Bridging the Standardization Gap (BSG)- Environment Sustainability

Benefits of ITU-T Recommendations

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ITU-T's Mission

ITU-T develops ICT and telecommunication standards

- Mission
  - Develop international standards (ITU-T Recommendations)
  - Bridge the standardization gap
  - Conformity and interoperability

- ITU-T has a permanent secretariat, the Telecommunication Standardization Bureau (TSB)

ITU-T: Study Groups

SG#	Area of ICT
SG2	Operational aspects of service provisioning and telecom management
SG3	Tariff and accounting principles (including economic and policy issues)
SG5	Environment and climate change
SG9	Television and sound transmission and integrated cable networks
SG11	Signaling requirements, protocols and test specifications
SG12	Performance, QoS and QoE
SG13	Future networks, including mobile and NGN
SG15	Optical transport networks and access network infrastructures
SG16	Multimedia coding, systems and applications
SG17	Security

Leading Private Sector Members

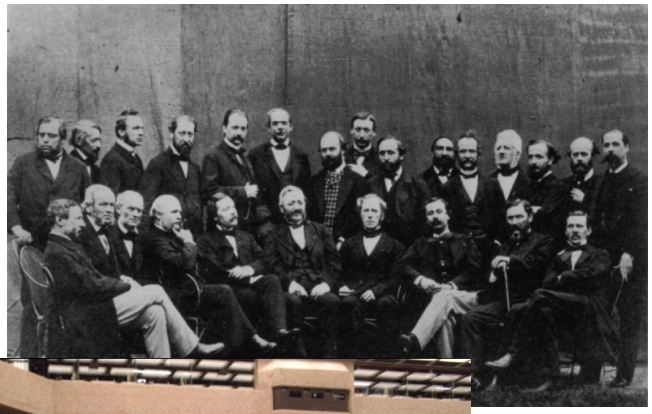
ITU-T Recommendations

Committed to connecting the world

International Telecommunication Union

ITU-T Recommendations

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.




LES
GOUVERNEMENTS
des Etats signataires de la
CONVENTION TELEGRAPHIQUE INTERNATIONALE
TITRE PREMIER
du réseau international.
Article 1.

International Telecommunication Union

ITU-T Recommendations

- Over 4,000
- Topics from
  - service definition to network architecture and security,
  - broadband DSL to Gbit/s optical transmission systems to next-generation networks (NGN)
  - IP-related issues
  - Cloud Computing
  - Security of telecommunication and IP based networks

ITU-T Recommendations

- Over 4,000
- Topics from
  - Service definition to network architecture
  - Telecommunication tariffs
  - Broadband DSL to Gbit/s optical transmission systems
  - Future networks
  - Quality of service
  - Climate Change
  - Signalling systems
  - Cloud Computing
  - Multimedia
  - Security

ITU-T collaboration with standards organizations

44 formal partnerships

- **World Standards Cooperation**: Patent policy & Joint events
- **ITU-T and IEEE**: MoU & Joint events
- **Global Standards Collaboration**: Supports ITU as preeminent global ICT standards organization
- **ETSI**: Management meetings
- **ITU-T and IETF**: Management meetings
- **ITU-T and ICANN**: Management meetings

ITU-T Recommendations

- Members have access to all ITU-T Recommendations
- Majority of all Recommendations available electronically free of charge from ITU Website.
- Texts that are not free of charge include common ITU-T/ISO/IEC texts for which special arrangements exist.

Advantages and benefits

Importance of Global Standards

- Drive competitiveness, for individual businesses and world economy
- Lower prices
- Reduce technical barriers
- Foster interoperability
- Manufacturers, network operators and consumers benefit

Standards proven economic tool

- Standards make annual contribution of 2.5 billion £ - British *Standards Institute (BSI)*
- Economic benefits of standardization about 1% GDP - *German standards body (DIN)*
- Standards have a significant effect on limiting the undesirable outcomes of market failure
- The work of ITU has smoothed the more economical introduction of new technologies

Advantages and benefits

Standards from ITU have a:

- ✓ multi-stakeholder environment
- ✓ broad **geographical** reach

Different perspectives from:

- ✓ the **national** level
- ✓ the **private** sector
- ✓ a **network** of liaisons (other SDOs and inter-gov orgs).

Advantages and benefits

ITU-T Recommendations:

- Voluntary standards
- Can become **national** standards (ITU-T Recs have non-mandatory status until they are adopted in national laws)
- Are a suitable basis for **national** ICT regulations
- Are used for conformity assessment - **enhance confidence**
- Are **coherent** (with each other)

Advantages and benefits

In the context of regulation they:

- Support **societal** and **environmental** policies
- Have been endorsed by **ITU's 193 Member states**
- Are used across different **markets**
- Reflect the **state of the art**
- Disseminate **new technologies**

Global applicability

Most developed countries have:

- **Market** economies
- Domestic **manufacturing and services**
- A culture of **competition**
- Consumer protection - with organized **groups**
- **Systems** for standards, quality, accreditation, metrology
- A demand for **harmonization**

Global applicability

Some countries:

- Have **subsistence economies**
- Rely on their subsistence on extraction of **raw materials**
- Depend on the quality of **imported products**
- Lack a consumer infrastructure
- **No** highly developed quality, accreditation and metrology infrastructure
- May not have **implementation systems** for regulation

Global applicability

So when dealing with ICT strategies and policies:

- Such countries may make certain standards mandatory
- Vital to have a portfolio of globally relevant ITU-T Recommendations

These countries can really benefit!

Different types - of ITU-T Recommendations

Different types

- **Technology** specifications
- Technical **Architecture**
- **Process and Methodologies**
- **Security** principles
- **Terminology** and definitions
- **Conformity** Assessment
- **Measurement**, test and analytical methods

A single standard could cover one or all of these!

Methods of using ITU-T Recommendations

Methods of referencing

Principles:

- Regulatory authorities decide **themselves**
- Once decided - appropriate method will need to be **chosen**
- There are commonly used methods
- The methods are applicable at national and international levels

Methods of referencing

Some considerations:

- ITU-T Recommendations are regularly **revised**.
- Will the use be **mandatory** or **voluntary**?
- What level of **checks** are needed?
- **Whole** standard or selected **parts** of it?

Methods of referencing - Direct references

- Specific Recommendation quoted by: **number** and **title**
- Often supports the **mandatory** use
- **Avoids reproduction** of the standard in the legal text
- **NOTE:** There are two forms: **dated** and **undated**

Methods of referencing - Direct references

Dated direct references:

- Number and title referenced with **date of publication**.
- Only a particular version of a standard is used.
- This can help give **legal certainty**
- Can help give **assurance** and **clarity**

Methods of referencing - Direct references

Dated direct references:

- **Restrictive** reference
- ITU-T Recommendations are **amended** and **revised**
- Changes to the standard should be **followed**
- New editions (with new dates) will always require a change to the legal text
- Amendments could be dealt with by "**as amended**"

Methods of referencing - Direct references

Undated direct references:

- Quotes the number and title but **not** the date
- This method is **more flexible**
- No update to legal text if the standard is revised
- Changes to the standard should still be **tracked**.
- Could add the phrase **"latest edition of"**

Methods of referencing - Indirect references

- Registering standards on an official information source
- A list of standards is decided and published by an official process
- The list is external to the regulatory text.
- The list needs to be kept up to date and be available to everyone

Methods of referencing - Indirect references

Specific advantages of indirect references:

- If there is a revision/amendment to the standard…

  no change is necessary to the legal text – only to the list

- The lists may include publication dates of standards…

  legal certainty of a dated reference is offered

Indirect references to ITU-T Recommendations

Examples of indirect referencing:

- *Where the product meets the relevant ITU-T Recommendation whose reference number has been published in (REFER TO OFFICIAL LISTING) the relevant authorities shall presume compliance with the requirements of this law.*

- *A product shall be presumed safe as far as the risks are concerned when it conforms to ITU-T standards, the references of which have been registered on (REFER TO OFFICIAL LISTING).*

Other considerations

Other considerations

National adoptions:

- ITU-T Recommendations are voluntary
- Can be **formally adopted** as national standards
- May involve a **separate national consultation**
- In some countries, national adoption may be a **necessary element of** using the standard in regulation
- Ensures the standard is **fit** for national needs

Other considerations

Maintenance procedures:

- ITU-T maintain their standards to reflect the **state of the art**.
- The study groups periodically **review** their standards.
- There are various ways that regulators can be kept informed
- **E.G.** participation in the relevant study groups
- ITU Standards Q&A Forum

Conclusions and Recommendations

Choose ITU-T Recommendations to support your national regulatory initiatives and ICT Strategic Plans !

Thank you!

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