itu.int/en/ITU-T/stratops/Pages/strategicplan.aspx</a>
ITU: Committed to connecting the world	<a href="http://www.itu.int/net/about/vision.aspx">www.itu.int/net/about/vision.aspx</a>
Bridging the Standardization Gap	<a href="http://www.itu.int/ITU-T/gap">www.itu.int/ITU-T/gap</a> <a href="http://www.itu.int/pub/T-RES-T.54-2004">www.itu.int/pub/T-RES-T.54-2004</a>
Least Developed Countries	<a href="http://www.itu.int/ITU-D/ldc/listldcs.html">www.itu.int/ITU-D/ldc/listldcs.html</a>
ITU and Accessibility	<a href="http://www.itu.int/themes/accessibility">www.itu.int/themes/accessibility</a>
Activities A to Z	<a href="http://www.itu.int/ITU-T/go/atoz">www.itu.int/ITU-T/go/atoz</a>
History of ITU-T	<a href="http://www.itu.int/ITU-T/50/history.html">www.itu.int/ITU-T/50/history.html</a>
ITU-T news	<a href="http://www.itu.int/ITU-T/go/news">www.itu.int/ITU-T/go/news</a>
ITU-T promotional material	<a href="http://www.itu.int/oth/T0B">www.itu.int/oth/T0B</a>

## ITU-T structure

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

## Tutorials, guides and presentations

ITU-T tutorials	<a href="http://www.itu.int/pub/T-TUT">www.itu.int/pub/T-TUT</a>
WTSA tutorials	<a href="http://www.itu.int/pub/T-RES">www.itu.int/pub/T-RES</a>
	<a href="http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010003PPTE.ppt">www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010003PPTE.ppt</a>
Study group tutorial	<a href="http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010014PPTE.ppt">www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010014PPTE.ppt</a>
Traditional Approval Process	<a href="http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010006PPTE.ppt">www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010006PPTE.ppt</a>
Alternative Approval Process	<a href="http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010007PPTE.ppt">www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010007PPTE.ppt</a>
Intellectual Property Rights	<a href="http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010009PPTE.ppt">www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010009PPTE.ppt</a>
Manual for rapporteurs and editors	<a href="http://www.itu.int/oth/T0A0F000006">www.itu.int/oth/T0A0F000006</a>
Rapporteur/editor tutorials	<a href="http://www.itu.int/ITU-T/studygroups/tutorials/201111/programme.html">www.itu.int/ITU-T/studygroups/tutorials/201111/programme.html</a>
Member rights	<a href="http://www.itu.int/dms_pub/itu-t/oth/06/5B/T065B00000A0002PDFE.pdf">www.itu.int/dms_pub/itu-t/oth/06/5B/T065B00000A0002PDFE.pdf</a>
Author's guide for drafting Recommendations	<a href="http://www.itu.int/oth/T0A0F000004">www.itu.int/oth/T0A0F000004</a>
English language style guide	<a href="http://www.itu.int/SG-CP/docs/styleguide.doc">www.itu.int/SG-CP/docs/styleguide.doc</a>
Considering end-users when developing standards	<a href="http://www.itu.int/oth/T0A0F000003">www.itu.int/oth/T0A0F000003</a>
Document submission guide	<a href="http://www.itu.int/ITU-T/edh/faqs-docsub.html">www.itu.int/ITU-T/edh/faqs-docsub.html</a>
Direct Document Posting guide	<a href="http://www.itu.int/oth/T0A0F000012">www.itu.int/oth/T0A0F000012</a>
Sync application user guide	<a href="http://ww.ifa.itu.int/t/2009/sg17/exchange/sync/2011-08/User%20Guide.pdf">ww.ifa.itu.int/t/2009/sg17/exchange/sync/2011-08/User%20Guide.pdf</a>
E-meeting guidelines	<a href="http://www.itu.int/dms_pub/itu-t/oth/0A/0F/T0A0F0000070001PDFE.pdf">www.itu.int/dms_pub/itu-t/oth/0A/0F/T0A0F0000070001PDFE.pdf</a>
Overview of the Constitution, Convention and General Rules	<a href="http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010004PPTE.ppt">www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010004PPTE.ppt</a>
Best practice	<a href="http://www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010005PPTE.ppt">www.itu.int/dms_pub/itu-t/oth/2B/02/T2B020000010005PPTE.ppt</a>
Consensus-building	<a href="http://www.itu.int/dms_pub/itu-t/oth/06/5B/T065B00000A0005PDFE.pdf">www.itu.int/dms_pub/itu-t/oth/06/5B/T065B00000A0005PDFE.pdf</a>
Guidelines for drafting Question texts	<a href="http://www.itu.int/oth/T0A0F000005/en">www.itu.int/oth/T0A0F000005/en</a>

## Downloading documents

Download Recommendations	<a href="http://www.itu.int/ITU-T/recommendations">www.itu.int/ITU-T/recommendations</a>
All publications	<a href="http://www.itu.int/ITU-T/publications">www.itu.int/ITU-T/publications</a>
Meeting documents	<a href="http://www.itu.int/ITU-T/meetingdocs/index.asp">www.itu.int/ITU-T/meetingdocs/index.asp</a>
Focus group technical specifications	<a href="http://www.itu.int/pub/T-FG">www.itu.int/pub/T-FG</a>
ITU-T basic template	<a href="http://www.itu.int/oth/T0A0F00000A">www.itu.int/oth/T0A0F00000A</a>

## Online databases

Work Programme	<a href="http://www.itu.int/ITU-T/go/wpd">www.itu.int/ITU-T/go/wpd</a>
Terminology database	<a href="http://www.itu.int/SG-CP/info/terminology.html">www.itu.int/SG-CP/info/terminology.html</a>
Test signal database	<a href="http://www.itu.int/net/itu-t/sigdb">www.itu.int/net/itu-t/sigdb</a>
Formal description database	<a href="http://www.itu.int/ITU-T/formal-language">www.itu.int/ITU-T/formal-language</a>

## Texts under approval processes

Traditional Approval Process	<a href="http://www.itu.int/ITU-T/tap">www.itu.int/ITU-T/tap</a>
Alternative Approval Process	<a href="http://www.itu.int/ITU-T/aap/AAPStatusBySG.aspx">www.itu.int/ITU-T/aap/AAPStatusBySG.aspx</a>

## Guidelines

Basic Texts	<a href="http://www.itu.int/net/about/basic-texts">www.itu.int/net/about/basic-texts</a> <a href="http://www.itu.int/pub/S-CONF-PLN-2011">http://www.itu.int/pub/S-CONF-PLN-2011</a>
Resolutions	<a href="http://www.itu.int/pub/T-RES">www.itu.int/pub/T-RES</a>
Intellectual Property Rights	<a href="http://www.itu.int/en/ITU-T/ipr">www.itu.int/en/ITU-T/ipr</a>
Partnership and External Cooperation (A.4, A.5, A.6)	<a href="http://www.itu.int/net/ITU-T/lists/qualified.aspx">www.itu.int/net/ITU-T/lists/qualified.aspx</a>
External cooperation	<a href="http://www.itu.int/en/ITU-T/extcoop">www.itu.int/en/ITU-T/extcoop</a>

## Electronic working methods

TIES information	<a href="http://www.itu.int/TIES">www.itu.int/TIES</a>
Electronic Working Methods	<a href="http://www.itu.int/ITU-T/go/emethods">www.itu.int/ITU-T/go/emethods</a> <a href="http://www.itu.int/ITU-T/edh/faqs-docs.html">www.itu.int/ITU-T/edh/faqs-docs.html</a> <a href="http://www.itu.int/ITU-T/services">www.itu.int/ITU-T/services</a> <a href="http://www.itu.int/ITU-T/edh/faqs-email.html">www.itu.int/ITU-T/edh/faqs-email.html</a> <a href="http://www.itu.int/ITU-T/edh/faqs-ifa.html">www.itu.int/ITU-T/edh/faqs-ifa.html</a> <a href="http://www.itu.int/ITU-T/edh/faqs-gotomeeting.html">www.itu.int/ITU-T/edh/faqs-gotomeeting.html</a> <a href="http://www.itu.int/ITU-T/edh/faqs-rss.html">www.itu.int/ITU-T/edh/faqs-rss.html</a> <a href="http://www.itu.int/ITU-T/info/rss.html">www.itu.int/ITU-T/info/rss.html</a>
Email reflectors	
Informal FTP areas	
Virtual meeting support	
RSS (really simple syndication)	

## Specific study areas

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

## Contact information

ITU-T secretariat	<a href="http://www.itu.int/ITU-T/go/who">www.itu.int/ITU-T/go/who</a> / <a href="mailto:tsbmail@itu.int">tsbmail@itu.int</a>
Membership	<a href="mailto:ITU-Tmembership@itu.int">ITU-Tmembership@itu.int</a>
Study groups	<a href="mailto:tsbsg[xx]@itu.int">tsbsg[xx]@itu.int</a> (where "[xx]" is the study group number)
Information technology helpdesk	<a href="mailto:helpdesk@itu.int">helpdesk@itu.int</a>
Electronic Working Methods	<a href="mailto:tsbedh@itu.int">tsbedh@itu.int</a>

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