

ITU-T Study Group 3

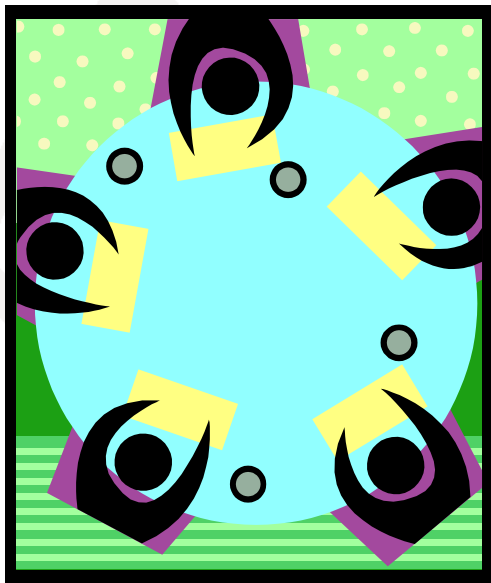
General overview of SG3 and its Regional Groups



**Lara Srivastava, JD, PhD
TSB, ITU-T Study Group 3**

ITU: Towards global consensus

A unique global public/private partnership develops standards in a unique contribution-driven, and consensus-based, environment.



193 Governments

Member State Administrations,
National Regulatory Authorities

700 Private Sector Members

Business associations
International organizations
NGOs

63 Academic Members

Universities
Research Institutes



ITU-T and Standardization

- Standards play a strategic role in fostering innovation and competitive markets.
- ITU-T Standards (*Recommendations*) help bring products and services to market rapidly.
- Manufacturers, network operators and consumers alike stand to benefit from lower prices and higher product/service availability through, inter alia:
 - Reduction of technical barriers;
 - Promotion of trust;
 - Enhanced compatibility and interoperability between systems.



ITU-T's Strategic Goals

- To develop interoperable, non-discriminatory international standards (*ITU-T Recommendations*)
- To assist in bridging the standardization gap between developed and developing countries
- To extend and facilitate international cooperation among international, regional and national standardization bodies

The ITU Telecommunication Standardization Sector (ITU-T) is a platform for governments and the private sector to coordinate development of the telecommunication networks and services that connect the world.



Benefits of Membership and Participation in ITU-T Standardization Process

- **Universality:** Simultaneous acceptance of ITU-T standards by 193 member countries, through a process of consensus
- **Speed:** Fastest approval process in the ICT standards world (8 weeks)
- **Openness:** Open standards, in line with clear and coherent intellectual property policies
- **Efficiency:** Avoidance of cumbersome licensing procedures in multiple markets
- **Partnership:** Tight coordination with other standards development organizations



ITU-T Standardization Process

- The standardization work of the ITU is organized by **Study Groups** (SGs) in which representatives of the ITU-T membership develop *Recommendations* (i.e. standards) for the various fields of international telecommunications
- Each study group has its own area of responsibility, leadership, and authority to initiate, develop and propose ITU-T Recommendations and other deliverables.
- Study Groups typically cover one or more specific technical subjects



Establishment of Study Groups

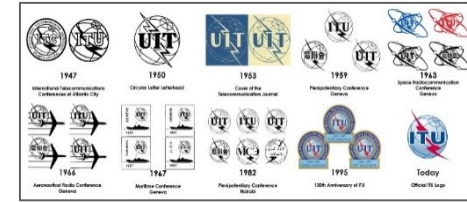
- Study Groups are either established by the WTSA (*World Telecommunications Standardization Assembly*), held every 4 years, or in between WTSAs, by the *Telecommunications Standardization Advisory Group* or TSAG, which meets at least once a year.
- The 4 year period between WTSAs is called a “**study period**”, i.e. this is the 2013-2016 study period
- Traditionally, study groups are **identified by a number**
- There are currently 11 ITU-T Study Groups, e.g.
 - SG2 Operational Aspects
 - SG3 Economic and Policy Issues
 - SG16 Multimedia
 - SG17 Security
- Some Study Groups also have **Regional Groups (RGs)**
e.g. **SG3RG-AFR, SG3RG-ARB, SG3RG-AO, SG3RG-LAC**



How do Study Groups work?

- The work of the Study Groups is fuelled by **Contributions** (Cs) submitted by members
- Contributions are submitted to Study Groups well in advance of when they meet
 - Preparation for meetings and collaborative work continue between meetings through online tools (e.g. [mailing lists](#))
- Contributions are presented at Study Group meetings and discussed by the group in a spirit of cooperation and consensus
- It is important for contributions to have clear conclusions and recommendations for action so that the group may move the work forward on key deliverables, such as *ITU-T Recommendations*
 - See [Guidelines](#) for preparing contributions (TIES password required)

Tariff Issues: ITU's long history and solid mandate



- Our work on tariffs and interconnection dates back to the origins of the ITU and as such, it can be said that it is part of the very DNA of the organization.
- On tariff issues, **ITU-T Study Group 3** is the successor of *Committees of Rapporteurs* (later renamed study groups) dating back to **1928**. The 1926 CCIF Plenary Assembly set up these groups to study specific questions.

Assembly	Study Group	Name of Study Group
1926	6e Commission de Rapporteurs 7e Commission de Rapporteurs	Exploitation Trafic et exploitation
1927	6e Commission de Rapporteurs	Trafic et exploitation
1928- 1954	7e Commission de Rapporteurs	Tarification / Tarification téléphonique



Today's ITU-T Study Group 3

- The mandate of SG3 for the 2013-2016 study period was confirmed by WTSA in Dubai in November 2012
- Study Group 3 is responsible for, *inter alia*:
 - **Tariff and accounting** matters for international telecommunication services (including **costing** methodologies)
 - Related telecommunications accounting, **economic and policy** issues
- WTSA-12 Resolution 2 goes on to say that SG3:
 - ..."shall in particular foster collaboration among its participants with a view to the **establishment of rates** at levels as low as possible consistent with an efficient service and taking into account the necessity for maintaining independent financial administration of telecommunications on a sound basis"



SG3 and ITU-T Recommendations

- SG3 is the home for **ITU-T D Series Recommendations** – for example:
 - Charging and accounting in NGN, international satellite, mobile services (e.g. Recommendation **ITU-T D.271**)
 - Transmission of accounting information, time-scale for settlement of accounts (e.g. Recommendation **ITU-T D. 195**)
 - Principles applicable to international internet connection (Recommendation **ITU-T D.50**)
- SG3 is also the home for **Regional Recommendations** on tariff and accounting:
 - D. 300s (EUR), D. 400s (LAC), D500s (AO), D.600s (AFR)
 - e.g. D.500 R: *Accounting rates applicable to telephone relations b/w countries in Asia and Oceania*, or D.603R *Minimizing collection charges on inter-African calls*

The structure of SG3

- Study Groups are structured according to a number of **Questions (Qs)** and **Working Parties (WPs)**.
- Generally speaking, the work of SG3 is organized into 3 Working Parties, which meet at every SG3 Meeting
- The Chairman of SG3 is Seiichi Tsugawa (KDDI, Japan).
- There are 8 Vice-Chairmen (see contacts [here](#))
- The day-to-day work of the Study Group (esp. between meetings) relies heavily on **Rapporteur Groups**:
 - SG3 currently has 12 rapporteur groups and a number of [Rapporteurs and Co-Rapporteurs](#)

The 10 questions of SG3

Q1 /3

Development of charging and accounting/settlement mechanisms for international telecommunications services using Next Generation Networks (NGNs), future networks, and any possible future development, including adaptation of existing D-series Recommendations to the evolving user needs

Q2 /3

Development of charging and accounting/settlement mechanisms for international telecommunications services other than those studied in Question 1/3 including adaptation of existing D-series Recommendations to the evolving user needs

Q3 /3

Study of economic and policy factors relevant to the efficient provision of international telecommunication services

Q4 /3

Regional studies for the development of cost models together with related economic and policy issues

Q5 /3

Terms and definitions for Recommendations dealing with tariff and accounting principles together with related economic and policy issues

Q6 /3

International Internet Connectivity including relevant aspects of IP peering, regional traffic exchange points, cost of provision of services and impact of transition from IPv4 to IPv6

Q7 /3

International Mobile Roaming issues (including charging, accounting and settlement mechanisms and roaming at border areas)

Q8 /3

Alternative Calling Procedures and Misappropriation and Misuse of facilities and services including CLI, CPND and OI

Q9 /3

Economic and regulatory impact of the Internet, convergence (services or infrastructure) and new services, such as OTT, on international telecommunication services and networks

Q10 /3

Definition of relevant markets, competition policy and identification of operators with SMP as it relates to the economic aspects of the international telecommunication services and networks



SG3 has 3 Working Parties

Working Party 1:

Chairman: Leslie Martinkovics (Verizon Communications, USA)

Question 1/3: Development of charging and accounting/settlement mechanisms for international telecomms services using the Next Generation Networks (NGNs), future networks and any possible future development, including adaptation of existing D-series Recommendations to the evolving user needs.

Question 6/3: International internet connectivity, incl. relevant aspects of IP peering, regional traffic exchange points, cost of provision of services and impact of transition from IPv4 to IPv6

Working Party 2:

Chairman: Alexander Yakovenko (Rostelecom, Russian Federation)

Question 2/3: Development of charging and accounting/settlement mechanisms for international telecomms services, other than those studied in Q1/3, including adaptation of existing D-series Recommendations to the evolving user needs.

Question 7/3: International Mobile Roaming issues (including charging, accounting and settlement mechanisms and roaming at border areas

Working Parties of SG3 (cont'd)

Working Party 3:

Chairman: Raynold Mfungahema (Tanzania)

Question 3/3: Study of economic and policy factors relevant to the efficient provision of international telecommunication services.

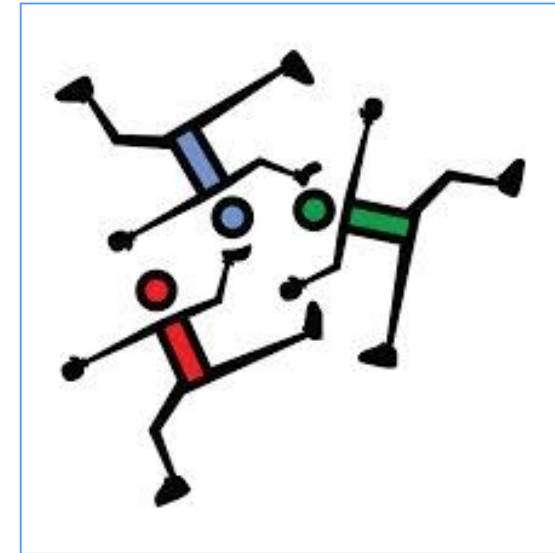
Question 8/3: Alternative Calling Procedures and Misappropriation and Misuse of facilities and services including CLI, CPND and OI

Question 9/3: Economic and regulatory impact of the Internet, convergence (services or infrastructure) and new services, such as OTT, on international telecommunication services and networks.

Question 10/3: Definition of relevant markets, competition policy and identification of operators with SMP as it relates to the economic aspects of the international telecommunication services and networks

Key Topics by Working Party

- **WP 1:** International internet connectivity, and economic impact of transition from IPv4 to IPv6
- **WP 1:** Universal Service
- **WP 1:** NGN Charging
- **WP 2:** International mobile roaming
- **WP 2:** Mobile Financial Services
- **WP 2:** Dispute resolution
- **WP 2:** Commercial Agreements
- **WP 3:** Alternative Calling Procedures
- **WP 3:** Economic impact of OTTs
- **WP 3:** Competition Policy and SMP
- **WP 3:** Governance



SG3 has 6 Regional Groups, 5 of which are active in this study period

<u>SG3RG-AFR</u>	Study Group 3 Regional Group for Africa
<u>SG3RG-AO</u>	Study Group 3 Regional Group for Asia and Oceania
<u>SG3RG-ARB</u>	Study Group 3 Regional Group for the Arab States
<u>SG3RG-LAC</u>	Study Group 3 Regional Group for Latin America & the Caribbean
<u>SG3RG-RCC/CIS</u>	Study Group 3 Regional Group for RCC/CIS
<u>SG3RG-EURM</u>	Study Group 3 Regional Group for Europe and the Mediterranean Basin

Resolution 54 of WTSA-12 invites the regions and its Member States, *inter alia*

- To pursue the creation of regional groups of parent ITU-T study groups...
- To develop draft terms of reference and working methods for these regional groups, which are to be approved by the parent SG...
- To create regional standardization bodies, as appropriate ...

invites the regional groups thus created:

- To **disseminate information** about telecommunication standardization...
- To **encourage involvement of developing countries** in standardization activities in their regions...
- To **submit written contributions** to parent study group reflecting the priorities of the relevant region...



ITU-T SG3 and the ITU/BDT Regional Economic and Financial Forums of Telecoms/ICTs for Africa, Arab States, Asia and Pacific, Latin America and the Caribbean

- In coordination with Study Group 3 Regional Meetings, the ITU's development bureau (BDT) organizes **Regional Forums** addressed at policy makers, regulators and operators in the different regions
- Typically, these forums are held **immediately preceding the SG3 Regional Meeting**, e.g. 2 days for Forum, 2 days for SG3RG
- The Regional Forums are a unique platform for stakeholders to exchange information and knowledge on regulatory, economic, costing and tariff issues, and provide invaluable and effective support to the work of the ITU-T Regional Study Groups;
- BDT also collects *Regulatory* and *Tariff Policies* data through annual surveys. This data is shared with Forum and SG3RG participants at the annual regional meetings.
 - See also the [ITU ICTEye](#) database

Study Group 3 is unique (1)

- **Unique global forum** to improve the understanding of **the financial and economic aspects** associated with the growth of ICT, particularly with respect to the shift to IP-based and NGN/Future Networks and the exponential rise in mobile wireless communications.
- SG3's mandate is **long-standing** and dates back to the early days of the *International Telegraph Union* in terms of interconnection, the improvement of daily operations and the settlement of accounts.

Study Group 3 is unique (2)

- SG3 **membership is diverse** and includes Member States as well as service providers (Sector Members), Academia Members and international organizations (e.g. WTO).
- It is the **only** ITU-T Study Group that deals with **policy and economic issues**
- It is **uniquely flexible** in terms of procedure: it allows for rapporteur groups to be formed on themes and topics of interest to the SG, rather than being linked to specific Questions (as is the case with other Study Groups)

Examples of issues being tackled by SG3

- NGN Charging and Accounting
- International Internet Connectivity
- Economic impact of transition from IPv4 to IPv6
- Economic impact of OTTs
- Identification of relevant markets and significant market power (SMP)
- International Aspects of Universal Service
- Governance of Telecommunication Regulators
- Mobile Roaming Issues (including roaming in border areas)
- Economic and Competitiveness aspects of Mobile financial services
- Pricing and accounting/settlement issues related to international telecom services
- Use of commercial agreements for the provision of international telecommunication services
- Dispute Resolution related to Charging and Invoicing
- Alternative Calling Procedures on international telecom networks
- Misappropriation and Misuse of Facilities and Services, including CLI, CPND and OI



Some key D-Series recommendations under the responsibility of SG3

Subject	Recommendation
International Internet connectivity	D.50
Alternative Calling Procedures	D.201
Charging for Mobile Services	D.93, D.99
Charging for Mobile Roaming	D.98
Charging/accounting for international telephone service	D.115, D.116, D.140, D.150
Telephone/Telex Accounts	D.170
Pricing and accounting/settlement issues related to international telecom services	D.195, D.190



Recommendations, Resolutions and Treaty Articles related to the work of SG3

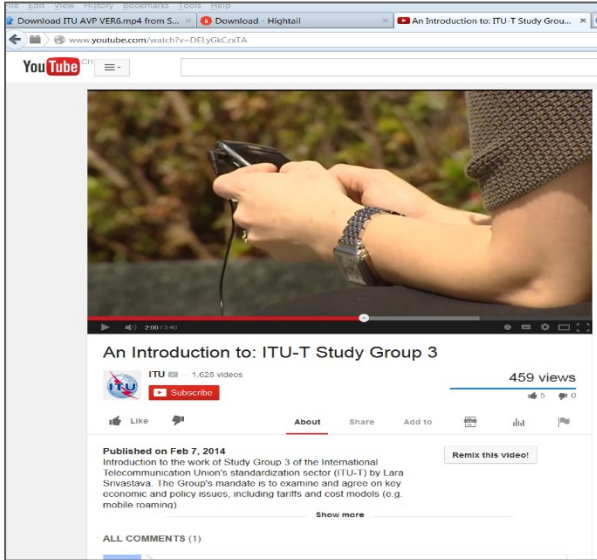
- [ITU-T D-Series Recommendations](#)
- [WTSA-12 Resolution 29](#) on Alternative Calling Procedures
- [WTSA-12 Resolution 44](#) on Bridging the Standardization Gap
- [WTSA-12 Resolution 54](#) on Creation of and Assistance to Regional Groups
- [WTSA-12 Resolution 61](#) on Countering and combating Misappropriation and misuse of international telecommunication numbering resources
- [WTSA-12 Resolution 62](#) on Dispute Settlement
- [WTSA-12 Resolution 64](#) on IP address allocation and facilitating the transition to and deployment of IPv6
- [WTSA-12 Resolution 65](#) on Calling Party Number Delivery (CPND), Calling Line Identification (CLI), and Origin Identification (OI)



Recommendations, Resolutions and Treaty Articles related to the work of SG3 (cont'd)

- [WTSA-12 Opinion 1](#) on the Practical Application of Network Externality Premium
- [ITR Article 3.7](#) on Regional Traffic Exchange Points
- [ITR Article 4.4 to 4.7](#) on Mobile Roaming
- [ITR Article 8.1.2](#) on Encouraging Investments and Competitive Wholesale Pricing
- [ITR Article 8.1.1.](#) and [8.2.1](#) on Use of Commercial Agreements for international telecommunication service arrangements
- [ITR Article 8.3.1](#) on Avoidance of Double Taxation for international telecommunication services
- [WCIT Resolution 5](#) on International telecoms service traffic termination and exchange

Videos on SG3



Introduction to ITU-T Study Group 3



Tackling the cost of international mobile roaming



SG3 SHAREPOINT COLLABORATIVE SPACE



ITU-T Study Group 3

Study Group 3 Website
(External)

Mapping
Recommendations to
Questions

EDIT LINKS
Site Contents

Welcome to the Shared Workspace for the ITU-T Study Group 3 on Economic and Policy Issues

ITU-T Study Group 3 (SG3) deals with tariff and accounting principles including related telecommunication economic and policy issues. To access the external website of SG3 you can go [here](#).

This Sharepoint site provides each Working Party, Rapporteur Group and Ad-Hoc Group with a shared workspace in which to engage in discussions and share documents. There is also a space for the SG3 Management Team. The Chairman of SG3 is Seiichi Tsugawa (KDDI, Japan). SG3 is supported by TSB Secretariat Staff: Lara Srivastava is the SG3 Adviser and Emmanuelle Labare is the SG3 Assistant. Please see below the full list of management team members and how you can contact them.

ITU-T Study Group 3 provides a unique global forum to improve the understanding of the financial and economic aspects associated with the growth of ICT, particularly with respect to the shift to IP-based and NGN/Future Networks and the exponential rise in mobile wireless communications. The traditional mandate of SG3, which continues today, dates back to the early days of the International Telegraph Union (in the 1800s) in terms of interconnection, the improvement of daily operations and the settlement of accounts. The membership of Study Group 3 is diverse and includes member states as well as service providers (sector members), academic members and international organizations (such as the WTO).

The needs of developing countries are an important focus on the group. In particular, an Ad-Hoc Group on developing country issues meets at every meeting of SG3. In addition, regional groups play a key role across the globe for the development of regional tariff policy and cost models: there are 4 regional groups for SG3, namely SG3RG-AFR (Africa), SG3RG-AO (Asia and Oceania), SG3RG-ARB (Arab States), and SG3RG-LAC (Latin America and the Caribbean). These regional groups meet at least once a year and are preceded by tutorials and seminars on costs and tariffs, in collaboration with the ITU-D.

Key issues tackled by Study Group 3

The mandate of Study Group 3 is broad and complex. There is a growing number of issues, notably in light of the outcomes of the World Telecommunication Standardization Assembly (WTSA-12) and World Conference on International Telecommunications (WCIT-12) that are being tackled by the group. The TSB Secretariat has also drafted a table of [key items of relevance to SG3 from WCIT and WTSA](#) (see also Shared Documents below).

Key issues include, inter alia:

- NGN Charging and Accounting



How times have changed
Taken at ICT Discovery (ITU Montbrillant 2nd floor)



<http://itu.int/go/extranet/t/studygroup3>



SG3 at a glance:

<http://www.itu.int/tariffs>

Mailing Lists and Informal FTP Area (IFA)

<http://www.itu.int/en/ITU-T/studygroups/2013-2016/03/Pages/ifa-structure.aspx>



Thank you

*We look forward to seeing you at
an ITU-T Study Group 3 meeting
in the near future!*

**For more information, please contact us at
tsb3sg3@itu.int or check out our website at:
www.itu.int/tariffs**