The International Telecommunication Union

Building the Information Society



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The International Telecommunication Union



Who we are, What we do

A United Nations specialized agency with a mandate to help the world communicate

The purpose of ITU as set out in its Constitution and Convention is:

- To promote the extension of the benefits of the new telecommunication technologies to all the world's inhabitants
- To promote, at the international level, the adoption of a broader approach to the issues of telecommunication in the global information economy and society, by cooperating with other world and regional organizations and those non-governmental organizations concerned with telecommunications

To carry out its mandate, ITU has a number of key roles, including management of the radio-frequency spectrum and development of global telecommunication standards, activities which are shaping the communication networks, systems and services of today and tomorrow. ITU also has a number of programmes and activities that promote the growth of information and communication technologies (ICTs) in emerging economies and developing countries.

ITU plays a crucial role in the analysis and crafting of key trends shaping the ICT industry. Information from around the globe is collected and refined for a better understanding of the industry's future, enabling the public and private sectors to develop strategies and target growth opportunities.

ITU's activities are carried out by three core sectors: The Radiocommunication Sector (ITU-R), the Telecommunication Standardization Sector (ITU-T) and the Telecommunication Development Sector (ITU-D).

A unique platform for public/private sector partnership

In today's fast-moving environment, ITU provides governments and private organizations with a unique forum where they can make an important and valued contribution to the rapidly changing telecommunication and ICT sectors.



ITU is the oldest of the United Nations specialized agencies. For 140 years, governments and the private sector have worked together within ITU to coordinate the operation of telecommunication networks and services and advance the development of communication technologies. Today ITU is composed of 189 Member States and some 690 Sector Members and Associates.

ITU's membership encompasses telecommunication policy-makers, regulators, network operators, equipment manufacturers, and software developers, regional standards bodies, telecom organizations and financing institutions.

An experienced agency to help manage ICTs for development

For over 40 years, ITU has built up a wealth of experience and expertise. Its recognized actions at the global level and its support to regional and local initiatives make ITU a unique executing and implementing agency, in the field of ICTs for development.

Summit organizer

"Because it is ITU's mandate to extend the benefits of ICTs to all of the world's inhabitants, we have taken the lead role in the organization of the Summit. We must take this opportunity now to take stock of the first phase and direct our thoughts towards ensuring that the next phase will be a truly effective tool for change." Yoshio Utsumi, ITU Secretary-General, ITU TELECOM AFRICA, Cairo, 2004.

> As the UN agency in charge of telecommunications and other ICTs, it was not surprising that the impetus to organize a World Summit on the Information Society arose from ITU.



The decision of the 1998 ITU Plenipotentiary Conference that led to the holding of a Summit on the Information Society was endorsed by the United Nations General Assembly. It positioned the Summit under

the patronage of the UN Secretary-General and called for participation of Member States at the highest level. It also called for UN system strong involvement in the preparatory process, as well as in the Summit itself.

In addition to serving as the Secretary-General of the Summit, the Secretary-General of ITU chairs the Executive Secretariat of the Summit as well as the HLSOC (High-Level Summit Organizing Committee), which comprises 28 UN agencies.

The ITU Plenipotentiary Conference also stressed the importance of ITU as an active and relevant contributor to the WSIS process. A Council Working Group on WSIS was created to discuss ITU's contribution to the WSIS preparatory process and ITU's role in implementing the WSIS Plan of Action.



ITU's vision of the Summit

- WSIS: a multi-stakeholder process in line with ITU's objective for a more inclusive Information Society
- WSIS: an international facilitating and consensusbuilding process in line with ITU's growing role as a facilitator for discussion and collaboration on telecommunication and ICT policy issues



The main objectives of WSIS – to tackle the injustice of the digital divide and develop new frameworks and an enabling environment appropriate to cyberspace – are at the heart of ITU's mandate

Building partnerships towards Tunis

The success of the Summit depends on effective followup and implementation of the decisions taken. In line with the overall spirit of the Summit, implementation will involve all stakeholders working in partnership. With this objective in mind, ITU has organized and co-organized a series of thematic meetings to foster efficient partnerships and promote dialogue among all stakeholders.

ITU launched "Connect the World" initiative

A global multi-stakeholder effort: Over 20 partners from private sector companies, governments, international organizations and civil society to achieve the goal of connecting all communities by 2015

Workshop on Internet Governance, 26-27 February 2004, Geneva

The overall objective of the workshop was to contribute to the process that prepared ITU inputs and positions vis-à-vis the United Nations Working Group on Internet Governance (WGIG).

Meeting on Measuring the Information Society, 7-9 February 2005, Geneva

Organized under the umbrella of the "Partnership on Measuring ICT for Development" (UNCTAD/OECD/ ITU/UIS/UN Regional Commissions, UN ICT Task Force, World Bank, Eurostat), the main goal of this global meeting was to agree on a final list of core ICT indicators to be collected by all countries, including on basic access and usage by households and individuals, businesses and schools. It also discussed the technical assistance needs of developing countries as regards the compilation of ICT indicators.



Tokyo Ubiquitous Network Conference, 16-17 May 2005

The concept of a "Ubiquitous Network Society" which will enable connection anytime, anywhere between anything and anyone is now spreading. To determine the steps towards realizing this concept, the Japanese Government, the UN University and ITU jointly hosted this Thematic Meeting.

Meeting on Multi-stakeholder Partnerships for Bridging the Digital Divide, 23-24 June 2005, Seoul

This Thematic Meeting examined how governments, the private sector, civil society and international organizations can work together to help bridge the digital divide. Separate sessions examined the need for a multistakeholder approach, reviewed country case studies of successful partnerships, and considered strategies for measuring the digital divide, technologies for helping bridge the gap and other ways of overcoming barriers.

Thematic Meeting on Cybersecurity, 28 June-1 July 2005, Geneva

This Thematic Meeting examined the recommendations of the Geneva Summit Plan of Action that relate to building confidence and security in the use of ICTs and the promotion of a global culture of cybersecurity. The meeting specifically considered six broad themes in promoting international cooperative measures among governments, the private sector and other stakeholders, including: information sharing of national approaches, best practices and guidelines; developing watch, warning and incident response capabilities; harmonizing national legal approaches and international legal coordination; technical standards; privacy, data and consumer protection; and providing assistance to developing economies.

Conclusions from the Thematic Meeting on Countering Spam, 7-9 July 2004, Geneva

The conclusions stress the existing duplication between different international initiatives, and the need to build on the core competencies of the different agencies involved. They also recognized that some ITU core competencies could be used in the fight against spam such as: standardization, information sharing, capacity-building and partnership-building expertise.

> For more information: www.itu.int/itu-wsis/2005/thematicmeetings.html www.itu.int/wsis www.itu.int/members/ www.itu.int/partners/





Improving ICT connectivity for all

"Connectivity has the power to bind the global community into a cohesive fraternity which shares the common ideals of peace and tolerance, growth and development. A concerted global effort must be made to ensure that there is no gap between the rich and the poor when it comes to flow of and access to information." Yoshio Utsumi, ITU Secretary-General, WSIS Geneva, December 2003.

The Geneva Plan of Action recognizes that information and communication infrastructure is an essential foundation of the Information Society (Action line C2).

By providing a framework for international cooperation and partnership in telecommunications, ITU's aims are:

- To assist in bridging the international digital divide (from basic radio to wireless Internet), by facilitating the development of fully interconnected and interoperable networks
- To give priority to the development of infrastructures for least-served countries and areas
- To assist developing countries in migrating towards newgeneration technologies, and to lower the cost of access



Facilitating infrastructure development

ITU assists developing countries in formulating and implementing economic and financing policies and strategies.

- Databases on main sources of financing for telecommunication development
- Software for the calculation of costs, tariffs and rates for fixed and mobile telephone services, and for the estimation of sensitivity to market risk
- Research papers and studies on financing infrastructures and lowering the cost of access

ITU organizes regional forums to promote ICT infrastructure development by fostering partnerships between public, private sector, regional and international organizations, financial institutions and service providers.

Shared community access is also one of the priority domains of ITU. Projects on multi-purpose community telecentres are ongoing in countries around the world.



Studying international connectivity

- ITU-T's Study Group 3 has been carrying out extensive studies on international Internet connectivity since 1998.
- In 2000, the World Telecommunication Standardization Assembly adopted ITU-T Recommendation D.50 on peering or transit arrangements between Internet service providers and Internet backbone providers.
- ITU also published a study on the creation of local and regional IXPs to save money and bandwidth.

Strengthening capacities

Through regional Centres of Excellence and a worldwide network of Internet Training Centres, ITU offers training on Internet (IP) networks and services, on calculation of costs and tariffs, interconnection, rural connectivity and spectrum management.

Benefiting from convergence

Advances in technology and competitive access are driving the revolution towards wireless access infrastructure and broader convergence of broadcasting, telecommunication and informatics. Convergence also offers sizeable opportunities for the implementation of appropriate new technologies by developing countries. ITU's main activities include:

- International standardization in the field of cellular telephony (such as IMT-2000), Next-Generation Networks (NGN), broadband access
- Assistance to countries to plan, build, operate, upgrade, manage and maintain technologies applicable to their networks and services
- Expert advice and transfer of know-how through training, symposia, workshops, conferences and seminars on digital broadcasting, mobile communication and innovative technological applications
- Production of guides, planning manuals and professional engineering training materials on a new approach for planning evolving network architectures to NGN, mobile network transition for 2G and 3G and spectrum management

A wireless world

"Wireless networks hold great promise in providing developing countries with a modern and extensive communications network. However, regulators in these countries suffer from significant constraints in terms of manpower and experience. We must assist them in developing suitable spectrum management policies that allow them to make the best use of their limited resources."

Yoshio Utsumi, ITU Secretary-General, ITU Workshop on Spectrum Management for a Converging World, Geneva, February 2004.

At the heart of this wireless world lies ITU. The Union plays a vital role in the management of the radio-frequency spectrum.

- It acts as the global spectrum coordinator and registrar of international frequency use, ensuring each and every radiobased service can operate without harmful interference.
- It determines the technical characteristics of the growing range of wireless services.
 - It provides direct assistance to countries to migrate to third-generation networks.



For more information: www.itu.int/itu-wsis/2005/connectivity.html www.itu.int/ITU-T/studygroups/com03/iic/index.html www.itu.int/ITU-D/htd/ www.itu.int/ITU-D/tech/ www.itu.int/home/imt.html www.itu.int/ITU-R/study-groups/was/index.html





Building confidence and security in the use of ICTs

"We must be creative in finding new ways to cooperate in addressing problems created by those who would abuse networks for their own profit and gain. We must find new methods for regional and international cooperation. And of course, we must find ways to facilitate the participation of developing countries in ICT policy discussions so that their particular interests, needs and concerns are understood. I can promise you that ITU, with its broad membership of 189 Member States and almost 700 private sector members, stands ready to assist in this endeavour." Yoshio Utsumi, ITU Secretary-General, WSIS Thematic Meeting on

Countering Spam, July 2004.

The Geneva Plan of Action recognizes that confidence and security are among the main pillars of the Information Society. (Paragraph 12)

Security matters have long been a core ITU activity. ITU's objectives include:

- Fostering international cooperation in the area of Internet and network security
- Providing a platform for the creation of harmonized policy frameworks
- Providing reliable information and data and offering a platform to facilitate discussion and exchange of experiences
- Identifying gaps in communication security standards work, and promoting efforts to address those gaps

Fostering international cooperation

- ITU facilitates the exchange of best practices between developed and developing countries, regulators, private sector and civil society on cybersecurity issues, in order to create harmonized legal frameworks.
- ITU addresses these issues through national, regional and international awareness-raising seminars, workshops and symposia.
- ITU provides an international forum for standardization. Intensive work is being carried out on processes for distribution, sharing and disclosure of vulnerability information, standard procedures for incident-handling operations in cyberspace, and strategies for protection of network infrastructures.



Providing tools on spam and security issues

- A website on anti-spam laws worldwide and a list of enforcement authorities
- An international cooperation database on international projects currently being developed or implemented to fight spam
- A security manual on "security in telecommunication and information technology"
- A catalogue of the approved security recommendations
- A compendium of approved security definitions with a view to establishing a common understanding and use of security terms



Providing technical assistance

- Direct assistance to countries in the formulation of appropriate national and subregional cyberlaws
- Organization of national and regional workshops to share information and best practices in security and trust technologies and policies (IP-based network security, security management, mobile security, biometric authentification)







Building an enabling environment

The Geneva Plan of Action highlights the need for governments to create an enabling environment to maximize the social, economic and environmental benefits of the Information Society (Action line C6).

The growing participation of regulators in the work of the Union makes it a unique platform for collaboration and dialogue on ICT-related regulatory issues:

ITU's activities target the following objectives:

- To ensure equitable, effective and economical use of the radio-frequency spectrum and satellite orbit
- To ensure efficient and timely production of high quality ICT standards
- To support regulatory bodies to effectively meet their national ICT development goals and face new challenges
- To foster an open dialogue among regulators and with key stakeholders including the private sector, investors and consumers

Building consensus

By organizing forums for regulators, ITU provides a platform for dialogue between regulators and key stakeholders in order to adopt harmonized legal and policy framework.

- The Global Symposium for Regulators (GSR): an annual meeting of national regulatory authorities around the world
- The Global Regulators' Exchange (G-Rex): a virtual platform for facilitating the exchange of best regulatory practices
- Regional regulatory forums: an opportunity to discuss common regional issues
- Ongoing study groups to develop spectrum regulation initiatives to better harmonize frequency allocations and the use of satellite orbits



Disseminating studies and guidelines for decision-makers

ITU provides key reference tools for its members and for the global telecommunication community:

- Regulatory profiles (country and regional)
- Best practice guidelines for the promotion of lowcost broadband and Internet connectivity
- Documents and reports on: interconnection, Internet and convergence, licensing, mobile connectivity, dispute resolution, numbering, pricing and cost, universal services, spectrum management, unbundling, spam, regional telecommunication policies, satellite regulations
- An annual publication on "Trends in Telecommunication Reform" that addresses the policy and regulatory issues governments face in developing their ICT environment

Providing technical assistance

Building capacity through:

• The organization of high-level workshops on policy and regulatory issues, including the development of model legislation, universal access/ service policies and strategies

• Online training on alternative dispute resolution and regulation

- Supporting regional synergies through the creation of regional regulatory associations
- Assisting new regulators, particularly in postcrisis countries
- Conducting studies on national/regional assessment of the telecommunication market

Participating in the discussions on Internet governance

ITU activities in the area of Internet governance and the administration of Internet names and IP addresses centres mainly around the development of ITU Recommendations. In doing so the growing convergence towards Next-Generation Networks and its impact on numbering and addressing schemes is considered. Other activities include:

- Support for the implementation of IPv6: assistance in the deployment of IPv6 systems, organization of workshops
- Internationalized domain names: organization of workshops, technical standardization
- Support for the administration of the root server system: awareness-raising on "Anycast Technology"

ITU also contributed staff resources to the Secretariat of the Working Group on Internet Governance (WGIG) and participated in WGIG meetings as an observer.



For more information: www.itu.int/ITU-D/treg/ www.itu.int/osg/spu/intgov/index.phtml www.itu.int/ITU-T/tsb-director/itut-wsis/index.html





Providing broader access to ICT applications

"We must use the power of ICT in such a way that people can improve their economic, social and cultural well-being. We need strong government commitment to strategies that increase the spread of ICTs. This is crucial for the success of any development initiatives and of course for the future of the millions of people in the world today who still have not heard a dial tone. The task is daunting, but we must overcome it if we are to keep the promise of the Information Society."

Yoshio Utsumi, ITU Secretary-General, World Telecommunication Day, Geneva, 2002.

The Geneva Plan of Action calls for actions, within the framework of national e-strategies, supporting the development of ICT applications. (Action line C7)

ICT applications are the subject of ongoing work throughout ITU. Projects are implemented closely with other UN specialized agencies such as WHO, UNCIT-RAL, UNDP, UNIFEM, as well as with private sector entities. Where applicable, projects actively take into account wireless and broadband technologies.

Project objectives include:

- Fostering the implementation of value-added IP applications in the economic and social sectors
- Extending the social and economic benefits of ICTs to all segments of society
- Ensuring sustainability in the development of telecommunication/ICT networks



E-government

ITU provides:

- Support for interministerial network development
- Training in the use of secure and trusted Internet infrastructure and applications, to enhance government services
- Development of Internet-based services and applications for citizens, with a view to increasing government efficiency and transparency

E-health

ITU's activities include:

- Support for the connection of hospitals and clinics
- Work to improve access to health information in rural areas and exchange of medical information
- Development of national standards for health information management and information technology
- Production of relevant studies on the application of telecommunication in health care



E-commerce

ITU work includes:

- Support for the establishment of a favourable legal environment for e-commerce by assisting Member States in the area of legislative reform
- Development of services based on digital certification, e-signature, e-commerce and the protection of consumer rights for e-transactions

Emergency situations

ITU intervenes in:

- Disaster preparedness through standards for public telecommunication services and interoperability of telecom networks
- Disaster mitigation through radiocommunication (spectrum management), establishment of globally/regionally harmonized frequency bands, application of satellite services, support to emergency broadcasting maritime and public safety signals
- Capacity-building activities
- Relief and reconstruction operations

Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations

ITU was a driving force in drafting and promoting the Tampere Convention. The Convention allows relief workers to make full use of life-saving communication tools. It calls on States to waive regulatory barriers that impede the use of telecommunications. These barriers include licensing requirements to use frequencies, restrictions on importing equipment and limits on the movement of humanitarian teams. The Convention came into force on 8 January 2004, following the ratification by 30 countries.





Measuring progress

"...because the Information Society touches on so many different aspects of our economic, social and cultural life, it is not enough simply to count the number of telephone sets or PCs as we used to do. Measuring the development of telecommunications is now beyond the competence of a single organization, ITU, and it requires adopting a multi-stakeholder approach in the collection and analysis of information. Technological change is constant and accelerating, and the development of indicators also needs to keep pace with this. There is a requirement to develop new types of measures of how we access information, and how we collect, store, process and communicate it. We also need a better view of how access to information varies between countries and between different segments of society. This will help us to measure progress in bridging the digital divide and in meeting the WSIS commitments"

Yoshio Utsumi, ITU Secretary-General, WSIS Thematic Meeting on ICT Indicators for Measuring the Information Society, Geneva, February 2005.

> The Geneva Plan of Action stresses the need for an international performance and benchmarking to follow up the implementation of the objectives, goals and targets of the Plan of Action (Paragraph 28).

> ITU is recognized worldwide as a leading provider of timely and comprehensive ICT statistics and indicators.

The main purposes for collecting indicators are:

- To understand trends in national, regional and international ICT development
- To assess the opportunities for possible financial mechanisms
- To assess the impact of policy reforms and technical assistance

- To better match the needs of countries with available resources
- To monitor WSIS implementation
- To track global progress in the use of ICTs to achieve the MDGs



Providing ICT indicators

ITU's Telecommunication Indicator Reports present an analysis of trends and developments in the global telecommunication sector. They include:

- Global and regional reports
- Statistics on basic ICT indicators by country, operators, region, gender

Developing a digital opportunity index

The WSIS Geneva Plan of Action calls for a commitment to develop and launch a composite ICT Development (Digital Opportunity) Index. In cooperation with other UN specialized agencies, ITU is working on defining indicators to achieve the WSIS targets.

Managing the WSIS stocktaking

ITU has launched a stocktaking exercise with the aim of providing an inventory of existing and planned initiatives by all stakeholders. The stocktaking database is updated regularly. It serves as a useful tool for illustrating how ICTs can help achieve the MDGs, monitoring the implementation of the WSIS Plan of Action, and identifying areas where further action is needed.



Photo credits

ITU building : ITU / A. de Ferron Page 2, 7, 9, 12, 13, 16, 17, 24 PhotoDisc Page 3 ITU,Jean-Marc Ferré, copyright ITU Page 4 ITU / André Longchamp Page 8 Alcatel, Copyright Alcatel Page 20 PhotoDisc, Photos.com The core competence of the ITU in the field of ICT assistance in bridging the digital divide, international and regional cooperation, radio spectrum management, standards development and the dissemination of information are of crucial importance for building the Information Society.

WSIS Declaration of Principles (Paragraph 64)

International Telecommunication Union

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