

デジタル標準化機関 (ITU-T) の 活用と今後の展望

領域、**提案～制定～普及まで**、課題、Hot issues、
日本のプレゼンス、若手人材への提言・アドバイス等

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標準の決め方・作り方

- 例えば、～～の標準化を考えるとして
- 何を標準化しますか、したいですか？
 - 製品ですか？
 - 装置・システム間の取り決めですか？
 - 性能や品質基準ですか？
- そもそも何のことを言っていますか？
 - 概念ははっきりしていますか？
 - 今までにあるものとの関係ははっきりしていますか？
- だれの役に立ちそうですか？
 - 賛同者は？
 - 仮想～～は？

ITU-T in brief

出典: <http://www.itu.int/en/ITU-T/about/Pages/default.aspx>

- From its inception in **1865**, ITU-T has driven a **contribution-led, consensus-based** approach to standards development in which all countries and companies, no matter how large or small, are afforded **equal rights** to influence the development of ITU-T Recommendations.
- From its beginnings as a body standardizing international telegraph exchange, through its formative role in telecommunications, and in today's converged ICT ecosystem, ITU-T has provided the world's best facilities to the global standardization community and remains **the world's only truly global ICT standards body**.
- Based at **ITU's headquarters** in Geneva, the Telecommunication Standardization Bureau (**TSB**) provides **secretariat support** to ITU-T Study Groups through sophisticated electronic working methods and state-of-the-art facilities in Geneva accommodating **the six official languages** of the Union – Arabic, Chinese, English, French, Russian and Spanish. Headed by an **elected** official with the title **Director**, it is the body responsible for providing cohesion to ITU-T's standards development process.

Delegate Resources

出典: <http://www.itu.int/en/ITU-T/info/Pages/resources.aspx>

Delegate Resources

YOU ARE HERE HOME > ITU-T > GENERAL INFORMATION > DELEGATE RESOURCES

1) 2014年版32頁のITU-Tの紹介パンフレット

2) 2012年版31頁の解説

LEARNING ABOUT ITU-T

- ▶ ITU-T overview brochure - [Request for materials]
- ▶ ITU-T delegate guide
- ▶ ITU-T newcomer quick-start guide **NEW**
- ▶ Tutorial presentations about ITU-T
- ▶ Search ITU-T Recommendations by keyword
- ▶ Recommendations by Series & Study Group
- ▶ ITU-T E-flash [Subscribe] [Unsubscribe]

SUBMITTING CONTRIBUTIONS

- ▶ Direct Document Posting (DDP)
- ▶ DDP user guide

3) 2017年版4頁。ジュネーブに出張する人向けガイド

4) ppt、オンライントレーニング、ビデオクリップ。
役職者用の解説

ITU-T delegate guide

出典: <http://www.itu.int/oth/T0A0F000002/en>

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2. Membership

参加資格

2. Membership

- Member States: Governments and regulatory bodies
 - ... the right to make contributions to all meetings; and the right to vote.
- **Sector Members**: Companies from the private sector and regional/international organizations
 - ... the right to take part in all **but the final Member State-only step of TAP and AAP (when needed)**;
- 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.
- <http://www.itu.int/en/join/Pages/Fees.aspx>

7 ITU-T Publications

標準化活動のアウトプット

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

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.
- 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.

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.
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- 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.

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.

6 Documents

標準化活動へのインプットと関連文書

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

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 – there is no longer a formal system for "delayed contributions".

6.1.2 Temporary Documents (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, TD/GEN and TD/WP[x]**

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.

3 How ITU-T works

標準を作る組織

3 How ITU-T Works

3.1 Structure and Organization

3.2 Study Group Roles

3.3 Approval and Agreement

3.4 Intellectual Property Rights (IPR)

3.5 Work Item Life Cycle

3.6 Drafting Guidelines

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 (SGs)**
- 3.1.5 Working parties (WPs)**
- 3.1.6 Questions (Q)**
- 3.1.7 Special projects
- 3.1.8 Focus groups (FGs)**
- 3.1.9 Joint Coordination Activities (JCAs)
- ~~3.1.10 Global Standards Initiatives (GSIs)~~
- 3.1.11 Workshops
- 3.1.12 Regional groups

3.1 Structure and organization

- 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.
- 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).

TSB

- Based at ITU's headquarters in Geneva, the **Telecommunication Standardization Bureau (TSB)** provides secretariat support to ITU-T Study Groups through sophisticated electronic working methods and state-of-the-art facilities in Geneva accommodating the six official languages of the Union – Arabic, Chinese, English, French, Russian and Spanish. Headed by an elected official with the title Director, it is the body responsible for providing cohesion to ITU-T's standards development process.

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)

3.2.4 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.

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.

3.2.7 Delegates

- Delegates represent their Member State, Sector Member, Associate or Academic Institution during the development of draft texts.
- 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.

3.3 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

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.
- **"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.

3.3.2 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.**
- 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.

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”.

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.
-
- 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.

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

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)**.

5.2.4 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.

8 ELECTRONIC WORKING METHODS (EWM)

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9 GUIDING TEXTS

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.

9.1 BASIC TEXTS 24

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10 BEST PRACTICE

10.1 MEETING CONDUCT 25

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10.2.1 Decision-making processes and terminology 26

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.

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).

Standards development (1/2)

- ITU-T offers a unique **contribution-driven** and **consensus-based** environment, using the latest collaboration tools and facilities.
- **Contribution** is the term used to describe membership input into a Study Group. This input can be on any relevant topic but is typically limited to suggesting new work areas, draft Recommendations, changes to existing Recommendations.
- Study Groups drive their work primarily **in the form of study Questions**. Each of these addresses technical studies in a particular area of telecommunication standardization. Each SG has a Chairman and a number of vice-chairmen appointed by the World Telecommunication Standardization Assembly (WTSA).
- To assist in the organization of the work, the SG may be organized into a number of working parties. The working party is the next organizational unit down within the study group (SG). It coordinates a number of study Questions on a related theme, e.g. the Media Coding Working Party in Study Group 16 deals with all study Questions relating to coding of speech, audio and video streams that we use every day for Internet calls, DVDs, etc.

Standards development (1/2)

- The team of experts working on a specific Question is known as the rapporteur group. Their meetings are chaired by the relevant rapporteur. Considering the text of the Question and guidance from the SG, the participants determine what Recommendations are required and develop text for these Recommendations taking all relevant inputs into account and consulting other relevant parts of ITU-T. During a meeting of the parent WP or SG, the experts will normally meet to progress the work, but they may also meet independently of the parent WP or SG, in a more informal setting, when required.
- **A Question is the basic project unit within ITU-T.** The area of study of the project is defined by **the text of the Question**, and this is generally approved by the study group itself. For a new Question to be established, it is necessary that a number of Members commit to support the work. Questions address technical studies in a particular area of telecommunication standardization, and are driven by contributions. A Question is normally terminated once the defined work has been completed, or the task is revised in the light of developments, which can be technical, market-oriented, network or service driven. The text for each of the Questions assigned to a study group can be found on its web page.
- <http://www.itu.int/en/ITU-T/about/Pages/development.aspx>

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