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**Promoting the building of a people-centred, development-oriented and  
inclusive information society: Progress made in the implementation of and  
follow-up to the World Summit on the Information Society outcomes**

Report of the Secretary-General<sup>1</sup>

The Economic and Social Council, in its resolution 2006/46, requested the Secretary-General to inform the Commission on Science and Technology for Development on the implementation of the outcomes of the World Summit on the Information Society (WSIS) as a part of his annual reporting to the Commission.

The present report seeks to review and assess progress at the international and regional levels in the implementation of the outcome of WSIS. It summarizes information provided by entities in the United Nations system and elsewhere on their efforts in 2006 to implement the outcome of WSIS, with a view to sharing best and effective practices and lessons learned. It also seeks to identify obstacles and constraints, and makes a number of recommendations for action in the light of experience gained to date.

<sup>1</sup> This document was submitted on the above-mentioned date as a result of deferment of consideration by ECOSOC of the report of the CSTD on its 9th session (E/2006/31).

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## I. Introduction

1. The World Summit on the Information Society (WSIS), organized by the International Telecommunication Union (ITU) on behalf of the United Nations system, took place in two phases, in 2003 in Geneva and in 2005 in Tunis. In the *Geneva Declaration of Principles*, the first Phase of the World Summit on the Information Society (WSIS)<sup>2</sup> adopted a common vision and commitment to building a people-centred, inclusive and development-oriented Information Society,

“where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights.”<sup>3</sup>

2. The Geneva Phase of the Summit also adopted a *Plan of Action*, which seeks to translate this vision into concrete objectives, goals and targets, to be met by 2015, along a series of eleven Action Lines and main themes. The second Phase of the Summit at Tunis endorsed the outcomes of the first Phase and adopted a *Commitment* and an *Agenda for the Information Society*, which addressed, inter alia, the themes of financial mechanisms, Internet governance and WSIS implementation. In recognition of the multi-stakeholder efforts needed at all levels to achieve the objectives of the Summit, the *Tunis Agenda for the Information Society* established clear mechanisms for implementation and follow-up at the national, regional and international levels.

3. The Economic and Social Council (ECOSOC) was requested by the Tunis Agenda for the Information Society to oversee the UN system-wide follow-up of the outcomes of the Geneva and Tunis Phases of the Summit. To this end, ECOSOC was requested to review the mandate of the Commission on Science and Technology for Development (CSTD), including its strengthening, taking into account the multi-stakeholder approach.<sup>4</sup>

4. At its substantive session in July 2006, ECOSOC adopted a resolution<sup>5</sup> entitled "Follow-up to the World Summit on the Information Society and Review of the Commission on Science and Technology for Development", by which it decided that the CSTD should effectively assist the Council as the focal point in the system-wide follow-up to the outcomes of WSIS and advise the Council thereon, including through recommendations to the Council aimed at furthering the implementation of the Summit outcomes. To this end, the Commission should:

“• Review and assess progress at the international and regional levels in the implementation of Action Lines, recommendations and commitments contained in the outcome documents of WSIS;

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<sup>2</sup> The World Summit on the Information Society (WSIS) took place in two phases: in Geneva during December 2003 and in Tunis during November 2005. The outcome documents are available at: <http://www.itu.int/wsisis/>.

<sup>3</sup> A1, "Our Common Vision of the Information Society", *Geneva Declaration of Principles*.

<sup>4</sup> Paragraph 105, *Tunis Agenda for the Information Society*.

<sup>5</sup> E/2006/46.

- Share best and effective practices and lessons learned, and identify obstacles and constraints encountered, actions and initiatives to overcome them and important measures for further implementation of WSIS outcomes;
- Promote dialogue and foster partnerships in coordination with other appropriate UN funds, programmes and specialized agencies to contribute to the attainment of the WSIS objectives and implementation of its outcomes, to use ICT for development and the achievement of internationally-agreed development goals, with the participation of governments, private sector, civil society and the UN and other international organizations according to their different roles and responsibilities.”

5. Against this background, and in anticipation of the ECOSOC resolution, the Commission decided at its ninth session to select “Promoting the building of a people-centred, development-oriented and inclusive information society with a view to enhancing digital opportunities for all people” as the substantive theme for its 2006-2008 work programme. In order to contribute to a better understanding of the issues and to assist the CSTD in its deliberations at its tenth session, the UNCTAD Secretariat convened a CSTD panel<sup>6</sup> meeting, in collaboration with UNESCO in Paris, from 6 to 8 November 2006.

6. This report aims to provide an overview of progress made in the implementation of WSIS outcomes at the regional and international levels, highlighting examples of good and effective practices, with a view to sharing best and effective practices and lessons learned.<sup>7</sup> In order to prepare the present report, the CSTD Secretariat sought information on implementation from relevant United Nations system entities tasked with WSIS implementation. By mid-February 2007, the Secretariat had received responses from 16 entities.<sup>8</sup> The present report also draws on the findings of the CSTD Panel, on national reports contributed by members of the CSTD, and on other relevant literature. Given that the actual period of implementation has been about 14 months, most of the activities related to WSIS follow-up are still in the early stages of implementation. The report highlights as much as possible implementation activities that involve multi-stakeholders at all levels. Recommendations from the Panel meeting and studies from relevant expert bodies are set out in the report.

## **I.1. The WSIS commitment**

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<sup>6</sup> The report of the panel is available as a background paper in one official language only (E/CN.16/2007/CRP1).

<sup>7</sup> More exhaustive and detailed analyses are available in a number of flagship reports, which chart worldwide progress in various dimensions of the Information Society. A number of reports were launched in 2006 to monitor trends and policies. These include the ITU/UNCTAD “World Information Society Report”, the World Bank’s “World Information and Communications Technology for Development” and UNESCO’s “Towards Knowledge Societies”. UNCTAD’s “Information Economy 2006” also strongly emphasizes WSIS follow-up and implementation. A number of gateways, databases and observatories are also valuable sources for most up-to-date information on progress in various areas. DESA’s e-Government Readiness Database, ITU’s WSIS Stocktaking Database, Cybersecurity Gateway and ICT Success Stories portal, UNESCO’s Observatory Portal on the Information Society and WHO’s Global Observatory for e-Health are cases in point.

<sup>8</sup> DESA, ECA, ECE, ECLAC, ESCAP, FAO, ILO, ITU, UNCTAD, UNESCO, UN-HABITAT, World Bank, WHO, WMO, Internet Governance Forum and Digital Solidarity Fund.

7. In both phases of the World Summit on the Information Society, world leaders recognized that the benefits of the information technology revolution were unevenly distributed today between developed and developing countries and within societies. The Summit called for the digital divide to be turned into a digital opportunity for all, particularly for those who risk being left behind and further marginalized.

8. The *Geneva Declaration of Principles*<sup>9</sup> and the *Tunis Commitment*<sup>10</sup> invite all stakeholders to work together to improve access to information and communication infrastructure and technologies, as well as to information and knowledge; to build capacity; increase confidence and security in the use of ICTs; to create an enabling environment at all levels; to develop and widen ICT applications; to foster and respect cultural diversity; to recognize the role of the media; to address the ethical dimensions of the information society; and to encourage international and regional cooperation.

## **I. 2. Charting progress**

9. Access to ICTs is increasing in developing nations, particularly rapidly in the case of mobile telephony, and the distribution of ICT services is becoming more equitable. The gap in ICT penetration rates between developed and developing nations is narrowing for basic ICTs such as fixed-telephone lines, mobile phones and TV sets. At current rates of growth, it is likely that the WSIS goal of half the world's population having access to ICTs will be reached by 2008, at least for mobile phones. However, wide gaps are evident in newer technologies such as broadband or third generation (3G) mobile. As a result, the Internet is developing along two different paths: one for the broadband-rich and another for the narrowband-poor.

### **I. 2. A. Significant progress in ICT access and use**

10. Developing countries accounted for over 60 per cent of the world's telephone lines (fixed and mobile) in 2005, up from less than 20 per cent in 1980.<sup>11</sup> By the end of 2005, the worldwide number of mobile phone subscribers had reached 2.17 billion, over one-third of the world's population (ITU 2006). Growth has been particularly strong in Africa, where the number of subscribers increased from 15 million in 2000 to over 135 million in 2005. Over time, the gap in mobile phone penetration between developed and developing countries has diminished considerably.

11. Growth in Internet use has been equally impressive. The number of Internet users in the world increased exponentially during the last decade to exceed, by the end of 2005, one billion people. Global Internet use grew by 106 per cent between 2000 and 2005. Growth rates were even higher in those regions where Internet access remains low. For example, in Africa, where

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<sup>9</sup> World Summit on the Information Society, Document WSIS-03/GENEVA/DOC/4-E, and December 2003: <http://www.itu.int/wsis/docs/geneva/official/dop.html>.

<sup>10</sup> World Summit on the Information Society, Document WSIS-05/Tunis/Doc/7-E, November 2005: <http://www.itu.int/wsis/docs2/tunis/off/7.html>.

<sup>11</sup> World Bank (2006).

Internet penetration stood at only 3.2 per cent at the end of 2005, Internet use grew by more than 600 per cent during the same period.

12. One of the main drivers behind these significant gains is the reduction in telecom prices.<sup>12</sup> Also significant were schemes to make mobile telephony more affordable. For example, in 2004, almost 88 per cent of mobile subscribers in Africa used prepaid services that were tailored to low-income markets.<sup>13</sup>

### **I. 2.B. Digital divide remains wide between and within nations**

13. Although the gap in terms of mobile phone penetration has diminished over time between developed and developing countries, the penetration rate in developing economies continues to run well below that of developed countries. In some developed countries, the penetration rate is over 100 per cent, while in almost half of the developing countries, it is under 10 per cent. A significant gap still exists in terms of Internet penetration; where developed economies account for more than half of Internet users worldwide, while approximately one-third of developing economies have a penetration rate of less than 5 per cent. A gap also exists in terms of gender – a gender divide continues to exist in the majority of countries, both developed and developing. Data collected by the ITU and others indicate that women's rates of Internet access do not automatically rise in tandem with national rates of Internet penetration. This imbalance may not extend to cell phones – in Southern Africa the rate of women's use and ownership of cell phones is roughly equal with men's.<sup>14</sup>

14. There is also a massive gap in international Internet bandwidth between developed and developing regions of the world. Some 80 per cent of all international bandwidth was used by Europe and North America in 2005, while Africa accounted for only 0.3 per cent of international bandwidth, despite being home to 14 per cent of the world's population. This huge gap in international bandwidth impedes the equitable distribution of the Internet and is leaving many countries and regions behind in the global information economy. In many developing nations, the lack of domestic Internet content and applications means that the majority of online access is to websites abroad, resulting in the so-called Hotmail problem whereby e-mail messages from one user in Sierra Leone to another user are routed externally, using valuable international bandwidth. The scarcity of international bandwidth not only means that prices are high but also that the Internet experience is likely to be slow and restrictive. For many developing countries, this problem is aggravated by the fact that their access to the Internet backbone networks is often subject to arrangements whereby the cost of carrying Internet traffic between the developing countries and the global Internet is borne only by the users in developing countries.

15. Recent studies<sup>15</sup> also concluded that many of the applications envisioned for the information society are mainly possible through broadband access. The Information Economy

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<sup>12</sup> ITU/UNCTAD (2006).

<sup>13</sup> UNCTAD (2006b).

<sup>14</sup> Huyer et al. (2005); Vodaphone, 2005.

<sup>15</sup> See for example UNCTAD (2006b) and ITU/UNCTAD(2006).

Report 2006<sup>16</sup> showed that in developed economies, broadband subscribers increased by almost 15 per cent in the last half of 2005, reaching 158 million. Business broadband connectivity grew most significantly – in the European Union, for example, from 53 per cent of enterprises in 2004 to 63 per cent in 2005. However, less than 1 per cent of enterprises in 48 of 71 developing countries studied had broadband rather than dial-up Internet connections. High-speed Internet access can contribute to economic growth and is increasingly being recognized as a policy objective in both developing and developed countries.

16. Developing countries are taking steps to redress the shortage of international Internet bandwidth by connecting to undersea fibre optic networks whenever possible. For example, the Indian Ocean nation of Maldives recently completed two Internet backbone links to fibre networks in Sri Lanka and India. In West Africa, a number of nations along the Atlantic Ocean coastline connected to the undersea SAT-3/WASC cable in 2002, giving them their first experience of high-speed fibre optic connectivity.

## **II. Implementation and follow-up at the regional and international level**

17. The *Geneva Plan of Action* requested international and regional institutions to "develop by 2005, their own strategies for the use of ICTs for sustainable development...., and to publish, in their areas of competence, including on their website, reliable information submitted by relevant stakeholders on successful experiences of mainstreaming ICTs". In terms of follow-up and evaluation, it requested that international and regional organizations "assess and report regularly on universal accessibility of nations to ICTs, with the aim of creating equitable opportunities for the growth of ICT sectors of developing countries".

18. The *Tunis Agenda for the Information Society* states the following:

*"At the regional level:*

Upon request from governments, regional intergovernmental organizations in collaboration with other stakeholders should carry out WSIS implementation activities, exchanging information and best practices at the regional level, as well as facilitating policy debate on the use of ICT for development, with a focus on attaining the internationally agreed development goals and objectives, including the MDGs.

UN Regional Commissions, based on request of Member States and within approved budgetary resources, may organize regional WSIS follow-up activities in collaboration with regional and subregional organizations, with appropriate frequency, as well as assisting Member States with technical and relevant information for the development of regional strategies and the implementation of the outcomes of regional conferences.

We consider the multi-stakeholder approach and participation in regional WSIS implementation activities by the private sector, civil society, and the United Nations and other international organizations to be essential.

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<sup>16</sup> UNCTAD (2006b).

*At the international level, bearing in mind the importance of the enabling environment:*

Implementation and follow-up of the outcomes of the Geneva and Tunis phases of the Summit should take into account the main themes and Action Lines in the Summit documents.

Each UN agency should act according to its mandate and competencies, and pursuant to decisions of its respective governing bodies, and within existing approved resources.

Implementation and follow-up should include intergovernmental and multi-stakeholder components.”

## **II.1. Implementation and follow-up at the regional level**

19. Most United Nations Regional Commissions have adopted regional plans of action for WSIS implementation. These plans are designed as roadmaps towards the regional implementation of WSIS outcomes, as well as overall development goals, including those in the Millennium Declaration (MDGs). They set priorities, targets and timeframes based on the specific circumstances of each region. The development of these plans was largely coordinated by the Regional Commissions, through multi-stakeholder consultations. They generally have a phased approach to implementation towards 2015, with built-in follow-up mechanisms to ensure monitoring and assessment on a regular basis.

### **Africa**

20. The African Regional Action Plan on the Knowledge Economy (ARAPKE) was adopted in September 2005<sup>17</sup>. Review of implementation and follow-up is planned to take place every five years, under the aegis of the African Union Commission, the Economic Commission for Africa (ECA) and the African Development Bank (ADB). A steering committee has been set up to organize regional conferences every two years to assess implementation of the WSIS decisions and the ARAPKE, based on national, sectoral and subregional reports to be prepared by all the stakeholders. Multi-stakeholder committees have been set up at the national and subregional levels to monitor implementation. National committees are encouraged to meet once every year to review and assess progress, while subregional committees are encouraged to organize conferences on WSIS follow-up before the full regional conference to monitor and coordinate implementation.

21. Some of the obstacles for implementation identified include constraints on financial resources and lack of qualified human resources specialized in ICT<sup>18</sup>. At the First Ministerial Conference on Information and Communication Technologies of the African Union, held in April 2006 in Addis Ababa, it was decided that the ADB and ECA, supported by other UN

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<sup>17</sup> The framework for the African Regional Action Plan on the Knowledge Economy (ARAPKE) was developed upon request from the Second African Regional Preparatory Conference for the WSIS, held in Accra, Ghana, from 2 to 4 February 2005.

<sup>18</sup> (AU 2006) Implementing the African Regional Action Plan on the Knowledge Economy (ARAPKE).

agencies and continental as well as subregional development banks, should undertake resource mobilization activities. The need for a pool of experts to support implementation at the national, sub-regional and regional levels has been identified.

22. Two conferences took place in 2006 in Marrakech<sup>19</sup> and Tunis,<sup>20</sup> respectively, on policies and strategies to channel domestic and foreign investment and to bring together ICT projects and investors. Both are expected to be organized annually.

23. ECA, in partnership with other entities, has assisted over 28 African countries in developing ICT national strategies and is working with a number of these countries to begin implementation. The fifth meeting of ECA's Committee on Development Information (CODI), to be held in May 2007, will discuss and make recommendations on implementation at the national and subregional levels.

24. The New Partnership for Africa's Development (NEPAD), especially its E-Commission, has been playing a key role in policy formulation as well as implementation. One of its most noteworthy projects is the "e-Schools Initiative": a multi-country and multi-stakeholder endeavour designed to bring ICT skills to young Africans in more than half a million schools on the continent at the primary and secondary school level. These schools will be provided with infrastructure, ICT equipment, access to appropriate ICT applications and digital content and appropriately trained teachers. Its main objective is to ensure that ICTs play a meaningful role in enhancing education and health conditions on the African continent. The NEPAD e-Schools Initiative will be implemented in three phases over a period of ten years, with 15 to 20 countries in each phase. The Initiative is a partnership between Governments, regional and international organizations such as the Council for Scientific and Industrial Research (CSIR) in South Africa, the Commonwealth of Learning, the World Bank, ITU and the Medical Research Council of South Africa (MRC), as well as the private sector, including Hewlett Packard, Microsoft, Oracle and Cisco.

25. During the first stage of the initiative, the "NEPAD e-Schools Demo" will establish and monitor six NEPAD e-Schools in each of the 16 countries participating in phase one: Algeria; Burkina Faso; Cameroon; Egypt; Gabon; Ghana; Kenya; Lesotho; Mali; Mauritius; Mozambique; Nigeria; Rwanda; Senegal; South Africa; and Uganda. Large-scale rollout is expected in 2007.

### **East Asia and Pacific**

26. Asia-Pacific is home to some of the global leaders in ICT development and applications, but a number of countries lag behind in terms of ICT access and use. ESCAP has identified several key obstacles to bridging the digital divide,<sup>21</sup> including a lack of coherent and integrated ICT policies and regulatory frameworks; a lack of awareness among stakeholders, including policymakers, concerning the benefits of ICT for socio-economic development; low skill levels

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<sup>19</sup> International Forum on Information Strategies and Investment, 1-3 March 2006.

<sup>20</sup> ICT 4ALL, Tunis+1: ICT investment in Africa, 26-27 October 2006.

<sup>21</sup>(ESCAP, 2006) Regional Action Plan towards the Information Society in Asia and the Pacific.

or capacity among ICT stakeholders; and low levels of cooperation and coordination in policymaking and implementation, including among government entities.

27. As a follow-up to WSIS, and in its efforts to help its member countries narrow the digital divide, the Economic and Social Commission for Asia and the Pacific (ESCAP) adopted in 2006 a "Regional Action Plan towards the Information Society in Asia and the Pacific". The Plan was formulated through a consultative process with the participation of some 600 individuals representing 50 Governments, 35 international organizations, the private sector and non-governmental organizations. Prior to the formulation of the regional Action Plan, regional surveys on WSIS Action Plans were conducted in subregions, to gather inputs on the special areas of concern within the region. The Plan set up a roadmap for the implementation of WSIS action lines and main themes, by prioritizing objectives into three categories, to be achieved within the short term (end of 2007), medium term (end of 2010) and long term (end of 2015).

28. Most of the countries in the region have established ICT departments or ministries to spearhead ICT agenda. Additionally, many Governments have set up ICT task forces, ICT councils or ICT committees for advising ICT-related policies and strategies at the national level. Several least developed countries, small Pacific island countries and countries with economies in transition are still in the process of establishing their national ICT strategies.

### **Western Asia**

29. The Economic and Social Commission for Western Asia (ESCWA) has prepared a "Plan of Action for Building the Information Society in Western Asia". The Plan identifies some of the following priority areas for implementation: (1) ICT for economic development; (2) Developing e-government services; (3) Empowering Arab NGOs in the information society; (4) Developing telecommunications infrastructure; (5) Developing the ICT sector; (6) Women's empowerment in the information society; (7) Information society measurements; (8) Promoting digital Arabic content; (9) ICT in education and scientific research; and (10) Increasing community access with emphasis on the marginalized and disabled.

30. In terms of implementation and follow-up mechanisms, the Plan proposes the establishment of a Steering Committee that would provide overall vision, set policy direction, articulate policies, design concrete frameworks and introduce alternative plans, if required. The ESCWA Secretariat would assist the Steering Committee in managing activities, coordinating programmes and monitoring progress periodically. Each programme will have a consultative team consisting of a programme coordinator, an expert in the field and a research assistant. The consultative team would work on creating synergy between established projects and new ideas for projects, and report periodically to the Steering Committee on progress. The Plan of Action also emphasizes national and subregional level coordination. An online partnership forum, the ICT Partnership Online (IPO), would be set up to facilitate consultation on projects and also funding opportunities. It is proposed that the IPO would evolve into a more sophisticated means of the online communication hosting online "communities of practice" representing different stakeholders.

31. ESCWA's current work focuses on promoting digital Arabic content, e-government policies and strategies, open source software solution for the public sector in the Arab region and capacity-building for ICT policymaking, as well as knowledge networks through ICT access points for disadvantaged communities.

### **Latin America and the Caribbean**

32. The region adopted the eLAC2007 "Regional Action Plan for the Information Society in Latin America and the Caribbean". eLAC builds on and extends ongoing intraregional initiatives, in convergence with national policies and projects, and sets out 30 goals to be met between 2006 and 2007. These goals cover access and digital inclusion, capacity-building and knowledge creation, public transparency and efficiency, policy instruments, and enabling environment.

33. Ecuador, Brazil, El Salvador and Trinidad and Tobago (coordinated by Ecuador) will serve in the Regional Follow-up Mechanism of eLAC2007 until the Ministerial Follow-up Conference, to be held in El Salvador in October 2007. Eight working groups have been set up in the areas of telework, alternative technologies, software, networks for research and education, ICT industries, e-Government, financing and legislative framework, each being coordinated by a Member State. Each country was asked to designate a national focal point to participate in the working groups. The Working Groups use the Virtual Collaborative Space ([www.elac2007.info](http://www.elac2007.info)) developed by the Economic Commission for Latin America and the Caribbean (ECLAC) to carry out their work. The regional follow-up mechanism is also requested to present periodic advance reports of eLAC2007 to every country in the region and to the international and regional organizations involved in the process of implementing the Plan.

34. During the second Conference on the implementation of eLAC2007, held in parallel to the Ministerial EU-LAC Information Society Forum in April 2006, ECLAC, with financial support of the "@lis" project of the European Commission<sup>22</sup> announced that it would contribute US\$ 10,000 to the initial work of each Working Group. The Working Groups were encouraged to work closely with national focal points as well as other relevant international and regional organisms. The overall evaluation will be conducted in November 2007.

35. In undertaking activities related to the implementation of the WSIS outcomes, ECLAC collaborates closely with other international bodies such as the Observatory for the Information Society in Latin America and the Caribbean (OSILAC), the e-government Effectiveness Inter-Agency Task Force and the Latin American Cooperation of Research Network (CLARA).

### **Europe**

36. The Economic Commission for Europe (UNECE) has made significant efforts to mainstream ICT into its work programme in the areas of trade, e-government, environment,

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<sup>22</sup> @LIS Programme is a strategic cooperation programme of the European Commission between Europe and Latin America aiming at promoting economic development and citizens' participation in the global information society.

transportation and policy development, and ICT thus constitutes an integral part of its activities in the region.

37. One such effort is in international trade. More than 5 billion documents are processed every year, with the annual cost of processing these documents manually estimated at over US\$ 250 billion. During the second phase of WSIS, the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) endorsed a roadmap to move towards “paperless trade”. The Centre has adopted a new, global United Nations electronic Trade Documents (UNeDocs) standard for digital trade documents. This standard will simplify international trade and increase security in the international supply chain through the exchange of less, but better, data that integrate with the latest Internet-based technologies. The Centre approved a new cooperation framework that encourages the participation of private-sector companies interested in supporting UN/CEFACT standards through software tools. UNECE, as the Secretariat of the Centre, has been developing, in cooperation with other UN Regional Commissions, a toolkit that makes national trade documents available through Internet repository.

38. UNECE has made important contributions to practical e-government solutions, and, in particular, environmental governance where electronic tools are being developed to strengthen public access to environmental information and encourage digital democracy. A Task Force on Electronic Information Tools has been established to promote an enabling legislative, regulatory and policy environment throughout the region. The Task Force promotes the exchange of experiences on the use of ICT to facilitate public participation in environmental matters. Among the practices being tracked by the Task Force is electronic public consultation on planning applications and permits. Further, the Aarhus Clearinghouse for Environmental Democracy (<http://aarhusclearinghouse.org>) provides a forum for collecting, disseminating and exchanging information and good practices relevant to the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) and to the implementation of principle 10 of the Rio Declaration on Environment and Development.

39. The UNECE World Forum for Harmonization of Vehicle Regulations is developing intelligent transportation systems (ITS) with the aim of improving the safety and environmental performance of vehicles. Some intelligent systems have already been incorporated into UNECE vehicle regulations.

40. In the framework of the Special Programme for the Economies of Central Asia (SPECA) UNECE has taken the lead in establishing a Working Group on ICT. In that context, regional capacity-building activities on ICT policymaking and legal aspects of ICT policy development have been carried out.

41. In addition, UNECE contributes to raising awareness on the gender digital divide within the framework of WSIS and promotes the use of ICT by small businesses run by women. Training workshops on ICT are part of the capacity-building programme under the SPECA Working Group on Gender and Economy.

## **II.2. Implementation and follow-up at the international level**

### **Economic and Social Council (ECOSOC)**

42. In its resolution 2006/46 of 28 July 2006, ECOSOC defined how it will oversee the system-wide follow-up to WSIS outcomes. The Council decided that these activities would be undertaken in the context of its annual review of the implementation of and follow-up to major UN summits in its coordination segment. The CSTD will assist the Council as the focal point in the system-wide follow-up.

43. In order to enable the CSTD to perform these additional tasks, the Council decided that the Commission should be strengthened in its substantive capacity and enhanced through effective and meaningful participation of Member States, and that membership of the CSTD should be enlarged by ten additional members to that end. The election of new members was held at the organizational session of ECOSOC in February 2007.

44. The Council also approved interim institutional arrangements for the participation of WSIS-accredited NGOs and civil society entities and WSIS-accredited private-sector entities in the work of CSTD, helping to ensure the meaningful and sustained engagement of non-governmental stakeholders in the WSIS follow-up process.

### **Commission on Science and Technology for Development (CSTD)**

45. The CSTD Secretariat, in collaboration with other United Nations entities, organized a series of open-ended, multi-stakeholder consultations on modalities of WSIS follow-up, including at the 9th session of the CSTD, held on 15 to 19 May 2006.

46. In response to ECOSOC's resolution which highlights the role of multi-stakeholder approach in WSIS follow-up, the Commission, through the UNCTAD Secretariat, invited civil society and the private sector to provide inputs to its 10th session; these submissions will be made available on the website.

47. At the CSTD panel held in Paris from 6 to 8 November 2006, participants identified a number of challenges to WSIS follow-up. These include (1) Thematic areas and the WSIS Action Lines are a "snapshot" of the key issues as of 2003. Given the fast pace of technological advance, new issues may need to be addressed; (2) No formal mechanism exists for the follow-up on the theme of financial mechanisms; and (3) WSIS implementation is decentralized at national, regional and international levels. The Commission stressed the importance of its Secretariat having access to the necessary information from UN entities involved in implementation, as well as from all other stakeholders in the information society, in order to assist the CSTD in carrying out its mandate.

### **UN Group on the Information Society (UNGIS)**

48. UNGIS was established by the United Nations Chief Executive Board (CEB) based on recommendations of the Secretary-General. It is made up of all CEB members, working under

the rotating chairmanship of ITU, UNESCO and UNDP. The main purpose of UNGIS is to facilitate the implementation of WSIS outcomes within the United Nations system. The Group seeks to enable synergies aimed at resolving substantive and policy issues, avoiding redundancies and enhancing effectiveness of the UN system while raising public awareness about the goals and objectives of the global information society. To maximize its efficiency, the Group has agreed on a work plan in which it would concentrate its collective efforts each year on one or two cross-cutting themes and on a few selected countries.

49. UNGIS will seek to bring the efforts of the UN system to bear on expanding access to communications, for instance through multimedia community centres, teleshops, etc. Drawing on the respective competencies of the different members of the Group, UNGIS will also focus on applications related to e-health and e-tourism. The Group will examine the e-readiness strategies and policies of one or two countries, to be proposed by UNDP, to develop a comprehensive toolkit for bringing the benefits of the information society to developing countries.

### **United Nations entities**

50. A wide variety of WSIS-related activities have been reported by relevant United Nations entities and programmes.<sup>23</sup> Many of these activities are being carried out within their existing mandate, programmes and areas of competence, in collaboration with development partners at national, regional and international levels. These include infrastructure development (ITU), capacity-building (UNESCO, UNCTAD), measures in the field of cybersecurity and confidence-building (ITU), e-government programmes (UN-DESA) e-business activities (UNCTAD), e-learning (UNESCO), enabling environment (UNDP, UNCTAD), e-health (WHO), e-employment (ILO), e-agriculture (FAO), e-science (UNESCO, UNCTAD), e-environment (WMO), cultural diversity and identity, linguistic diversity and local content (UNESCO), media (UNESCO) and ethical dimensions of the information society (UNESCO). The current activities of some specialized programmes, such as InfoDev, the Information for Development Programme of the World Bank or UNDP's work on Democratic Governance, are very closely related to WSIS-themes. Several agencies and entities are in the process of sharpening their focus and priorities in order to strategically integrate WSIS outcome documents into their work programme.

51. The lead agencies in the WSIS process, most notably ITU, UNESCO and UNDP, have continued to play leading facilitating roles in the implementation of WSIS Action Lines. These three entities, in collaboration with most United Nations agencies and entities, organized in February 2006, the first consultation meeting on overall facilitation, which adopted terms of reference for moderators/facilitators and lead agencies for the Action Lines. Most Action Line Facilitators/Moderators have held at least one facilitation meeting by February 2007. These meetings brought together relevant stakeholders from national, regional and international levels, representing inter alia Governments, NGOs and the private sector. As a result of these meetings and subsequent virtual working groups, most Action Lines have successfully identified sub-themes, or priority areas of focus for implementation. Several Action Line facilitators are creating networks to connect multi-stakeholder "communities of practice" on the implementation

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<sup>23</sup> A full summary of the activities undertaken by relevant UN entities, as well as Facilitation Meetings, is available as a background report (E/CN.16/2007/CRP.2) and from the CSTD website.

of their respective Action Lines. The second meeting of Action Line facilitators will take place on 25 May 2007.

### **Civil society and business, and multi-stakeholder partnerships**

52. Civil society played a key role in WSIS, and continues to play an important role in the field of advocacy for ICT for development, poverty reduction, empowerment, social justice and human rights. At the grass-roots level, NGOs are active in the implementation of many projects and programmes. Several civil society programmes deal with community development, telecentre deployment and rural communications, including local radio, and the promotion of free and open software. Despite the fact that numerous civil society programmes and projects have been submitted to the ITU-WSIS stocktaking database, an overall reporting mechanism from civil society is yet to be identified.

53. Business is not only a key stakeholder in the deployment of infrastructure but also a key driving force in technological development. The exponential growth in the use of cellphones worldwide has made information and communication available to many people, who were previously excluded from the global economy. "Serving the World's Poor, profitably"<sup>24</sup> has become a business proposition for a number of multinational companies that work in collaboration with Governments, international and regional organizations and other development partners, developing low-cost mobile phones and PCs and establishing community technology learning centres. A recent initiative is "50x15",<sup>25</sup> which seeks to develop new technology and solutions to enable more affordable Internet access and computing capability for 50 per cent of the world's population by the year 2015.

54. A number of multi-stakeholder partnerships were created during and after WSIS. One such example is the Connect the World<sup>26</sup> project launched in June 2005 by ITU and 22 founding partners. The project aims to help expand access to ICTs to the estimated 800,000 villages and one billion people worldwide who have no access to telephones. The project presently includes more than 50 partners from Government, the private sector, international and regional organizations as well as civil society. Major partnerships have been created through Connect the World in 2006, including a new ITU-Grameen partnership to leverage the power of ICTs and micro-financing to empower the poor called "ICT Empowerment Network". A number of early projects have been announced within this network, including, efforts to extend the Grameen Village phone model into more countries, and an initiative by a new consortium, based in Cambridge, UK, called "Enclusion" to develop low-cost rural connectivity solutions.

55. A good example of a concrete project is the partnership between the Grameen Foundation USA and Nokia, which makes available "Village Phone Business Kits" for purchase in emerging markets. Each kit includes a mobile phone, a booster antenna, and a recharging solution. Microfinance clients can purchase this kit through their microfinance institution by taking out a loan which will be repaid with proceeds from the business. The client then becomes a Village

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<sup>24</sup> C.K. Prahalad, *The Fortune at the Bottom of the Pyramid*, Wharton School Publishing, 2005.

<sup>25</sup> Launched by AMD, in partnership with Telmex, WYSE, Lenovo, Micorsoft, Samsung, and Inveneo.

<sup>26</sup> <http://www.itu.int/partners/index.html>.

Phone Operator and rents the use of the phone on a per-call basis to people in his or her community.

### **Global Alliance for Information and Communication Technologies and Development (GAID)**

56. GAID was launched in Kuala Lumpur on 19-20 June 2006, with the secretariat support of DESA.<sup>27</sup> It is expected to be an important contributor to the coordination and implementation of many of the 11 Actions Lines of WSIS, especially by bringing multi-stakeholder input to the intergovernmental processes.

57. The Strategy Council of GAID decided that it would initially focus on the use of ICT in promoting the following four broad areas: 1. Education, 2. Health, 3. Entrepreneurship, and 4. Governance. GAID, a network of networks, is expected to work toward fulfilling its mission by providing an inclusive, multi-stakeholder global forum and platform for cross-sectoral policy dialogue and advocacy, and by catalysing multi-stakeholder, action-oriented partnerships and regional networks encouraged under the Alliance's umbrella.

58. In 2006, GAID undertook preparatory work, with the intent of laying the foundations for its future substantive work. Among other initiatives, regional networks (in Latin America and Caribbean, Asia-Pacific, Africa, Europe, Arab States and transition countries) and stakeholder networks (composed of youth, persons with disabilities, parliamentarians, local governments and regional authorities and gender stakeholders) are being formed. The first regional network to be created was the GAID Asian-Pacific Network, which was established at the first meeting on GAID for the Asia-Pacific region that took place in Shanghai, People's Republic of China, on 19 October 2006.

59. Moreover, a call for proposals for thematic Communities of Expertise met with positive response, and several Flagship Partnership Initiatives under the umbrella of the Global Alliance have been set up to leverage joint resources and to spur visible action across the four GAID focus areas. These Initiatives are Better Connectivity with Broadband to Africa, Cyber Development Corps, and Telecentre 2.0 - Scaling up for global success.

60. It is envisaged that the Alliance will provide multi-stakeholder input to the policy dialogue to be conducted at the CSTD.

### **Global Knowledge Partnership (GKP)**

61. Founded in 1997, GKP is a multi-stakeholder network promoting innovation and advancement in Knowledge for Development (K4D) and Information and Communication Technologies for Development (ICT4D). It operates globally as well as in seven regions: Africa, Central and Eastern Europe; East Asia; Latin America and the Caribbean; Middle East and North Africa; Oceania and South Asia. The network comprises over 100 members from 40 countries,

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<sup>27</sup> GAID is chaired by the former CEO of Intel.

representing public sector, private sector and civil society organizations. It is governed by an elected Executive Committee and supported by a Secretariat based in Kuala Lumpur, Malaysia.

62. GKP was one of the major parallel events organizers at the Geneva and Tunis Summits. Its Strategy 2010 focuses on access to knowledge, education, poverty reduction and resource mobilization. Its activities include the convening of knowledge-sharing events with products and innovative solutions; brokering multi-stakeholder partnerships for knowledge-sharing and increasing effectiveness of ICT for development initiatives; promoting innovation in the use and appropriation of ICT for development initiatives and knowledge-sharing; facilitating mobilization of investments in ICT for development at the local, national, and global levels; and influencing policy, regulatory frameworks and public opinion.

### **II.3. Progress made and lessons learned in the implementation of Action Lines and main themes**

#### **A. Action Lines**

63. Significant progress was made during 2006 in the identification of priority areas for implementation of WSIS Action Lines and in the creation of synergies among the different stakeholders. The following section highlights some of them.

#### **The role of public governance authorities and all stakeholders in the promotion of ICTs for development (C1) and e-government (C7), facilitated by UNDESA**

64. Building on the findings and recommendations of the Consultations on Action Lines C1 and C7eGov, and on-line consultation facilitated by UNDESA, the following priority areas have been identified:

C1: ICT for sustainable development; national e-strategies; ICT in parliaments; e-participation; partnerships.

C7 eGov: e-government strategies; e-government systems; measuring e-government; knowledge management.

65. DESA had built a mailing list of key stakeholders which comprises some 2,000 names. A website dedicated to the facilitation of the implementation of Action Lines C1 and C7eGov has been established within the United Nations Public Administration Network (UNPAN) Portal. The website provides many relevant resources and is updated on a regular basis.

Access to information and knowledge (C3), E-learning (C7), E-science (C7), Cultural diversity and identity, linguistic diversity and local content (C8), Media (C9), and Ethical Dimensions of the Information Society (C10), facilitated by UNESCO

66. Through multi-stakeholder consultations facilitated by UNESCO, the following priority areas have been identified under these Action Lines:

C3: Public domain information, access to public official information, community access, libraries and archives, diversity of software models, research and development for accessibility for all, open access to scientific information and e-government for local authorities.

C7(e-learning): Enhancing capacities for e-learning in education, communication and learning tools, e-learning policies and strategies, digital content within learning and education, legal and institutional frameworks, multi-stakeholder partnerships and research and development in e-learning.

C8: Heritage, local content and contemporary cultural expressions, linguistic diversity, traditional knowledge, and the All-Inclusive Information Society (indigenous peoples, gender, disabled persons).

C9: Freedom of expression, media education and information literacy, journalism training, community media, media regulation, media archives, content of media and the internet and research.

C10: Establishment of implementation modalities of the Geneva Plan of Action, mainstreaming of ethical dimensions of other Action Lines, design and realization of concrete activities.

C7 (e-science): UNESCO organized a consultation meeting in October 2006, which aimed at facilitating the initial contacts and sharing of information among multi-stakeholders on their priorities and expertise in the implementation. It also decided that a “core multi-stakeholder group” be set up, which would identify programme activities in E-science.

#### **Capacity-building (C4) and enabling environment (C6), facilitated by UNDP**

67. UNDP, in its capacity of provisional moderator/facilitator, organized in May 2006 the first facilitation meetings on Action Lines 4 and 6. The meetings provided an opportunity to discuss ways to enhance collaboration and information-sharing among diverse stakeholders to contribute to effective multi-stakeholder implementation. In addition, it tried to identify priority areas for enhanced focus and to explore ideas on how the Action Line teams might organize their work.

#### **Information and communication infrastructure (C2) and building confidence and security in the use of ICT (C5), facilitated by ITU**

68. C2: Based on multi-stakeholder facilitations held by ITU, the following priority themes have been identified: (a) Making the case of how and how much ICT could impact human development; (b) Mainstreaming ICT in development, including integrating ICT into disaster risk reduction for sustainable development; (c) Conducting demand/supply analyses on ICT-enabled services; (d) Developing model policies to support national e-strategies; (e) Reinforcing regulatory capacities at the national level; (f) Harmonizing legal and regulatory frameworks at

the regional level; (g) Developing financing mechanisms, in particular in support of the development of national broadband networks by means of public-private partnerships; (h) Promoting local entrepreneurships and risk mitigation, implementation of initiatives and information-sharing on ICT deployment initiatives.

69. It was decided that the focus should be on supporting the implementation of concrete and impact-making initiatives, such as the 25 regional initiatives adopted by the 2006 World Telecommunication Development Conferences<sup>28</sup>. A platform has been created on the Action Line website to facilitate cooperation on large-scale projects.

70. C5: Through multi-stakeholder consultations facilitated by ITU, the following priority areas have been identified: (a) Development of a generic model framework or toolkit that national policymakers could use to develop and implement national cybersecurity or the CIIP (Critical Information Infrastructure Protection) programme; (b) Capacity-building in the harmonization of cybercrime legislation, the Council of Europe's Convention on cybercrime and enforcement; and (c) Information-sharing of best practices on developing watch, warning and incident response. A website on Partnerships for Global Cybersecurity has been set up to provide up-to-date information on implementation.

71. With regard to mechanisms for cooperation on cybersecurity, ITU held a meeting in 2006 where participants considered the necessary actions to be taken at the international, regional and international levels. It was suggested that Governments commit to the development of a Memorandum of Understanding on e-Trust to foster international coordination. A project for enhancing cooperation on cybersecurity and combating spam was initiated in 2007 and is scheduled to last four years.

#### **E-Business (C7) and E-Employment (C7), facilitated by UNCTAD and ILO**

72. Based on the joint Facilitation Meeting held by UNCTAD, ILO and ITC, a preliminary set of priority areas have been identified: the role of innovation in the creation of gainful employment through e-business; small and-medium-sized enterprises; gender issues; creation of an enabling environment for the information economy; standardized indicators; e-commerce; the digital divide and ICT for poverty reduction; and the role of broadband.

#### **E-health (C7), facilitated by WHO**

73. Priority areas in WSIS include improving health information systems; facilitating access to knowledge and information in health; promoting the adoption of international standards for exchange of health data; and strengthening systems for disaster response and communicable diseases monitoring and alert. WHO reported progress on the international level through its work, its Member States and partners.

74. The Fifty-eighth World Health Assembly in May 2005 adopted Resolution WHA58.28 establishing an e-Health strategy for WHO. In alignment with the WSIS agreements, the

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<sup>28</sup> ALC2/2/08.

resolution urges Member States to consider drawing up long-term strategic plans for the development and implementation of e-Health services. It calls on Governments to form national e-Health bodies to guide policy and strategy development in e-Health including data security, privacy, interoperability, cultural and linguistic issues, infrastructure, funding, monitoring and evaluation. WHO recommends that each Member State establish a national-level body for e-Health, formally supported by the Ministry of Health as a key instrument in implementing the e-Health Resolution.

75. In January 2007, WHO published its first global survey for e-Health on its Global Observatory for the e-Health website. The Survey shows that much has been achieved by countries in their actions to introduce ICTs into their health systems. Countries have reported progress in building the foundation policies and strategies for e-Health. Good progress was also reported in ICT capacity-building of health professionals and students, rates of adoption of e-Health applications, and knowledge services for health professionals and students.

76. Developing countries also expressed the need for greater WHO involvement in a number of areas that need particular attention, for example, e-Health governance, enabling policies and strategies, multilingual e-Health content, as well as interoperability and the issues surrounding the development and adoption of e-Health standards. Many member States are also struggling with the need to change entrenched attitudes regarding technology – often in the health work force itself. Strengthening capacity, preserving cultural integrity and increasing access to ICTs for those who need it most are key priorities.

### **E-Agriculture (C7), facilitated by FAO**

77. FAO has held a number of internal workshops on WSIS follow-up since June 2006. Participants included representatives from leading development organizations and the WSIS E-Agriculture Working Group (EAWG). The Communication and Promotion Office of FAO will serve as the Secretary to the EAWG. A multi-stakeholder meeting is planned for 2007.

78. Between 1 October and 15 November 2006, FAO carried out a worldwide survey on e-Agriculture, which was intended to gather inputs from all relevant stakeholders. More than 3,000 participants answered questionnaires, and analysis of the Survey was to be completed by February 2007. A virtual workspace, the “E-Agriculture Knowledge Forum”, will be launched in May 2007, and an E-Agriculture portal website will be established in September 2007.

79. A number of obstacles have been identified in the facilitation and implementation of several Action Lines, as follows: overlapping of Action Lines and financial constraints which deter participation by civil society entities in the implementation and follow-up process.

## **B. Main Themes**

### **Internet governance**

80. At the request of the Tunis Phase of WSIS, the United Nations Secretary-General convened “a meeting of the new forum for a multi-stakeholder policy dialogue - the Internet

Governance Forum (IGF)". The Secretary-General appointed an Advisory Group, with the task of preparing the agenda and the programme for the first meeting of the IGF. This group consisted of 46 members from Government, the private sector and civil society. The inaugural meeting, entitled "Internet Governance for Development", took place in Athens from 30 October to 2 November 2006 and was attended by some 1,350 participants. It addressed openness, diversity, access and security, with the cross-cutting objectives of development and capacity-building.

81. Several new initiatives emerged from the meeting, among them the creation of the so-called "dynamic coalitions" – multi-stakeholder groupings of people and institutions, formed to work or collaborate on a particular topic or concern. Partners in these coalitions include Governments, corporations, international organizations, NGOs and academic institutions. Some of these include the StopSpamAlliance; dynamic coalitions on privacy, on open standards, on an Internet Bill of Rights, on freedom of expression, and on promoting access to knowledge.

82. A stocktaking session was held in February 2007 to assess the first IGF meeting. Participants generally agreed that it was a good start in successfully stimulating important public discussions on many issues related to Internet governance in an open and interactive debate among all stakeholders. There was broad support for the multi-stakeholder format of the Athens meeting as well as for the need to maintain an open multi-stakeholder format for the preparatory process for the next meeting. It was generally agreed that the next meeting should build on the success of Athens and maintain the development focus of the IGF. Many participants noted that serious efforts were needed to ensure increased participation from developing countries. It was also pointed out that there was a need to differentiate between Internet governance and the broader ICT4D agenda that was being discussed elsewhere in the WSIS follow-up process. Governments were encouraged to play a more active role in the IGF, as the issues addressed had profound implications for legal systems and approaches worldwide.

83. The second IGF meeting is scheduled to take place in Brazil in 2007. India and Egypt have offered to host the forum in 2008 and 2009, respectively.

### **Financing mechanisms**

84. The voluntary "Digital Solidarity Fund" (DSF) was established in 2005 in Geneva as a financial mobilization mechanism for infrastructure development and capacity-building for narrowing the digital divide. The DSF has 23 founding members from national governments,<sup>29</sup> local authorities<sup>30</sup> and international organization,<sup>31</sup> and is a registered Foundation under Swiss law. Of its resources, 60 per cent are set aside for least developed countries, 30 per cent for developing countries and 10 per cent for countries with transition economies. The DSF aims to use an innovative financial mechanism based on the 1 per cent principle, which stipulates that

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<sup>29</sup> Comprising Algeria, Saudi Arabia, Burkina Faso, China, Dominican Republic, France, Ghana, Equatorial Guinea, Kenya, Morocco, Mauritania, Nigeria, Senegal and the United Republic of Tanzania.

<sup>30</sup> Including Dakar (Senegal), Geneva (Switzerland), Lyons (France), Paris (France), Santo Domingo (Dominican Republic), the Rhone-Alps region (France), the Basque country (Spain) and the Piedmont region (Italy).

<sup>31</sup> For example, the Organisation Internationale de la Francophonie.

any public institution or private company willing to contribute to narrowing the digital divide could donate 1 per cent of the contract value of ICT-related bids.

85. For the period of 2007-2008, the DSF will continue to promote the 1 per cent Principle at the national and local levels, and an international conference on Digital Solidarity is scheduled for the second half of 2007. The DSF also aims to increase the number of founding members, with equal representation among national governments, local authorities, the private sector, civil society and international organizations.

86. At the operational level, since its inception, DSF has implemented pilot projects in Africa and Asia. In Banda Aceh, Indonesia, the DSF financed the reconstruction of the Information Department of the local authority. Other projects have been in operation in Burundi, and Burkina Faso in the field of e-Health and e-Learning. DSF plans to expand pilot projects into countries in Latin America and the Caribbean, Asia and the CIS region. In Africa, DSF aims to replicate elsewhere successful best practices learned in Burundi and Burkina Faso.

### **Measuring the information society**

87. Considerable progress has been made in measuring the information society, as called upon in the Geneva Plan of Action<sup>32</sup> and the WSIS Tunis Agenda.<sup>33</sup> The Partnership on Measuring ICT for Development was launched during UNCTAD XI in June 2004.<sup>34</sup> Current partners include ITU, OECD, UNCTAD, the UNESCO Institute for Statistics, the UN Regional Commissions (ECLAC, ESCWA, ESCAP, and ECA), the UN ICT Task Force/GAID, the World Bank and EUROSTAT. The Partnership has developed a core set of indicators in four areas: ICT infrastructure and access, ICT access and use in households, ICT use in business, and the ICT sector and trade in ICT goods. These guidelines serve as a basis for current capacity-building activities with national statistics institutes, related Ministries and the statistical community at large. A key objective of the Partnership is to enhance the capacities of national statistical organizations (NSOs) in developing countries and to build competence to develop statistical compilation programmes on the information society, based on internationally agreed upon indicators. Since WSIS Tunis, regional workshops on ICT indicators have been held in Asia-Pacific, Latin America, Western Asia and Africa, as well as a number of national workshops. The Partnership also intends to develop a global database of ICT indicators for online availability.

88. The Partnership's collaboration also constitutes the basis for harmonized data collection on ICT statistics at the international level. The Partnership's core list of indicators was endorsed by the UN Statistical Commission in February 2007, which encouraged countries to use this core list of indicators in their data collection programmes. The Commission recognized that ICT was a rapidly evolving area and encouraged the Partnership to continue work to improve and update the list of indicators, especially in view of measuring use of ICT in education, in Government, the contribution of ICT to economic growth and social development, and barriers to use of ICT. These additional indicators will be particularly important for measuring the WSIS targets, which

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<sup>32</sup> Paragraph 28.

<sup>33</sup> Paragraphs 112-120.

<sup>34</sup> Further information about the Partnership is available at <http://measuring-ict.unctad.org>.

have a focus on connecting schools, Government and other public institutions. The UN Statistical Commission encouraged the Partnership to assist countries in their capacity-building efforts for the collection of data for the ICT indicators.

89. Meanwhile, a number of different composite indices have been developed to track the development of ICTs and to measure the extent of the digital divide in both its domestic and international dimensions. These include the ICT Diffusion Index,<sup>35</sup> the Digital Opportunity Index<sup>36</sup> and the ICT Opportunity Index.<sup>37</sup> In view of the similarities of the two first indices, UNCTAD and ITU agreed, at the second phase of WSIS, to collaborate in their efforts to measure the magnitude of the digital divide and track global progress in the use of ICTs for development. The two organizations jointly developed a Digital Opportunity Index (DOI), a composite ICT development index, which was launched with the publication of the World Information Society Report in June 2006. The DOI tracks progress in infrastructure development and charts progress towards the WSIS goals and building of the information society. The DOI is an important tool for international ICT performance evaluation and benchmarking and is updated annually. Another WSIS-endorsed ICT indicator, the ICT Opportunity Index (ICT-OI), was launched during the Tunis phase and updated in February 2007. ICT-OI is the result of the merger of ITU's Digital Access Index (DAI) and Orbicom's Monitoring the Digital Divide/Infostate conceptual framework. ICT-OI focuses on links between ICT development and user capabilities. The 2005 Monitoring the Digital Divide report also includes a chapter on Women in the Information Society, which includes a comprehensive quantitative and qualitative analysis of the rates and trends of ICT access and use by women globally, as recommended in the WSIS Plan of Action. A subsequent phase will develop indicators to measure the gender dimensions of the knowledge society, including the digital divide.

90. Although the Partnership on Measuring ICT for Development and other initiatives to improve the availability of core ICT indicators have made notable progress, one area that would require further attention is indicators for measuring WSIS targets. While the core indicators cover important areas such as individual, household and business access to ICTs, many of the WSIS targets have a focus on connecting schools, Government and other public institutions. Efforts are needed to work with Governments to develop indicators for tracking this in order to monitor progress towards the WSIS targets.

### **III. Measures for further implementation**

91. The CSTD may wish to take into account the findings, conclusions and recommendations of the Action Line and main themes facilitation meetings<sup>38</sup> in its design of the multi-year programme and to suggest concrete measures for different actors to undertake on a priority basis.

92. The CSTD Panel held in Paris from 6 to 8 November 2006 concluded, *inter alia*, that:

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<sup>35</sup> The Digital Divide: ICT Diffusion Index (UNCTAD 2003, 2004, 2005).

<sup>36</sup> <http://www.itu.int/doi>.

<sup>37</sup> [http://www.orbicom.uqam.ca/projects/ddi2005/index\\_ict\\_opp.pdf](http://www.orbicom.uqam.ca/projects/ddi2005/index_ict_opp.pdf).28.

<sup>38</sup> See document E/CN.16/2007/CRP.2.

(a) As a platform technology and an enabler of development, ICTs can make an important contribution to the achievement of internationally agreed development goals. However, in some national e-strategies, ICTs are treated as a new growth and export sector only. In order to unleash the potential of ICTs for human and social development, ICTs strategies should be fully integrated into national development plans, Poverty Reduction Strategies and other development frameworks at an early stage. Therefore, national e-strategies should be reviewed to ensure that they bring ICTs to bear on all components of national development, especially in facilitating the implementation of policies and measures that aim at reducing social and economic disparities and in promoting human development in general.

(b) Experiences show that countries that have adopted and implemented bottom-up and holistic e-strategies that are aligned with overall national development strategies are most likely to reap the benefits of ICTs. These countries have also created enabling policy and regulatory environments that stimulate competition, entrepreneurship, commerce, investment, job creation and growth.<sup>39</sup> The success of any policy initiative based on intensive use of ICTs depends on the participation of all citizens, during the formulation, implementation and decision-making processes. Accountability and transparency are also crucial, especially with regard to the choice of technological infrastructure to be used by a certain community, so that the technology selected can adequately respond to the community's needs and interests. All ICT-related policy designs should embody a commitment to development at the community level, especially the rural community, and among groups who have not yet benefited from the information society. E-Government projects are an effective way to deliver more efficient and transparent public services and to combat corruption, increase transparency and social accountability. For many people in underdeveloped areas, access to public services, such as online document issuance or social security registration, is a first step towards social and digital inclusion.

(c) The contribution of "older" ICTs, such as radio and television, is equally crucial in the building of the information society. Radio has enabled many isolated or rural communities to allow their members, especially women, to make their voices heard, to participate in political life and to gain access to knowledge and information.<sup>40</sup> Innovative approaches are maximizing the impact of different technologies by combining them. Bridging the digital divide, therefore, will require efforts to achieve a more equal distribution of the benefits of new and old information technologies.

(d) One of the most important issues concerning ICT for development is resource mobilization. Financial and human resource constraints have been identified by many developing countries as obstacles to the building of the information society, especially in Africa. The Panel called for a global coalition of financial and human resources, which would take the form of cooperation among firms in the developed and developing countries, partnerships among Governments, multilateral bodies, financial institutions and other international organizations.

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<sup>39</sup> UNDP (2001).

<sup>40</sup> UNESCO (2006).

#### **IV. Recommendations**

93. In view of the progress made to date, the Commission may consider making the following recommendations to:

##### **National Governments:**

- Regularly review and update their national e-strategies to ensure that ICTs bear on all components of national development, especially in facilitating the implementation of policies and measures that aim at reducing social and economic disparities and in promoting human development in general.
- Ensure a multi-stakeholder and bottom-up approach in the design, implementation and evaluation of ICT policies, taking into account the needs and perspectives of all groups in society, including the rural poor and disadvantaged communities.
- Ensure that national e-strategies include measurable targets and budgetary details as well as mechanisms for evaluation and assessment.

##### **International organizations:**

- In close collaboration with regional Commissions and other development partners, support developing countries in their efforts to engage in consultative and participatory design and review of e-strategies.
- Continue current efforts to measure the information society with a view to developing appropriate indicators that can be applied in the mid-term and long-term review of WSIS implementation at the national, regional and international levels. In this regard, continued collaboration between the various United Nations entities and other international organizations, such as ITU, United Nations regional Commissions, UNCTAD, UNDP, UNESCO and the World Bank is encouraged.
- The United Nations entities that are tasked with Action Line facilitation are encouraged to continue regular consultations to review and assess progress made and lessons learned and to share good practice examples. These consultations should involve all stakeholders, and aim at facilitating information exchange, creating knowledge, sharing best practices, discussing lessons learnt and developing multi-stakeholder and public-private partnerships. Special efforts should be made to facilitate the participation of civil society, especially those from developing countries.
- The UNGIS Secretariat and the CSTD Secretariat are encouraged to collaborate closely in the follow-up process and explore innovative ways of collaboration, including through exchange of information about the implementation work of the UN Agencies and Programmes, policy discussions, expert group meetings and online working groups.

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