



International Telecommunication Union

ITU Standardization and its new Environment

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ITU-T NGN Technical Workshop
14-15 March 2005, Jeju Island, Korea



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ITU Landmarks

1837

Invention of the first electric telegraph

1844

Samuel Morse sent his first public message over a telegraph line between Washington and Baltimore

Foundation of the International Telegraph Union by twenty States with the adoption of the first Convention. First Regulations.

1876

Alexander Graham Bell patents his invention of the telephone

1924

Paris - Creation of CCIF (International Telephone Consultative Committee)

1925

Paris - Creation of CCIT (International Telegraph Consultative Committee)

1927

Washington - Creation of the CCIR (Intl. Radio Consultative Committee)

1932

Madrid - Plenipotentiary Conference. Telegraph Union changes name to International Telecommunication Union - ITU

1947

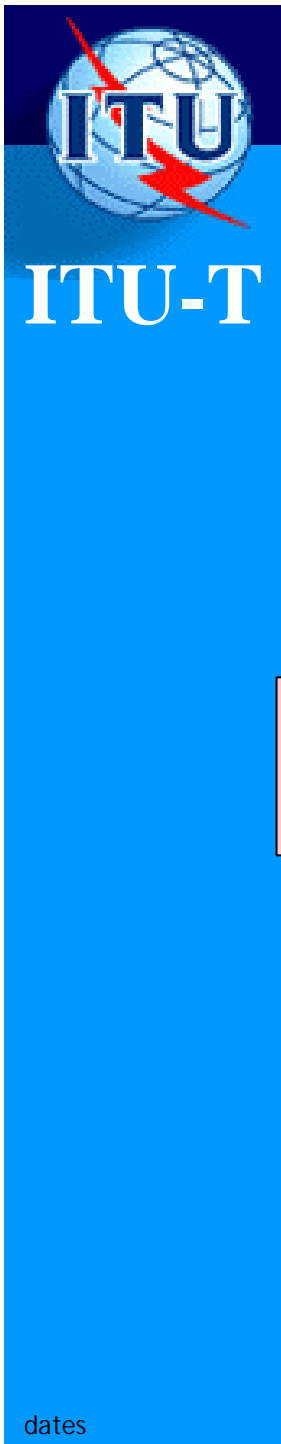
ITU becomes a Specialized Agency of the United Nations

1956

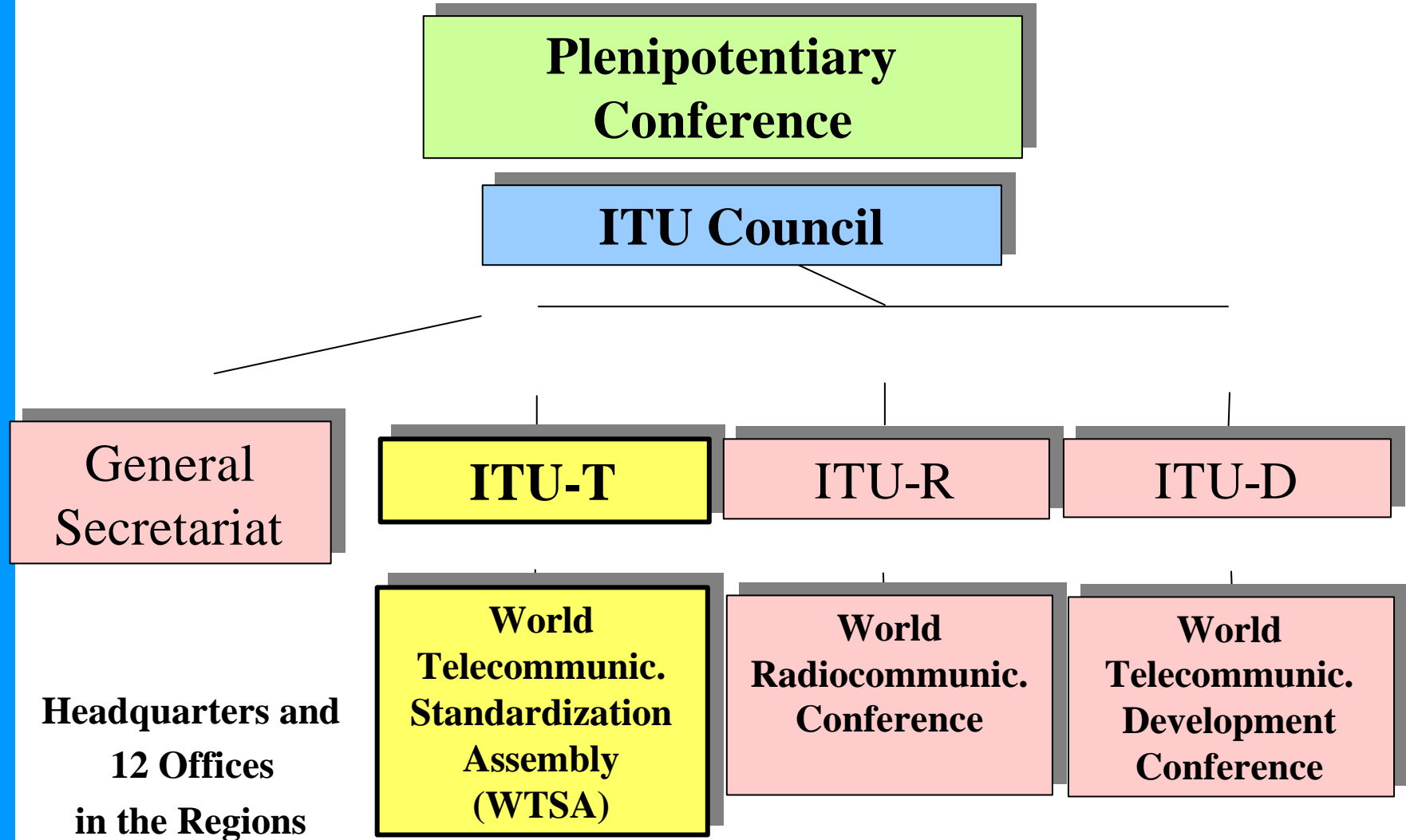
Geneva - CCIF and CCIT merged into CCITT (International Telegraph and Telephone Consultative Committee)

1992

Geneva - Plenipotentiary Conference. Creation of 3 Sectors: *ITU-T (CCITT), ITU-R (IFRB, CCIR), and ITU-D (TCD)*



ITU Structure



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Functions of ITU-T

"The functions of the Telecommunication Standardization Sector shall be, bearing in mind the particular concerns of the developing countries, to fulfill the purposes of the Union relating to telecommunication standardization, as stated in Article 1 of this Constitution, by studying technical, operating and tariff Questions and adopting Recommendations on them with a view to standardizing telecommunications on a worldwide basis"



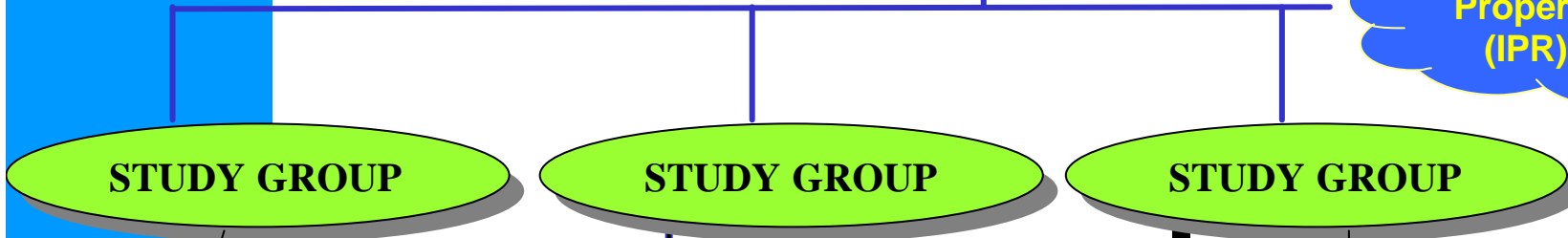
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ITU-T Membership (3-March-2005)

- **Member States: Governments [189]**
- **Sector Members: [357]**
 - Recognized Operating Agencies (~ROA-160), Scientific or Industrial Organizations(~SIO-154) and Financial or Development Institutions (FDI);
 - Other entities dealing with telecommunication matters;
 - Regional and other international telecommunication, standards, financial or development organizations (~31).
- **Associates: [90]**
 - Associates as a way for small entities or organizations to participate in the work of a single ITU-T Study Group at a reduced financial contribution.



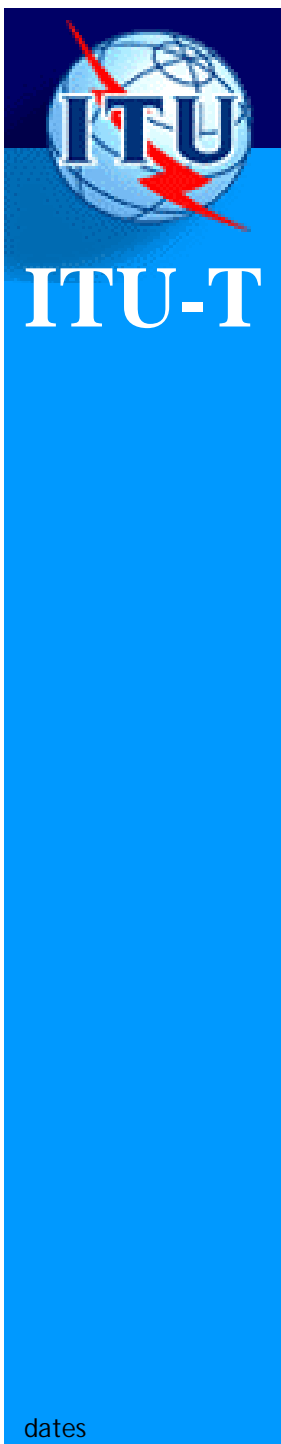
ITU-T Organizational Structure



Focus Group

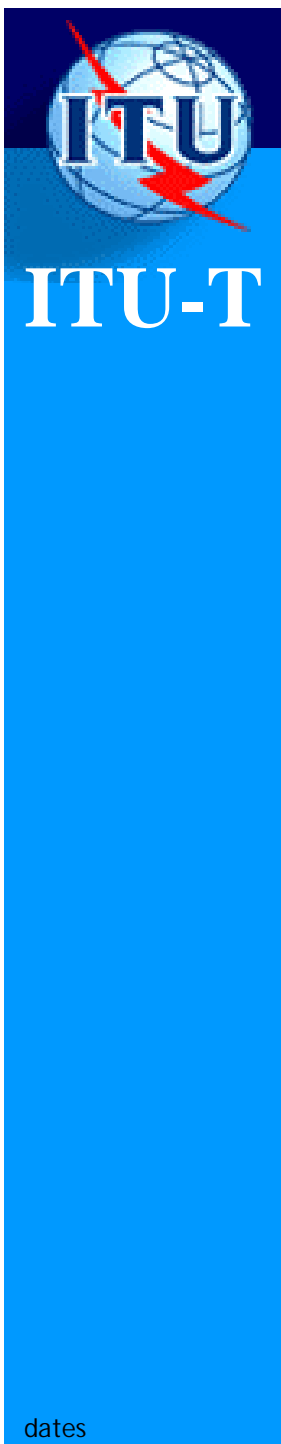
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Joint Rapporteur group



WTSA

- o Meets every four years
- o Defines study group structure and chairmen
- o Resolutions
- o May approve Recommendations



TSAG

- Meets about every nine months
- Power to modify study group structure between WTSAAs
- Maintains A-series Recommendations
- Monitor SG progress
- Coordination of activities



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ITU Telecom Standardization Sector (ITU-T)

- Standardization activities are segmented into “**Study Groups**” that focus on different topic areas (e.g., security, access & transport networks, multimedia, signalling, numbering, naming and addressing, tariffs, IP and NGN)
- **Unique forum for public-private partnership**
- Cooperative activities with many organizations and forums including regional telecom forums, IETF, ISO, IEC, ETSI, etc.
- Workshops and seminars on matters of particular interest to the market

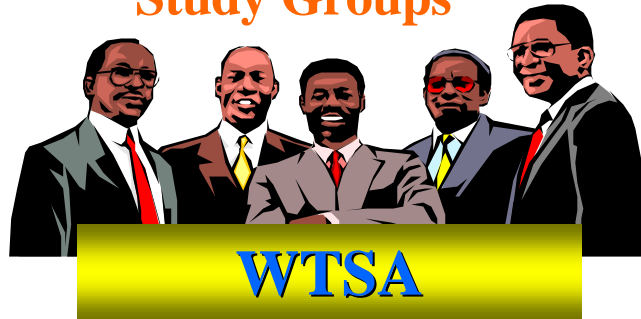


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Member Contributions

Process of Development of Recommendations

Questions Approval and Allocation to Study Groups



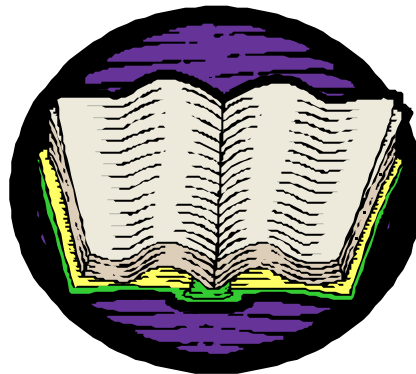
SGs define work program



Mature Text Approval Procedure SG/WP



Rapporteur Group activities



Output: draft Recommendations, Reports, Handbooks, etc.



Check IPR & Copyright



Contributions Submitted

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Approval of Recommendations

■ Alternative Approval Process (AAP)

For technical Recommendations

Once the text is considered to be mature, it is submitted for AAP at an SG or WP meeting (**Rec A.8**)

■ Traditional Approval Process (TAP)

For Recommendations subject to policy or regulatory implications

Initiated at any SG or WP meeting and completed, for final approval, at the subsequent SG meeting (WTSA- **Res 1**)

Approval and publication of Recs.

time	before 1998	1989 - 1993	1993 - 1996	1997 - 2000	2001 - 2004
Approval	4 years	2 years	18 months	9 months (exceptional cases 5 months)	2-9 months
Publication time	2- 4 years	2 years	1 - 1.5 year	6-12 months	3-9 months

Notes: - **Pre-published Recommendations, available on ITU-T website, from a few days to four weeks after approval of the text**

- Recommendations in force, pre-published, superseded/obsolete: available on the ITU-T website

- Forms of publications: Paper, CD-ROM, electronic bookshop, on-line, etc.

- Free on line access since January 2001 (one free access per member and 3 free downloads for public)

- "Approval time" counted between "Determination/consent" and final approval

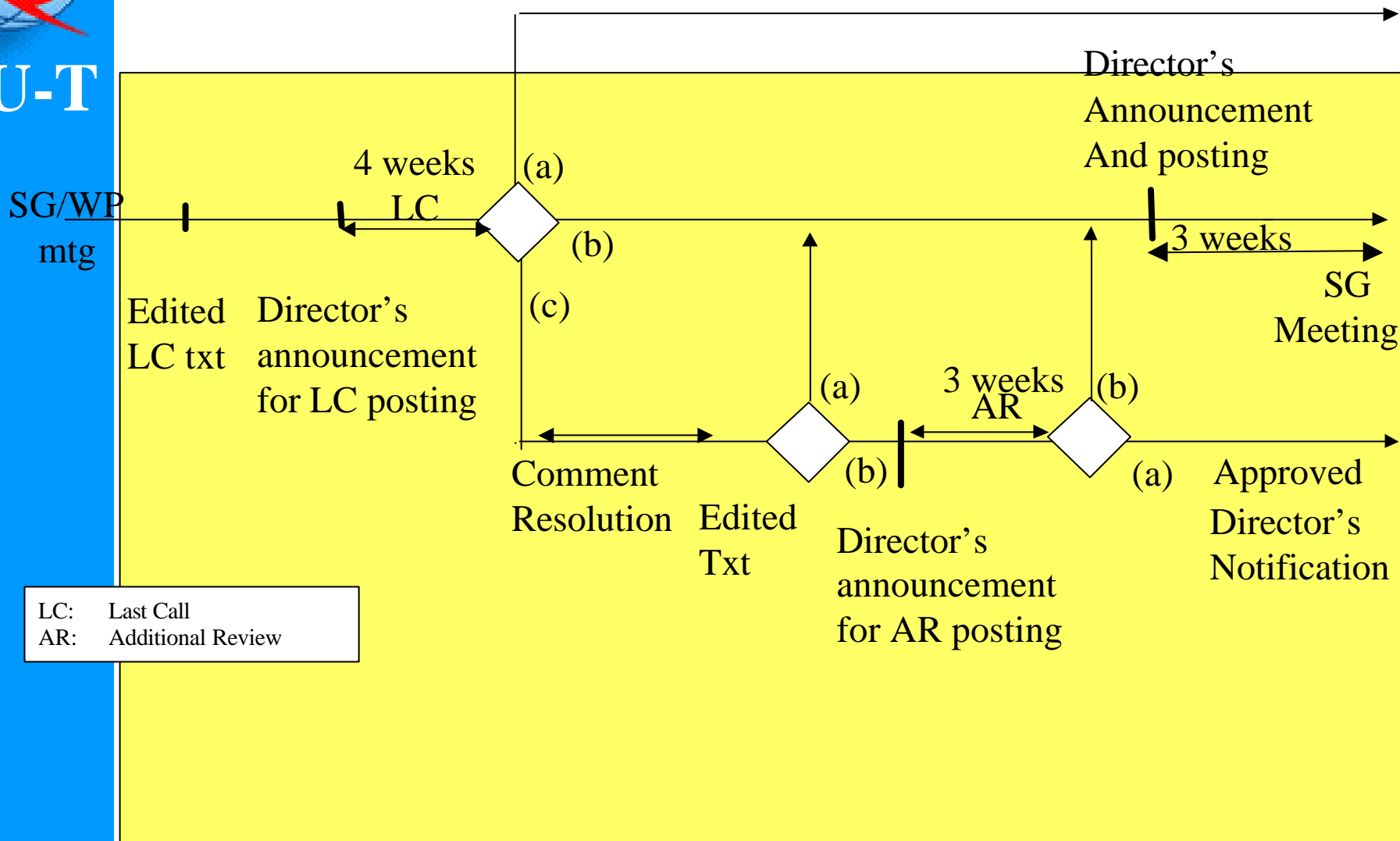
- **Av. Approval time under AAP = 9.5 Weeks**

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Approval of new and revised Recommendations Sequence of events (AAP)



LC: Last Call
 AR: Additional Review



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International Cooperation

- **International SDOs: ISO, IEC, WSC; ISO/IEC JTC1**
- **Regional SDOs: ATIS, TIA, TSACC, TTA, TTC, ARIB, CCSA, ETSI, ACIF, GSC**
- **For internet: IETF/ISOC, ICANN, ccTLDs, etc.**
- **Many Forums/SDOs: such as IEEE, 3GPPs, ATM, MPLS/FR, MEF, TMF, ...**
- **Regional Telecom organizations: APT, ATU, CITEL, RCC, CEPT, ETNO, ...**
- **etc...**

(SDO = Standards Development Organization)

Challenges to ITU-T

Continue to be the pre-eminent inter-governmental and private sector body for worldwide standards

- **facing the rapid development of new technology, rapid change in environment**
- **Many SDOs; de-facto standards**
- **The limited resources, limited budget and additional tasks**
- **To increase Membership and participation of delegates in ITU-T activities**
- **Ensure the stability of members' commitment to ITU-T Study Group positions**
- **Harmonise views and positions of Members on the products and results of Study Groups**



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Main results from WTSA-04

- **Next-Generation Networks (NGN) focus** - spanning the work programme of all study groups
- **The creation of a new Study Group on NGN/SG13 (also parent of FGNGN)**
- **The adoption of new resolutions on Internet-related issues (ENUM, spam, internationalized domain names, country code top level domain (ccTLD) names)**
- **The adoption of a resolution on cybersecurity**
- **The adoption of measures aimed at enhancing a greater involvement of developing countries in standardization activities**

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Main results from WTSA-04

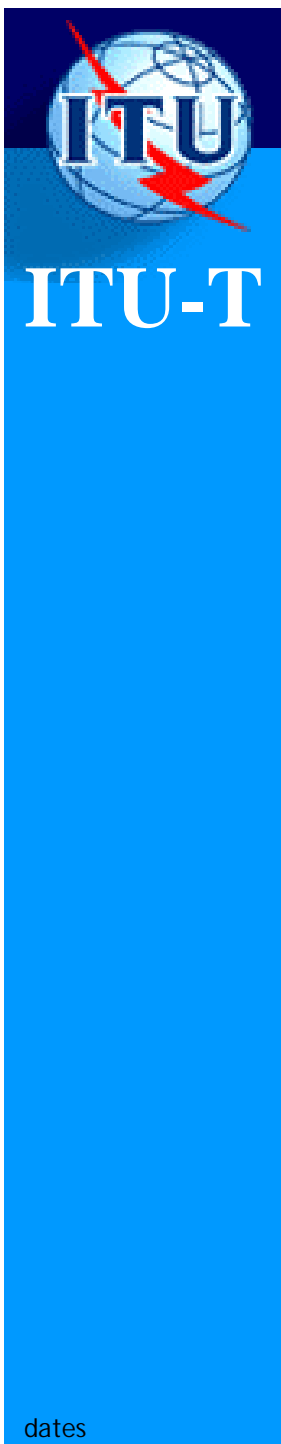
- **The setting up of 13 Study Groups with their areas of responsibility and the designation of their chairmen and vice- chairmen. WTSA also designated the chairman and vice- chairmen of the telecommunication standardization advisory group (TSAG)**
- **The inclusion of a gender perspective in the work of the ITU- T with the adoption of a resolution on gender mainstreaming**
- **A request for a study on the economic effect of call-back and other similar calling practices in developing countries and how they impact on their ability to develop their telecommunication networks and services**

Main results from WTSA-04



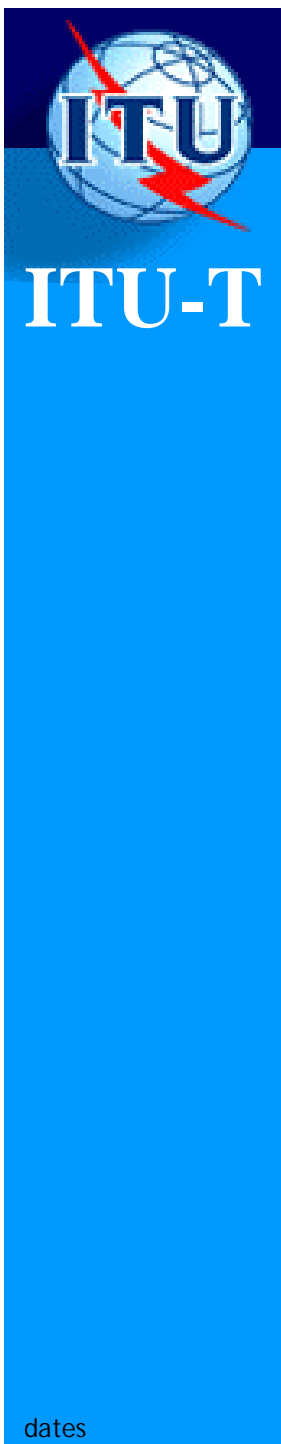
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- **AAP for non-approval > 1 Member State**
- **TAP no changes**
- **Electronic Documents Handling (EDH) to be further strengthened**
- **Workshops and seminars as important parts of regular activities, establishment of a coordination group for seminars coordination to be created, additional function of Technology Watch.**
- **Enhance the regional presence, and encourage regional activities also by creating regional groups for special issues**
- **Establish “Groups” to deal with urgent market needs (focus groups, project groups, etc...)**



ITU-T Study Groups and TSAG

- Study Group 2: Operational aspects of service provision, networks and performance**
- Study Group 3: Tariff and accounting principles, telecommunication economic and policy issues**
- Study Group 4: Telecommunications Management**
- Study Group 5: Protection against electromagnetic environment effects**
- Study Group 6: Outside Plant and related indoor installations**
- Study Group 9: Integrated broadband cable networks and television and sound transmission**
- Study Group 11: Signalling requirements and protocols**



ITU-T Study Groups and TSAG

Study Group 12: Performance and Quality of Service

Study Group 13: Next Generation Networks

Study Group 15: Optical and other Transport Network Infrastructures

Study Group 16: Multimedia Terminals, Systems and Applications

**Study Group 17: Security, Languages and Telecommunications
Software**

Study Group 19: Mobile telecommunication networks

TSAG: Telecommunication Standardization Advisory Group



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Normative



SG-related



Non-normative

Focus Groups

ITU-T Products

Recommendations
Annexes

Appendices
Supplements
Implementors Guides

Manuals
Reports

Technical Specifications
Technical Reports, ...

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ITU-T added value to the global standardization

Leadership through coordination, governments and private sector
consensus building, and **collaborative** working arrangements
with external organizations, forums and consortia

Facilitating adoption of appropriate
external specifications as
ITU-T Recommendations

Facilitating interoperability and interworking

Developing requirements and architectural framework
Recommendations as needed and appropriate

Identifying emerging industry **needs for global standards** and
proposing efficient and coordinated work planning
and sharing arrangements with external forums to meet needs

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Thanks

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