ITU-D STUDY GROUP ACTIVITIES

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ITU-D STUDY GROUPS

• SG 1: Telecommunication development strategies and policies

National telecommunication policies and regulatory strategies which best enable countries to benefit from the impetus of telecommunications as an engine of economic, social and cultural development.

Finance and economics, including World Trade Organization (WTO) issues, tariff policies, case studies, application of accounting principles as developed by ITU-T Study Group 3, private-sector development and partnership.

• SG 2: Development and management of telecommunication services and networks and ICT applications

Methods, techniques and approaches that are the most suitable and successful for service provision in planning, developing, implementing, operating, maintaining and sustaining telecommunication services which optimize their value to users. This work will include specific emphasis on telecommunication network security, mobile communication and communications for rural and remote areas, with particular focus and emphasis on applications supported by telecommunications

The implementation and technical application of information and communication technology, using studies by the others Sectors, taking into account the special requirements of the developing countries

http://www.itu.int/ITU-D/study_groups/index.html

Structure of ITU-D SGs

- Study groups may set up working parties, rapporteur's groups and joint rapporteur's groups to deal with specific Questions or parts of thereof.
- Where appropriate, regional groups may be set up to study Questions or problems, the specific nature of which makes it desirable that they be studied within the framework of one or more regions of the Union.
 - The establishment of regional groups should not give rise to duplication of work being carried out at the global level by the corresponding study group, its subordinate groups or any other groups
- Joint rapporteur's groups (JRG) may be established for the study of those Questions requiring the participation of experts from more than one study group.
 - Joint Group on Resolution 9 (Rev. Doha, 2006): Participation of countries, particularly developing countries, in spectrum management

Structure of ITU-D SGs

- Chairperson
- Vice chairpersons
 - The mandate of the vice-chairman shall be to assist the chairman in matters relating to the management of the study group, including substitution for the chairman at official ITU-D meetings or replacement of the chairman should he or she be unable to continue with study group duties.
 - Vice-chairmen may be selected as chairmen of working parties or as rapporteurs.
- Rapporteurs for each questions
 - Rapporteurs are appointed by a study group in order to progress the study of a Question and to develop new and revised reports, opinions and recommendations. Rapporteurs may have responsibility for only one Question or topic.
- Study Groups management team
- Joint SGs management team

MEETINGS

- The study groups and their subordinate groups shall normally meet at ITU headquarters.
- The meetings of the study groups and their subordinate groups studying Questions should take place, to the extent possible, in the ITU-D regions, when invited by Member States or Sector Members, in order to facilitate the attendance of developing countries
- Participation in meetings
 - Member States, Sector Members, Associates and other entities duly authorized to participate in ITU-D activities shall be represented in the study groups and other groups in whose work they wish to take part by participants registered by name and chosen by them as representatives to make an effective contribution to the study of the Questions entrusted to those study groups. Chairmen of meetings may invite individual experts, as appropriate, to present their specific point of view, without taking part in the decision-making process.
- Frequency of meetings
 - The study groups shall in principle meet at least once a year during the interval between two WTDCs. However, additional meetings may take place with the approval of the Director of BDT, having regard to the priorities laid down by the preceding WTDC and the resources of ITU-D.

Regional and subregional meetings

- Regional and subregional meetings offer a valuable opportunity for information exchange and for the development of management and technical experience and expertise.
 - Every opportunity should be taken to provide additional opportunities for experts from developing countries to gain experience by participating in regional and subregional meetings which deal with study group work.

Establishment of work plans and preparation of meetings

 The implementation of the work plan will, however, depend to a large extent on the contributions received from Member States, Sector Members and Associates, duly authorized entities or organizations, and BDT, as well as on the opinions expressed by participants in the meetings

Preparation of reports

a) Progress reports
b) Meeting reports
c) Output reports
d) Study group reports to WTDC.

CONTRIBUTIONS

- Submission of contributions
- Processing of contributions
- Electronic access
- Presentation of contributions
- Proposals for new questions

ITU-D Study Group 1

Telecommunication development strategies and policies

http://www.itu.int/ITU-D/study_groups/index.html

SG 1

- 6-2/1 Regulatory impact of next generation networks on interconnection appropriate interconnection arrangements for new generations networks.
- 7-2/1 Regulatory policies on universal access to broadband services
- 10-2/1 Regulation for licensing and authorization of converging services
- 12-2/1 Tariff policies, tariff models and methods of determining the costs of services on national telecommunication networks, including next-generation networks
- 18-2/1 Domestic enforcement of telecommunication laws, rules, and regulations by national telecommunications regulatory authorities
- 19-2/1 Implementation of IP telephony in developing countries
- 20-2/1 Access to telecommunication services for people with disabilities
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- 21-2/1 Impact of telecommunication development on the creation of employment
- 22-2/1 Securing information and communication networks: Best practices for developing a culture of cybersecurity

6-2/1 Regulatory impact of next generation networks on interconnection

- Studies of various issues related to Regulatory impact of next-generation networks on interconnection
- Report
- Description of the legislative and regulatory framework that would be needed to implement

7-2/1 Regulatory policies on universal access to broadband services

- Regulatory policy aspects linked to broadband services and technologies, in particular a summary of the experience acquired by telecom regulators in implementing universal access to broadband services in their countries;
- Specific universal access aspects with regard to management of access and interconnection agreements and methods of financing universal service;
- Aspects to keep up the technological neutrality principles inserting broadband access services to the universal services package;
- Aspects relating to best practices in seeking funding sources and developing innovative financing mechanisms for accelerating universal access/service development in rural communities;

10-2/1 Regulation for licensing and authorization of converging services

- Overview of different legislative frameworks, with a major focus on licensing and/or authorization procedures with a view to identify the main regulatory trends of the examined models concerned by convergent services.
- Evaluation of the experiences of both telecom and competition regulators, in particular with regard to changes in the authorization and licensing regimes.
- Preparation of guidelines and/or recommendations for those countries which are planning to introduce new legislation aimed at supporting the development of converging services.

12-2/1:

Tariff policies, tariff models and methods of determining the costs of services on national telecommunication networks, including next-generation networks

Expected output

- a business strategy document for making the transition from existing service offerings in developing countries to service offerings that combine voice and data, together with a business plan to assure the stability of operators' current revenues in developing countries;
- a set of guidelines for promoting growth in data communications in developing countries.

18-2/1 Domestic enforcement of telecommunication laws, rules, and regulations by national telecommunications regulatory authorities

- A report to the membership presenting guidelines to assist Member States in their efforts to address a number of issues that represent common challenges for an NRA.
- The report will reflect best practice guidelines for regulatory authorities with respect to enforcement of laws, rules, and regulations relating to telecommunication issues that represent common challenges for the NRAs.

19-2/1 Implementation of IP telephony in developing countries

Question for study:

- 1) How can a nation and its citizens, current telephone operators, cable television operators and other ISPs and new entrants benefit from the introduction of IP telephony and broadband access? How can national telecom policy increase the benefits of the introduction of IP-based technologies?
- 2) What are the potential challenges that developing countries experience in attempting to evolve to or implement IP-based networks including IP telephony and broadband access capabilities, and what are possible approaches for overcoming these challenges?

Expected output

- 1) Annual progress report(s) indicating status of the study of Questions and issues being addressed.
- 2) At completion of study, detailed final report with issues raised by each Question as well as lessons learned/success story/findings/conclusions.

20-2/1 Access to telecommunication services for people with disabilities

EXPECTED OUTPUT: REPORT

- The report will enable Member States, especially developing and least developed countries (LDC), to design policies and execute strategies for promoting and implementing services and solutions which provide access to telecom services for persons with disabilities.
- The report will help Member States and Sector Members identify commercial best practices that telecom service providers should apply in relation to persons with disabilities.

21-2/1 Impact of telecommunication development on the creation of employment

OUTPUT:

- Report will contain a qualitative and quantitative evaluation of direct and indirect jobs created by telecommunication development in national labour markets, distinguishing in principle between four subsectors:
 - 1) marketing and sale of services and equipment,
 - 2) network installation,
 - 3) manufacturing of network and terminal equipment, and
 - 4) technology research and development.

22-2/1 Securing information and communication networks: Best

practices for developing a culture of cybersecurity

Question for study

a) To survey, catalogue, describe and raise awareness of:

- the principal issues faced by national policy-makers in working with all stakeholders to build a culture of cybersecurity;
- the principal sources of information and assistance related to building a culture of cyber security;
- successful best practices employed by national policy-makers in working with all stakeholders to organize for cybersecurity and develop a culture of security;
- the unique challenges faced by developing countries in addressing the security of networks and the best practices for addressing these challenges.
- b) To examine best practices for the establishment and operation of watch, warning and incident response and recovery capabilities that may be used by Member States to establish their own national capabilities.

ITU-D STUDY GROUP 2

Development and management of telecommunication services and networks and ICT applications <u>http://www.itu.int/ITU-</u> D/study_groups/index.html

QUESTIONS UNDER STUDY

- 9-2/2 Identification of study topics in the ITU-T and ITU-R study groups which are of particular interest to developing countries
- 10-2/2 Telecommunications for rural and remote areas
- 11-2/2 Examination of terrestrial digital sound and television broadcasting technologies and systems, including cost/benefit analyses, interoperability of digital terrestrial systems with existing analogue networks, and methods of migration from analogue terrestrial techniques to digital techniques
- 14-2/2 Telecommunications for e-health
- 17-2/2 Progress on activities for e-services/applications in the world
- 18-2/2 Implementation aspects of IMT-2000 and information-sharing on systems beyond IMT-2000 for developing countries
- 19-2/2 Strategy for migration from existing networks to next-generation networks for developing countries
- 20-2/2 Examination of access technologies for broadband telecommunications
- 22-2/2 Utilization of ICT for disaster management, resources, and active and passive spacebased sensing systems as they apply to disaster and emergency relief situations

Q 9-2/2: Identification of study topics in the ITU-T and ITU-R study groups which are of particular interest to developing countries

• Question for study

 Identification on a continuing basis of those study group topics in the ITU-T and ITU-R which are of particular interest to developing countries are based on an agreed set of guidelines, including the preparation of some technical reports.

Expected output

- Agreed guidelines to the identification process of such topics.
- Annual progress reports indicating status of the selected topics and, where completed, an indication of how the outputs can be obtained.
- Technical Reports on particular topics (called technical arrays in the past)

10-2/2 Telecommunications for rural and remote areas

ISSUES FOR STUDY:

- Step 1 Identification of the full range of potential techniques and solutions that can significantly impact on the provision of telecommunication services in rural and remote areas, with emphasis on those that employ the latest technology designed to lower infrastructure capital and operating costs.
- Step 2 Investigate and report on how the techniques identified above can be used to best deliver the range of services and applications required by rural and remote communities and adapted to the needs of users.
- Step 3 Make an assessment of the likely commercial viability or sustainability of the techniques and solutions identified in the above steps.
- Step 4 Report on a range of case studies that clearly demonstrate how a range of techniques, based on new technology aimed at providing reduced capital and operating cost solutions and enhancing community participation, can maximize the benefits of telecommunication infrastructure in rural and remote areas.
- Case Library for Rural Communications
 - All region
 - Europe & CIS (Litvania)

11-2/2 Examination of terrestrial digital sound and television broadcasting technologies and systems, including cost/benefit analyses, interoperability of digital terrestrial systems with existing analogue networks, and methods of migration from analogue terrestrial techniques to digital techniques

The Question focuses on the following issues:

- Appropriate ways of introducing digital technology for terrestrial sound and television broadcasting in developing countries, including ways and means of covering rural and sparsely populated areas.
- Impact of the convergence of terrestrial sound and television broadcasting with other terrestrial telecommunication services on developing countries, taking into consideration relevant activities carried out in the other two ITU Sectors.
- Cost/benefit analysis of gradual transition to digital terrestrial sound and television broadcasting, including:
 - a) business models;
 - b) evaluation of risk factors;
 - c) matters relating to digital receiving terminals;
 - d) some practical examples on the basis of relevant case studies as a part of the preparation for the transition period.
- Analysis of technical and cost/benefit issues which foster an enabling environment.

14-2/2 Telecommunications for e-health

Issues for study

- 1) further steps to assist in raising the awareness of decision-makers, regulators, telecommunication operators, donors and customers about the role of telecommunication and information technologies in supporting healthcare and a healthy life in developing countries.
- 2) collaboration and commitment between the telecommunication sector and the health sector in developing countries, in order to maximize the utilization of limited resources on both sides for implementing ehealth-care applications.
- 3) Dissemination experiences and best practices with the use of telecommunications in e-health in developing countries.
- 4) Cooperation among developing countries in the field of telecommunications for e-health.
- 5) Promotion development of telecommunication standards for e-health applications in conjunction with ITU-T and ITU-R in particular.

ITU-T STUDY GROUP 16 WORK ON e-HEALTH

17-2/2 Progress on activities for e-services/applications in the world

 Annual progress reports containing any guidelines and any lessons learned on e-services/applications in developing countries, with special attention to promotion of women's engagement in these applications. 18-2/2 Implementation aspects of IMT-2000 and information-sharing on systems beyond IMT-2000 for developing countries

Issues for study

- a) Identify ways of implementing IMT-2000, using satellites, as appropriate, for some countries and regions,
- b) Identify the key elements to be studied in order to provide efficient and cost effective implementation of IMT-2000 and its evolution in developing countries.
- c) Propose useful content for the development of training modules by ITU-D for users of IMT-2000 services and applications,
- d) Provide information on the specific impact of the implementation of IMT-2000 on women, youth, indigenous people and people with disabilities,
- e) Provide information on systems beyond IMT-2000.

RESULT FROM PREVIOUS STUDY PERIOD: GUIDELINES ON SMOOTH TRANSITION FROM THE EXISTING MOBILE NETWORKS TO IMT 2000 FOR DEVELOPING COUNTRIES 19-2/2 Strategy for migration from existing networks to next-generation networks for developing countries

Issues for study

- Trends of telecommunication networks towards NGN.
- Examination of NGN technologies (network management, transport networks, access networks, interworking with existing networks, etc.).
- Methodologies for planning, with taking into account the behavior of different existing networks.
- *Migration solutions to NGN.*

20-2/2 Examination of access technologies for broadband telecommunications

Issues for study

 Identify the technical, economic and development factors influencing the effective deployment of broadband wired and wireless access technologies and their applications, with a focus on technologies and/or standards recognized or under study by the other two ITU Sectors.

Expected Output

- Analysis of the economic, technical, regulatory and development factors influencing the effective deployment of broadband access technologies. This will also include an assessment of the demand for these technologies and applications in developing countries.
- A matrix of different broadband access technologies, both wired and wireless, terrestrial high-altitude systems, including stratospheric-based and satellite. Yearly updating of the technology matrices will be necessary, including an update of the output report of the last study period by the year 2009.
- Result from previous Study Period: Report on different
 BB access technologies

22-2/2 Utilization of ICT for disaster management, resources, and active and passive space-based sensing systems as they apply to disaster and emergency relief situations

The output of the Question

- provide administrations with information on the establishment or modernization of national or regional disaster management systems and plans.
- Collaborating with ITU-T, provide a report on guidelines for a "Content Standard". Working with the WGET, develop proposed suggestions/recommendations on implementation of the Tampere Convention.
- Annual progress reports indicating the status of the selected topics and, where completed, an indication of how the outputs can be obtained.

RESOLUTION 9 (REV.DOHA, 2006)

Participation of countries, particularly developing countries, in spectrum management

Objectives

- Based on: Successful development of the "Spectrum Fees Database" (SF Database)
 - prepare the next in the series of the reports above within the next study period for the frequency band 3-30 GHz;
 - continue the development of the SF Database and provide additional guidelines and case studies, based on practical experiences of administrations
 - Assistance to developing countries

Res 9: Assistance to developing countries

- Assistance in raising the awareness of national policy-makers as to the importance of effective spectrum management for a country's economic and social development
- Training and dissemination of available ITU documentation
- Assistance in developing methodologies for establishing national Tables of frequency allocations
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- Assistance in setting up computerized frequency management and monitoring systems
- Economic and financial aspects of spectrum management
- Assistance with preparations for world radiocommunication conferences (WRC) and with follow-up on WRC decisions
- Assistance with participation in the work of ITU-R study groups and their working parties

THANK YOU FOR YOUR ATTENTION!