Note by the Secretary-General, ITU

I have the honour to transmit to the WSIS Preparatory Committee a report by the Chairman of the ITU Council Working Group on WSIS.

Yoshio UTSUMI
Secretary-General

COUNCIL WORKING GROUP ON THE WORLD SUMMIT ON THE INFORMATION SOCIETY

4th Meeting, Madeira — 10-11 September 2003

Document: **WG-WSIS-4/8 Rev.1**
Date: **11 September 2003**
English only

Chairman of the Working Group on WSIS

BUILDING THE INFORMATION SOCIETY WITH ITU

1 Preamble

"In the information society, no human being should be left behind"
(YOSHIO UTSUMI, Secretary General of ITU[1])

1. Aware of the impact of information communication technologies (ICTs) in the transformation of society, the ITU plenipotentiary conference (Minneapolis 1998) initiated the process that has led to the organization of the World Summit on the Information Society by the United Nations. This decision has then been reinforced with resolutions, passed during the ITU Plenipotentiary Conference in 2002.

2. ITU recognizes the multidimensional nature of the issue and acknowledges the importance of the involvement of all stakeholders, including governments, international organisations, private sector and civil society, in the utilisation of ICTs for the achievement of the Millennium Development Goals.

3. ITU is unique among international organizations in that it was founded on the principle of cooperation between governments and the private sector. With a membership encompassing ICT policy-makers and regulators, network operators, equipment manufacturers, hardware and software developers, standards-making organizations and financing institutions, ITU's activities, policies and strategic direction are determined and shaped by the industry it serves.

4. The three Sectors of the Union - Radiocommunication (ITU-R), Telecommunication Standardization (ITU-T), and Telecommunication Development (ITU-D) - work today to build and shape tomorrow's networks and services. Their activities cover all aspects of information and communication technologies, from setting global standards that facilitate seamless interworking of equipment and systems on a global basis to adopting operational procedures for the vast and growing array of wireless services and designing programmes to improve ICT infrastructure in the developing world including Sector Reform and E-Strategies.

---

[1] See http://www.itu.int/wsis/newsroom/press_releases/itu/2003/intersessional_21jul.html. :

5.   In this report, ITU aims at describing its activities and highlighting how they contribute to the development of ICTs, also sharing its perception on how the international community can work together to build the information society.

6.   ITU will then report to the 2006 Plenipotentiary Conference on the progresses achieved thanks to this process

7.   Those WSIS Issues considered as priority areas for ITU include:

- Access and connectivity;
- International standardization;
- Radio frequency management;
- Building confidence, trust and security;
- Establishing stable regulatory frameworks (good governance),
- Human capacity building.

8. Areas in which ITU has expertise and competence include:

- Stewardship of scarce resources that are critical to the information society, including spectrum and orbital resources and numbering, through an open and consensus-based process, which is open to all relevant stakeholders;
- Promoting the concept of universality of network services (one of the historical roles of ITU);
- Internet domain name management (in follow-up of PP-02 Res. 102);
- Performance monitoring and collection and dissemination of statistics, which will be particularly important in the implementation phase of the draft action plan.

9.   Although ITU has almost 140 years of history, it continues to innovate and to develop new areas of expertise, notably in the elaboration and diffusion ICT applications for Development, including e-Services; e-Health; e-Education etc.

10.   A full "stock-taking" of ITU activities relevant to the information society has been prepared under the supervision of the ITU Council Working Group on WSIS (WG-WSIS). It will continue to be updated and is available on the ITU website at www.itu.int/council/wsis.

2   ITU contribution to WSIS

2.1   The nature the Digital Divide

11.   The ITU World Telecommunications Development Conference Report 2002 defines the Digital Divide as follows:

> *"The digital divide is no longer defined in terms of lack of access to telephone services, but rather in terms of lack of access to information and communication technologies (ICT). There appears to be a converging viewpoint that the digital divide is not just about access to technology, nor necessarily of high cost, but has a socio-economic component. There are many dimensions to the digital divide. The digital divide exists between nations and within nations. It exists between rich and poor, young and old, urban and rural dwellers. There is a financial divide, a knowledge divide and a divide of confidence. The divide is also reflected in the concentration of information resources in a small group of developed countries - the imbalance of information technology assets among nations."*

12.   It becomes clear that bridging the digital divide requires the combinations and organisation of different actions that are components of global, regional or national strategies. In this context, Governments should work to establish comprehensive, forward-looking and sustainable e-strategies adapted to the specific requirements of each community and country.

2.2   Scope and stages

13.   Even though ITU's mandate doesn't directly cover socio-economic activities like health, education or the natural environment, it is very much concerned with the application of ICTs in these areas. ITU is involved with its members in the implementation of projects and in creating a favorable policy, regulatory and legislative environment aimed at harnessing the potential of ICTs to contribute towards facilitating entry into the information society and reducing the socio-economic divide. In so doing, it has to liaise with other entities competent in these domains, through partnerships.

14.   At least three directions are important for ITU to consider when it is involved in such initiatives (following the lines of action identified in PP Decision 8):
   a. <u>Providing access to ICTs for all</u>. This covers both individual and community access, to ICT networks and services, including both traditional media (such as fixed-line telecommunications and broadcast networks) and new media (such as cellular mobile and the Internet).
   b. <u>ICTs as a tool for economic and social development - and meeting the Millennium Development Goals</u>. ICTs can provide a way of providing access to basic services, such as health, education, clean water etc, more efficiently. ICTs can also help in creating opportunities for employment and entrepreneurship and for alleviating poverty. Thus ICTs can help in reaching the MDGs.
   c. <u>Confidence and security in the use of ICTs</u>. Private and public partners may hesitate to undertake actions if the local framework represents a risk factor they are not sure they can overcome. The full potential of ICTs can only be unleashed if users and service providers have the necessary trust and confidence. Building a secure environment is therefore an important element for the development of ICTs.

15.   These points are inter-dependent, and ITU's contribution would potentially cover all three dimensions because Member States are at different levels regarding the factors listed above. The need for long-term impact demands that any action be attached to an initiative with clear objectives, preferably within global, regional or national strategies.

2.3   Complementarities within ITU

16.   Synergies developed so far within ITU are making good use of the unique skills developed by the three different sectors, supported by the Secretary General's Office. For ITU to maintain its leading role, initiatives at the global level should involve each of these entities.

2.4   Cooperation with other entities

17.   The success of the Summit is based on multi-stakeholder partnerships,[2] and in this sense ITU has made it clear that it is ready to consider participation in any significant initiative taken by other partners. But it also invites other relevant organizations to join in its work, through its membership network, notably in implementing the Istanbul Action Plan

---

[2] See Annex I

3 Activities of ITU

18.   ITU has been active in the information society arena for decades and continues to produce valuable information and support to its membership through its sectors. Shown below are a brief summary of some of the ITU activities relevant to the Information Society.

3.1 Policy and regulatory environment

19.   An enabling environment is seen as one of the key elements in the draft Declaration of Principles. The overall objective of the Istanbul Action Plan Programme 1 on Regulatory Reform is to provide practical solutions to enable effective regulation by ITU Member States and assist them in engaging in reform to meet their national telecommunication/ICT development, access and use goals. Creating a stable, fair and transparent legal, regulatory and policy environment capable of promoting technological innovation and competition is key. There are many actions both already underway and planned to fulfil this objective. These include:

- Organisation of the annual Global Symposium for Regulators as well as regional meetings workshops;
- Development of model legislation (e.g., ITU/CTO universal service project);
- Conducting case studies, including those identifying best practices for effective regulators;
- Costing and pricing mechanisms, developed by ITU within the framework of the Istanbul Action Plan Programme 4. Also, a work programme to assist countries in the application of this practical tool is being executed worldwide by a series of training workshops for Arab States, Africa and Latin America.
- Reform of the accounting revenue division procedures in the light of the change brought about by the introduction of competition and the advent of new technologies in the telecommunication sector, and more generally, the changes in the world monetary systems.
- The work of the Regulatory Reform Unit, which includes the annual regulatory survey, the regulatory database, website of legislation and the preparation of reports (such as the annual *Trends in Telecom Reform*);
- A proposed joint project with the World Bank on settlement of national disputes with an emphasis on consensus building and alternative dispute resolution;
- The Global Regulators Exchange (G-REX), a password protected website for national regulatory authorities and policy makers, which facilitate an exchange of best regulatory practices through its hotline and online conferences;
- The New Initiatives programme of workshops on topics such as promoting broadband, competition policy and creating trust in critical network infrastructures.
- World Telecommunication Policy Forums, such as the 2001 Forum on IP Telephony, and the subsequent follow-up in the Sectors;
- Many other activities aimed at regulators and policy-makers in the Sectors and in the TELECOM Forum.

20.   **Standardization**: ITU is working closely with other organizations on the implementation of initiatives that assist in bridging the standardization gap between developing and developed countries (Res. 123, PP-02). ITU recognised that developing countries could benefit from improved capabilities in the development of standards, and should be better involved in standard-making processes.

21.   **Legislative Environment**: In creating a conducive environment for the development of ICTs, developing countries in Latin America (ASETA Member States), Africa (Mauritania, Cape Verde and Burkina Faso) and Asia (Mongolia) have benefited from ITU assistance in the development of model laws for ICTs (e.g., e-applications) including the for prevention of cyber-crime, security and data privacy. To address global issues in relation to e-security, ITU has

initiated a multilateral and self-regulatory framework called World e-Trust Memorandum of Understanding.

22.   **Internet Policy and Domain Name Management**: At the national and regional levels, ITU is providing assistance to developing countries in addressing Internet policy issues aimed at facilitating regional cooperation and the development of regional networks. A full account of this activity is provided annually to Council, but some recent and planned activities include:

- In March 2003, an workshop was held on management of ccTLD (country code, top-level domains). A further workshop was held in September 2003 on the management of the ".int" gTLD (generic top-level domain), which is reserved for organizations of an international character.
- In July 2003, an ITU Internet Symposium was held in Kigali, Rwanda, where several African countries adopted the Kigali Declaration aimed at addressing some policy aspect related to the management of Internet Protocol Addresses and country code Top Level Domain Names.
- On 25-26 August 2003, a workshop on Internationalised Domain Names and ENUM was held jointly by APT and ITU.
- Following a request from the 2003 Council, a handbook on best practice on Internet policy is being developed, jointly.

23.   **Security**: One key concern in the development and use of digital technologies is that unauthorized outsiders could monitor or even take over private conversations.
One of the most important security standards used today is X.509, an ITU Recommendation for electronic authentication over public networks. X.509 is the definitive reference for designing secure applications for the Public Key Infrastructure (PKI), and is widely used for securing the connection between a user's Web browser and the servers providing information content or e-commerce services.
The ITU has led many open discussions on providing security guidelines to those developing and offering new services, including in the area of identifying threats and vulnerabilities. Over seventy ITU Recommendations focusing on security have been published, and the work includes studies into, for example, security from network attacks, theft or denial of service, theft of identity, security for emergency telecommunication. A Workshop on Security, held in Seoul, Korea, in May 2002, succeeded initiating a better dialogue with other standards development organizations and an agreement was made to monitor security work carried out within the global communications industry, consider best practices and adopt effective solutions.

3.2   ICT Infrastructure Developments

24.   The costs associated with the development of the information infrastructure and services are often outside the reach of many economically under-developed regions. This is particularly the case in rural and remote areas that have lower subscriber density or geographic challenges such as mountainous terrain, large bodies of water, or jungles. For this reason, ITU has been promoting the use of most suitable technologies, including wireless, as a way to timely and effectively address these difficulties.

3.2.1   IMT-2000/3G mobile

25.   As a strategic priority of ITU, IMT-2000 provides a framework for worldwide wireless access making use of terrestrial and/or satellite components based on globally harmonized frequency spectrum associated with radio and network core specifications defined by a set of interdependent ITU Recommendations.

26.   Development of global standards was concluded in ITU in 2000 enabling IMT-2000 systems roll-out to start worldwide. Work is being pursued in ITU to improve the radio and network system global specifications and to develop frequency arrangements to cope with medium and long-term bandwidth requirements. Intensive work is being carried out in the three Sectors on the preparation of guidelines for the migration and evolution aspects to move from current 2nd generation systems towards IMT-2000 (see http://www.itu.int/imt).

27.   It is known, however, that spectrum harmonization and standardization activities alone are no longer sufficient to ensure global wireless services. There is a further need to coordinate other matters such as national and regional regulations, including equipment approval best practices and mechanisms. ITU has been active in assisting national authorities and industry groups in discussions relating to global circulation of terminals, including the establishment of internationally accepted emission limits, terminal equipment identification mechanisms, etc.

28.   In the spirit of Resolution 43 (Istanbul, 2002) ITU is:
- Providing advice and direct assistance to countries in implementing the IMT-2000 systems in accordance with the ITU Radio Regulations and the relevant ITU Recommendations.
- Organising seminars and workshops and producing training material and Handbooks on strategic planning for the introduction of IMT-2000.
- Preparing a guideline for smooth migration (MTG), including system interoperability among third-generation technologies, and undertaking studies on economics of migration to IMT-2000, with particular reference to its impact on developing countries.

3.2.2   Next-Generation Networks (NGN)

29.   ITU has taken a leadership position in the movement to develop Next-Generation networks (NGN), which are quickly emerging as an essential initiative towards defining how interpersonal network communications will be shaped win the 21st century. NGNs will have the ability to deliver Multimedia communications and content to a global constituency, using the technical Recommendations of the ITU as a basis for the convergence of existing and new networks.

In July 2003, ITU held a Workshop on "Next Generation Networks: What, When and How?". This conference addressed both the service requirements of users in a global NGN, and the technical aspects required to develop a common understanding of the trends and requirements needed to combine fixed and mobile networks into a cohesive broadband services platform. A goal of the NGN is to make available information, content, services and connectivity on a global scale, while allowing for many different methods of user access to NGN services.

ITU Study Groups are deeply involved in building the technology framework required to be able to implement NGN services, from secure Multimedia communications standards, to access technologies extending from fixed copper networks and Digital Subscriber Lines (DSL) through 3G mobile technologies, broadband cable networks, and high speed fibre-optical connections.

3.2.3   Digital Broadcasting

30.   Besides the telecommunication network as such, the main means of delivery for mass communications are the omnipresent TV, sound and data broadcasting. The broadcasting services have greater carrying capacity and higher penetration compared to other options, including the telecommunication services already existing and being developed.

31.   The broad multifunction interactive digital broadcasting services along with the extensive development of the means of telecommunications may play an important role in addressing the information access problem. That's why it is necessary to search for ways of how to speed up the introduction of the digital broadcasting services not only as a kind of radiocommunications, but also as a strong means of infocommunications.

32.   ITU has been actively pursuing studies on digital TV, including HDTV, sound, data and multimedia, including the complex issue of the transition from the widely spread analogue systems to digital broadcasting. As a result of intensive ITU-R efforts, the world is finally in possession of a package of international Recommendations and standards for terrestrial and satellite digital broadcasting systems and all kinds of interactive systems, making it possible to design a strategy for the transition period in modern conditions.

33.   ITU plans to implement in the near future a new working structure that aim at preparing proposals on bridging of the digital divide and thus to speeding up and reducing the cost of the introduction of digital broadcasting; to widen its potential and increase its effectiveness, calling for a new global approach to the introduction of the digital TV, sound and data. The most important aspect of the new approach is a further substantial widening of informative and service functions of detachable devices for analogue TV sets, which were initially designated to receive digital TV broadcasting only. ITU has managed to achieve substantial progress in that area.

34.   The existing digital TV broadcasting services transmit Internet data by means of special Internet inserters and devices for cyclical presentation of websites ("sites carousel"). But the web pages transmitted in this way can be presented with a proper quality only by a PC monitor. At the same time, for many countries broadband access to the Internet by means of TV broadcasting without making use of a PC is of great importance and is a part of their efforts in bridging the digital divide. This calls for the reformatting and rescaling of the web pages transmitted in the digital TV broadcasting data stream in the user's set top box. The ways to ensure better presentation of a web page on an ordinary TV set screen are currently being study in ITU.

3.2.4   Other Broadband Access Technologies

35.   Broadband access is nowadays delivered using wire and wireless technologies, such as xDLS, cable modems, W-LAN, etc., suitable to the different needs of users, and to the diverse geographical and market conditions.

36.   ITU has been studying the various aspects relating to wireless access system (see http://www.itu.int/ITU-R/study-groups/was/index.html), including frequency spectrum issues and standardization. Despite some problems faced in the early implementation phase of Fixed Wireless Access (FWA), a big market potential still exists for these systems to provide wireless Internet access, particularly broadband access as viable alternative to DSL and cable-based systems.

37.   **Wireless Local Area Network (WLAN)** systems are seeing an extraordinary expansion worldwide. The recent decisions by WRC-03 in providing additional global harmonized spectrum for WLAN will greatly facilitate the consolidation of this technology as an effective means to provide short-range high-capacity wireless access to the Internet. Studies are being pursued in ITU based on the established long-term vision of convergence between IMT-2000 and WLAN-based systems.

38.   As recognized in ITU, satellite telecommunication technology has the potential to accelerate the availability of high-speed Internet services in developing countries, land-locked and island countries, and economies in transition. In this regard, a new topic has been recently included in the current ITU study period to consider the technical and operational characteristics that could facilitate the mass production of simple (i.e. very small aperture terminal (VSAT)) terminal equipment at affordable prices for the worldwide provision of high speed satellite-based Internet services.

3.3 Human Capacity Building

39.   Within the framework of Programme 5 of the Istanbul Action Plan, ITU assists developing countries to strengthen their human, institutional and organizational capacity through human resource management and development activities, so as to facilitate a smooth transition to the current telecommunication and ICT environment. The program particularly addresses competency building of policy-makers and regulators at the government level, as well as senior executives and managers at the operators' and ICT-service providers' level, by using an appropriate mix of information technologies and traditional training methodologies. The main activities carried out by ITU under this programme may be grouped as follows:

3.3.1 Regular Training and HRD activities aimed at promoting and supporting innovative Human Capacity Building processes in developing countries worldwide:

40.   *Transfer of Knowledge:* Aimed at providing high-level training in key areas for telecommunication and ICT development, with special emphasis on policies, regulation, corporate management, and new technologies and services.

41.   *Sharing of experiences and know-how:* Aimed at facilitating the exchange of experiences and know-how through regional and global meetings, electronic discussions, exchange of experts and joint activities with ITU sectors as well as with regional organizations and other UN agencies.

42.   *Assistance to strengthen the Human Resources and Training functions:* Aimed at assisting the Human Resources function to become a true agent of change in the organization; and strengthen national and regional training providers to cope with the use of modern training techniques.

43.   *Dissemination of information:* Aimed at disseminating pertinent HRM/D information for managers and decision makers, including training materials, case studies, best practices, as well as recommended training opportunities.

3.3.2 Human Capacity Building Special Initiatives:

44.   These activities are aimed at promoting innovative projects to enhance capacity building mechanisms and networks in order to provide a wider range of advance training products together with the required resource persons. Over the past years two major global projects have been implemented with the support of a growing number of partners:

45.   *The Centres of Excellence Initiative*: which has already allowed to up-grade the skills of more than 2'500 managers and decision-makers over the last four years on priority issues ranging from telecommunications/ICT policy and regulation, to new technologies, including business and human resources management and development. The training resources developed through the project include a growing number of models and case studies aimed at supporting the participants in building their own scenario and develop solutions tailored to their specific needs and environment. The resulting network of training providers is now ready to address new challenges such as the ones that could result from the forthcoming WSIS. A number of new programmes are already under discussion with key players currently involved in the preparation of the WSIS.

46.   In order to continue to support the needs of developing countries and in coordination with the Centres of Excellence (CoE), two specialized training courses for trainers have been undertaken, to create two regional teams consisting of members taken from policy-makers, regulators and operators, based on the use of COSITU. This is a key factor in enabling developing countries to draft and evaluate the cost of their universal service obligations (USO) policies. With COSITU they are able to identify the best financing schemes taking into consideration their real situation, and thus be able to evaluate the amounts needed for national USO funds, calculate

asymmetric interconnection/settlement rates, and promote profitable licences in rural/remote areas, in particular for SME.

47.   *The Internet Training Centres Initiative*: ITU in partnership with Cisco is implementing this project aimed at establishing 50 Internet training centres in least developed and developing countries. These centres are responsible for multiplying ICT knowledge as widely as possible in their communities. ITU/Cisco immediate contribution is to set up the infrastructure of the centers and ensure the training of trainers so critical to this process. Pilot projects with a gender focus have proven to be a great success within this project.

3.3.3 The ITU e-Learning Centre:

48.   The ITU e-Learning Centre delivers more than 50 on-line courses per year in English, French and Spanish, not only to transfer technical and managerial know how, but also to disseminate the e-learning culture and promote the use of ICTs in training and education. The e-learning centre provides a platform for learning, working and exchanging information on-line as well as to interconnect similar platforms operating in ITU Centres of Excellence, national or regional training providers and academia.

49.   *In conclusion*, within the framework of the above-mentioned Human Capacity Building programme, ITU organizes regular training courses in ICT related subjects addressed to policy makers, regulators, operators and service providers. Approximately 200 actions are implemented per year including: face-to-face workshops and seminars; e-learning and coaching; case studies, benchmarks, best practices; regional and global meetings of specialists on ICTs. Subjects range from policy-making and regulation, to new technologies, including business and human resources management and development. A variety of agreements with ITU sector members and academia allow ITU to provide formal education programmes up to the Masters level, which use ICTs and e-learning tools for training.

3.4 Other e-Readiness factors

50.   **Financing and economic strategies:** The evaluation of the opportunities opened up by telecommunication development and ICT Services, its financing aspects and the participation of different players is becoming very important. Financing will continue to be a challenge for the ICT sector globally, but the challenge will be even more acute for the developing countries for some time to come. Many studies have been conducted with a view to classifying countries with their market potential, associated risks, need for public support, partnerships required and the kind of commitments they can afford. These studies will be combined in a "ICT Development Strategy Report" to be published during WSIS- Geneva, and could give a start to a longstanding international cooperation with a view to assisting developing countries build national and regional ICT development strategies.

51.   **Statistics and information**: In order to overcome the Digital Divide, it is crucial to identify existing gaps in access to ICTs. ITU's information sharing activities consist of a number of activities related to tracking the global diffusion of ICTs, popularly referred to as "Telecom Indicators". ITU is recognized all over the world as the leading provider of timely and comprehensive ICT statistics. Reports include the Yearbook of Statistics, a number of regional reports, as well as the *World Telecommunication Development Report* (WTDR). The WTDR , published since 1994, analyses trends in national, regional and international ICT development, and helps to understand the Digital Divide. The 2003/04 edition, due to be published ahead of the Geneva Phase of WSIS, will focus on measurement of the information society. It will include the launch of a "composite ICT Development (Digital Opportunity) index.

Other activities conducted in this field by ITU:

- Since 2000, ITU has undertaken more than 40 national telecommunication market reports as part of the Case Studies project and New Initiatives programme (see www.itu.int/casestudies). The project arose out of the growing top-level interest in the 'Digital Divide' and the need to assess developing countries' ability to participate in the new global information economy and society. These reports are important because data and information are the basis for policies and decisions.

- Since 1997, ITU has published a series of *Internet Reports*, which track the development of this critical sector. The second of these reports, published in 1999, looked at *Internet for Development*, while the fifth report, due for publication ahead of TELECOM World, in October 2003, looks at the *Birth of Broadband*.

- Since 2002, ITU has been compiling and publishing ICT success stories, which highlight the successful application of ICTs in different sectors of the economy and society, and in narrowing gender disparities. These success stories, are available at: http://www.itu.int/osg/spu/wsis-themes/ict_stories/index.html.
- These reports and others provide an overview of the telecommunication and Internet sector, show how ICT is being used in main sectors of the economy and society. They also provide a methodological framework for analysing the state of Internet developments and make recommendations. The aim is to understand the factors, which accelerate or retard the development of the Internet in different environments and, through comparative analysis, to advise policy makers and regulatory agencies on appropriate courses of action

3.5   Applications and services

52.   The benefits of the information society can only be realized if ICTs can directly deliver the promises they hold to the world's population through applications and services to all sectors of the population. ITU is actively involved in the implementation of projects in the following domains:

53.   **E-government:** ITU e-government activities include the implementation of projects, guidance in the elaboration of technology policies at the national and regional levels. Operational e-government projects have been implemented in Bulgaria and Cambodia. For 2003, projects in Cameroon, Rwanda and Georgia are scheduled to be completed. Several workshops and seminars have been organized to address national and regional policies and strategies for e-government. In addition, ITU-T held a workshop on this topic on 5-6 June 2003 (see: http://www.itu.int/ITU-T/worksem/e-government/index.html).

54.   **E-commerce:** For more than 5 years, ITU has been providing technical assistance in the implementation of e-commerce project for developing countries. As part of its Electronic Commerce for Developing Countries (EC-DC), operational e-commerce projects have been implemented in Africa, Asia, Latin America and Arab Region. Five regional seminars on e-commerce have been organized to address regional technology policy issues and strategies for e-commerce. ITU also provides direct assistance to developing countries in e-commerce technology policies and strategies.

55.   **E-health:** A significant number of e-health activities have been undertaken such as implementation of telemedicine projects in several countries (e.g., Mozambique, Malta, Nicaragua, Georgia, Myanmar, Senegal, Bhutan, Uganda and, Ukraine). There are ongoing projects for several countries such as Cameroon, Ethiopia, Kenya, Haiti, Rwanda, Venezuela, Sudan, Mauritania, Bulgaria, Zimbabwe, and Guinea. Requests for assistance from Lebanon, Tajikistan, Uzbekistan and Latvia are in consideration for future partnership action by ITU.

- Based on a request from the Kenyan Administration, ITU has mobilized international expertise to conceptualise and develop an innovative large-scale Telemedicine project proposal to "Fight Tuberculosis, Malaria and HIV", submitted for funding to the Global Fund. A demonstration is foreseen at WSIS, which is expected to lead to similar projects elsewhere.

- Telemedicine was the subject of an ITU workshop on "Standardization in E-Health", held on 23-25 May 2003 (see: http://www.itu.int/ITU-T/worksem/e-health/index.html) and is also the subject of a special session of the Forum at ITU TELECOM World 2003 on 16 October 2003.

56. **E-Security:** ITU provides assistance to developing countries in the implementation of projects to build security in public networks. Between 2001 and 2003, ten Operational projects on e-security have been implemented in Africa, Asia, Latin America and the Arab Region. A training workshop for 128 countries was organized in Geneva with the participation of more than 50 industry experts on security and trust. ITU also provides training on information technology security and provides guidance to countries and regions in the elaboration of national and regional policies for security on the Internet. Workshops and seminars addressing e-security have been organized in various ITU Regions and countries.

57. **Interactive Distance Training**: ITU has developed and deployed with partners two projects in Interactive Distance Training of Primary Teachers in India and Morocco (of which the latter is to be presented at one of the WSIS "side events"), mobilizing operators, users, industrial groups and standard-setting bodies to ensure interoperability of application systems.

3.6 Conclusions

58. ITU stands ready to play an active role in the implementation of the WSIS action plan, in the fields in which it has competence, both through implementing those activities seen as being core concerns of ITU and its membership, and by helping to establish a coordination group for implementation of the WSIS action plan, with other stakeholders.

ANNEX I

PROMOTION OF INITIATIVES

A1. Current ITU commitments towards the WSIS

ITU is actively involved in developing an "ICT Development Strategy Report" taking into consideration the following initiatives:

- A study was undertaken in 2001 and 2002, which evaluated the opportunities opened up by telecommunication development and the financing required in low teledensity countries. Some 34 selected developing countries were considered. This study aimed not only to identify the obstacles, but also to propose solutions for mitigating or completely removing such obstacles, in order to assist both developing countries and potential investors by focusing on business opportunities in developing countries.

- From the initial 34 countries, five low teledensity countries were selected and studied—Bolivia, Cameroon, Viet Nam, Albania and Chad—with the objective of identifying and evaluating real needs, proposing projects or initiatives, and identifying conditions for creating partnerships with interested organizations. The participation of different players, such as, the private sector equity investors, financial institutions, national and multinational organizations, regulators, operators and service providers is being encouraged according to countries' expectations and the establishment of mutual commitments.

A2. Actions suggested

a)   Extended stock-taking (worldwide ICT initiative survey)
The stock-taking undertaken in application of Council 03 Resolution 1207 was limited to ITU activities. It is suggested that the exercise be extended to all ICT major initiatives undertaken by international, regional and national organizations in view of creating a solid database of projects, which would facilitate the identification of grounds for cooperation among stakeholders.

b)   Finalize Global ICT Development Strategies Report
The report is aimed at identifying ICT market opportunities in particular in developing countries, isolating and classifying risk factors and identifying actions to be undertaken jointly by intergovernmental organizations and governments in order to reduce them. It will be updated regularly and used as a tool to help include ICT in national development strategies and also mainstream private sector participation, in particular SME, taking into consideration women and youth organizations.

c)   Launch the composite ICT Development (digital opportunity) index
The Index, which was discussed at the meeting of experts held at the World Telecommunication Indicators Meeting, in January 2003 (see: http://www.itu.int/ITU-D/ict/WICT02/index.html) will be launched as part of the work on the 2003 *World Telecommunication Development Report: Measuring the information society*, and will subsequently be improved and updated. It will be discussed at the WSIS side event on "Monitoring the Information Society: Data, Measurement and Methods", due to be held on 8-9 December (see: http://www.unece.org/stats/documents/2003.12.wsis.htm).

d)   Visions of the Information Society
During PrepCom 2, ITU presented a series of seminars by eminent speakers under the broad theme of "Visions of the Information Society" (see www.itu.int/visions). These will be published as a publication and on CD-ROM ahead of the Geneva phase of WSIS.

e)   Monitoring the impact of ICTs on the Millennium Development Goals (Indicators)
ITU was appointed the lead agency responsible for defining and providing ICT indicators for the UN Millennium Development Goals (MDG) project. The MDG contains specific goals and concrete targets for areas like health and education as part of the overarching drive to reduce world poverty by 2015. As the agency in charge of Target 18 ("In cooperation with the private sector, make available the benefits of new technologies, especially information and communications") ITU provides three specific indicators (measuring

total telephone, Internet and PC penetration), on an on-going basis, for measuring access to ICTs. This subject will be one of the chapters of the 2003 WTDR, to be launched during the Geneva Phase of WSIS.

f)   WSIS side events

In addition to its primary objectives to play the leading managerial role in the organisation of the WSIS, ITU is committed to participating actively in WSIS side-events that will show-case ITU activities and programmes that cope with the main themes of the summit on the information society. These include:

- An ITU stand that presents on going projects and initiatives that ITU has implemented in conjunction with its Member States and Sector Members and that illustrate the themes of the Summit and experiences and lessons learned. The ITU stand will be displayed in hall 2 at Palexpo from Dec 9 to 12.

- About 30 different projects will be presented to illustrate ITU members experiences in the field of:
    - E-applications: (e-government, e-health,e-learning,...)
    - Infrastructures and services (IP wireless, rural communication, disaster recovery communications, internet security, etc)
    - Capacity building (Centres Of Excellence Initiative, Internet Training Center Initiative, etc)
    - Gender and youth initiatives.

  Member States as well as Sector Members involved in the design and implementation of those projects will be closely associated with ITU staff to showcase those themes that fit with the objectives of the summit.
- A high-level panel discussion/roundtables on the overall themes "From telegraph to telephone to ubiquitous communications, the challenges", that will be organized at Palexpo just ahead of the Summit.
- A statistical workshop on " monitoring the information society: data, measurement & methods, organized in cooperation with UNESCO, OECD, UNDP, UNCTAD...) at Palais Des Nations, the 8th and 9th of December.
- A summit of chief technical officers (CTOs) at ITU Headquarters on December 8 (all day) that will address strategic technical challenges of the information society (see under c above)
- A roundtable on standardization issues, to be held on 9 December at ITU.
- The 4th annual Global Symposium for Regulators, to be held on 8-9 December at ITU (see: http://www.itu.int/ITU-D/treg/Events/Seminars/2003/GSR/index.html).
- A workshop on ubiquitous communications, to be held jointly by ITU and MPHPT Japan, to follow-up on the "Visions of the Information Society" project described in d) above.

g)   "Development of Network Infrastructure initiatives"

Infrastructure is one of the most important e-readiness factors. ITU has the mandate in this area. Both public and private sector are to be involved, bearing in mind that the majority of developing country markets are already liberalized, or are becoming so.

The initial mission of a project on regiona/national short-term infrastructure initiatives could be to:

- Define the scope of public intervention in ICT basics infrastructure depending on country categories;
- Identify minimum commitments of countries that can guarantee real ownership (inclusion in national development Strategies);
- Create a model cooperation framework;
- Support definition of national objectives;
- Identify appropriate regional and global actions needed;
- Formalize the cooperation framework;
- Implement appropriate actions.

h)   "Building human capacity in ICTs"

ITU has also a mandate in this area and can offer its expertise:

- In providing ICT training courses;
- In promoting community-based projects that provider wider access to ICT training.

i)   "Promoting ICT at work and in social life"

"**ICT for Human development**" is a theme that could mobilize civil society in advocating the use of ICTs to promote development in other sectors like education, health, security, environment, agriculture, etc. The aim of this initiative would be to update decision makers so as to include use of ICT as one of the possible service delivery mechanisms:

- ICT-based development models should therefore be promoted and;
- Programmes to sensitize policy-makers and civil society to the value of ICTs in development should be organised.

j)   "Promoting business and Government use of ICT to interact with the public"

"**Open Administration**" could be an initiative aiming at increased use of ICT by State administration and major business organizations providing services to the public in general in there relations with that public. The ITU experience gained on network security infrastructure for e-government should be used in combination with lessons learned for other initiatives in order to:

- Build delivery models;
- Include e-administration in country strategies;
- Gain government "ownership" of the project;
- Provide official development assistance.

k)   Universal Service initiatives

ITU recognizes the need to promote the best possible level of connectivity at an affordable and reasonable cost for all. Actions to be taken include:

- devising, for all interested countries, universal access policies within two years, and
- incorporating principles of universal access in national development strategies.

m)   Promote affordability

Universal services funding mechanism should support different ways of achieving affordability, including promotion of low cost technologies availability and asymmetric settlements between dominant and local operators.

A3. ITU short term events

A set of events should been planned to take place in the period of 2004-2005, in time for the preparation of WTDC-06. Thus, one option to consider would be a possible linkage between the regional preparatory meetings and some of these events. Some initiatives to be considered during this period could include:

- "Information Society Now" – Global short term initiatives (ITU-D) – March 2004
- "Partnerships for End-users" a Global and Regional organizations Forum (ITU-D/T/R) – Model partnership for regional initiatives – April 2004 (see annex 1)
- "Information Society model national strategy" – May 2004
- "Serve the least served: connectivity now" – June 2004
- "Monitoring impact of ICTs on the MDG"
- "Consolidate business and social models of ICTs"

A4. Follow-up of the Istanbul Declaration

The main statements of the Istanbul Declaration were practically reflected in the IsAP, including Resolutions and Recommendations. Concrete actions undertaken so far by the BDT are recorded in the ITU stock taking exercise (online at www.itu.int/council/wsis).