Third annual report of the Information and Communication Technologies Task Force

Summary

In its third year, the Information and Communication Technologies Task Force, through its core activities, working groups and regional nodes, has successfully contributed to advancing the multi-stakeholder discussion on Internet governance, enabling environment and other high-profile policy issues, added to progress in measuring, monitoring and analyzing ICT impacts on the achievement of the internationally agreed development goals, further supported and promoted collaborative initiatives at the regional, subregional and national levels, and provided significant input to the formulation of a coherent United Nations ICT strategy.

The Task Force continues to pursue the mainstreaming of ICT into development as a powerful tool that can enable the attainment of the MDGs. It is also contributing toward making the Tunis phase of the WSIS a summit of sustainable solutions. A programme of reform and renewal of the United Nations also provides a chance for the Task Force to perform its mandate of providing advice to the Secretary-General on the ICT matters.

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United Nations Information and Communication Technologies Task Force
Third Annual Report

I. Introduction

1. The present report has been prepared in response to the mandate contained in Economic and Social Council resolution 2000/29 of 28 July 2000 and its decision 2001/210 of 13 March 2001 on the establishment of the Information and Communication Technologies (ICT) Task Force.

2. The present report covers the period from February 2004 to February 2005. It provides an overview of the current environment, describes the role of the Task Force in promoting the access and application of ICT for advancing United Nations development goals, presents an outline of the major activities of the Task Force, an assessment of its effectiveness and an overview of what the Task Force will strive to achieve in the final year of its mandate.

II. Current Environment[1]

3. Science and technology, and particularly the new ICT, are distinguished by rapid change. To mention just one example, the exceedingly swift spread of access to the Internet via mobile phones, i.e. the emergence of the "triple play" of voice, video and data being carried over a single platform, make the long-heralded convergence a reality and constitutes a sign of a new dynamic phase triggered by the Internet's growth towards ubiquity. Technological change has considerably reduced the cost of ICT goods and services and widened the continuum of technology choices and solutions.

4. ICT are cross-cutting technologies with fundamental impact on the various sectors of society, culture and the economy. A decade ago, ICT were considered by many as marginal for economic growth and poverty reduction. Since then, skepticism has given way to more open perceptions and attitudes. ICT are now seen as powerful enablers of development goals. In many developing countries policy attention today begins to turn towards the convergence of industrial policies that emphasize manufacturing capabilities and science, technology and innovation policies that are increasingly seen as important tools for development because of their power to generate and use knowledge.

5. More precisely, ICT are increasingly seen by developing country governments, analysts and development agencies as stimulating collective cultural learning and thus enhancing socio-

[1] In continuation of the practice of the previous annual reports, this Chapter presents a broad outline of the environment in which the ICT Task Force operated and its implications for ICT4D and is based on the discussions at the Global Forums and other meetings organized by the ICT Task Force.

economic development, improving individual people's lives by allowing them to acquire knowledge and skills that empower them to produce in innovative ways, and as enhancing overall economic growth and income by raising productivity, which can in turn improve the quality of life.

6. Policies designed to enhance the role of ICT in development have created new avenues for reducing poverty, especially through the beneficial effects they have on mainstream development objectives in, e.g., health, education, capacity building of people (empowerment) and improving living conditions that meet individual, household, and community needs, including social networks, human skills, natural and physical conditions and access to capital and markets.

7. However, research undertaken for instance in the framework of OECD-DAC indicates that not enough attention has been paid in economic analysis and policy-making to the significance of ICT for national economic growth. While in the OECD countries the links between ICT, productivity and economic growth have been established (albeit only recently), the more precise impact of investment in ICT for developing countries, notably LDCs, remains largely under-researched.

8. Digitalisation, global networks and "cyberspace" may create wealth on the basis of new value chains and business, from content origination to content packaging, service providing, network operating and finally consumption. But the value-added of this new space and networks is not immediately apparent in economic terms as there is a time-lag in their impact on productivity.

9. There is an ongoing debate relevant both for developed and developing countries concerning the extent to which production and distribution decisions in the information economy differ from those in manufacturing industries. The emerging consensus is that ICT may lead to fundamentally different business models. The four main aspects of the new business models are the following:

    - *Network effects:* The spread of a successful hardware or software innovation is often accompanied by an exponential increase in the usefulness of that standard for its users, as more and more elements can be connected to an interactive system. The value of a network is seen to increase in approximate proportion to the square of its number of users. This effect, however, may induce monopolists to lock customers into network relationships.

    - *Production by copying:* In traditional markets, the firm's size is constrained by the increasing marginal costs of material and resources. For digital cyber products and software it is different: once initial costs are paid, each digital copy costs next to nothing. Though costs of assembling the original good may be very high - for instance, in the case of new operating systems, software or movies - digital reproduction involves a simple operation that can be carried out with little technical skill and equipment. Low costs of copying expand the market, but also increase the incentive to

command the largest share of a "digital good market". The largest supplier will have the lowest marginal costs and will thus appear to be a „natural monopoly".

- *Properties of information:* Information makes its impact on users in a very specific manner: it does not change their physical state or modify their physical circumstances. Instead, it affects the user's thoughts, knowledge or feelings. Users learn something new, or gain pleasure or they receive instructions that help them to behave in ways that makes them more effective and successful. What matters is that the receipt of such signals by individuals does not destroy or alter the original message. This is the core reason why information is considered a "public" rather than a "private" good. For economic reasons there is a tendency to exclude those who do not pay or cannot afford to pay for the consumption of the information good, either through electronic walls, legal sanctions against unauthorised copying or technical copyright-management systems. Copyright statutes try to strike a judicious balance between the temporary protection of exclusive property rights and the subsequent free use of new inventions, be they technical or artistic in nature.

- *"Moore's Law":* The pace of change in ICT development exceeds by far the rate of change in earlier technologies. Driven by the factors underpinning "Moore's Law" (doubling of the number of transistors per square inch every 18 months), advances in information technology follow one another at enormous speed. Those who argued that ICT provide developing countries with an opportunity to "leapfrog" entire stages of technological development and thus to compete on the basis of ICT knowledge with industrial countries on more equal terms may be disappointed to some extent. By the time most developing countries have deployed "second generation wireless networks", a considerable number of developed countries will have rolled out "third generation networks" offering more powerful functionalities. On the other hand, Moore's Law implies that the process of catching up can occur much more quickly. For instance, whereas it took developed economies on average 20-30 years to move from 10 to 30 phones (fixed-line or mobile) for every 100 inhabitants, today many developing countries are showing that it can be done in less than ten years.

10. There exist, however, many examples showing how ICT can contribute to development through "competitive edge technologies" as well as through what is sometimes called "appropriate technologies". The Dal Lake Wi-Fi Project in India is a pertinent case. With the recent de-licensing of radio spectrum for spread spectrum packet-based communications in India, wideband connectivity has been extended – using Wi-Fi technology – to sparsely populated communities. The project is revolutionary and has ample potential for replication.

11. The example illustrates that portable Internet could become what is called a "disruptive technology". This technology indeed may be able to break traditional (quite long) network planning cycles and the sequence of high fixed network costs related to such network planning cycles. The term "portable Internet" – the title of an ITU Internet Report (2004) – is a generic term describing a platform for high-speed data access using Internet Protocol, covering

advanced wireless technologies like Wi-Fi, WiMax, IMT-2000, 3G, ultra wideband and radio frequency identification (RFID) tags, operating at long, medium and short ranges, and new techniques that make more efficient use of the available spectrum, including spread spectrum, smart antennae, agile radios and mesh networks.

12. To properly assess the need for and the potential of the portable Internet it might be expedient to understand that the developing world in general seems to strongly express a preference for mobile phones over fixed-line ones. This adds to greater mobility but may nevertheless put the brakes on Internet development in developing countries in the near future because fixed-line technologies generally offer higher speed. Indeed, Internet penetration in the developing world has grown at a slower rate than mobile since 2000. It is therefore important to reach out to the growing number of users who have a mobile phone but no fixed-line telephone. Handheld devices that are Internet-enabled could open up the information gateway in a new and potentially vibrant market. This could help promote the policy goals of universal access while at the same time expanding markets.

13. In substance, the dual challenge we face is to provide connectivity for the world's population and use it for advancing sustainable development. Ultimate success in the drive to ensure access must be measured by the ultimate outcomes of sustainable development.

14. Financing options facing developing countries as they attempt to facilitate growth in the use and deployment of ICT remain a major item on the development policy agenda. ICT infrastructure financing in developing countries, traditionally, either came from Government budgets or from revenues from post, telegraph and telephone authorities or from donors and international financial institutions (IFI). The transforming effects of technological change and the trend towards deregulation and privatisation of the telecommunications industry which accelerated in the 1990s have resulted in major shifts in the financial strategies and options among ICT stakeholders: development banks and bilateral donors became instrumental in generating a greater reliance on private capital. IFI redirected public resources from direct financing of infrastructure projects to policy reforms and other mechanisms to support infrastructure development.

15. This shift in stakeholder policies pertaining to the financing of ICT went hand in hand with a considerably increased understanding of the crucial importance of the enabling environment for ICT. Promoting local investment and attracting foreign direct investment in ICT depends crucially upon a favourable environment, underpinned by good governance and the rule of law. An ICT policy and regulatory environment that encompasses open entry, fair competition and market-oriented regulatory practices should match a supportive development policy environment, thus integrating ICT into poverty reduction policies and processes.

16. As the rapid and successful use of ICT is becoming increasingly central to the development process, developing countries are faced with an additional set of financing requirements. It is recognized that despite increased private industrial and financial involvement in ICT, the potential of the ICT sector for development is far from being fully exploited. This is

particularly true for the provision of ICT infrastructures in rural areas of developing countries. These are not easily covered by private suppliers because of the perception of lower profitability and higher investment risks. This perception is changing: national "universal service/access funds" and other mechanisms to lower costs of delivery to under-served markets, the leveraging of market forces for the promotion of community access and the creation of multi-purpose community telecenters are understood to require scaling up existing financial resources through innovative financial mechanisms and schemes. The potential of public-private partnerships (PPP) (e.g. in the field of syndication of financing ventures and consortia) at different levels could be much better exploited. Regional cooperation, multi-stakeholder partnerships and seed financing apparently are critical elements for both backbone and last-mile solutions in developing countries.

17. At the same time, building human resource capacities and knowledge assets at every level is a main requirement for achieving the Millennium Development Goals. ICT, in principle, hold great promise for development in all societies; but the social impact must always be assessed and appropriate policy regulatory and financial measures taken to ensure that the future information society is as fair, human and as inclusive as possible.

18. ICTs that deliver up-to-date information applications, content and services obviously are most relevant for developed and developing countries alike. To achieve the needed enhanced domestic and international support for public sector ICT capabilities becomes a first-level policy priority for all stakeholders. Current financing levels have not been adequate so far to meet the needs of ICT-related capacity building. International donors, however, are seemingly re-directing their attention to both ICT policy and infrastructural developments and to mainstreaming connectivity activities for ICT and development.

III. Role of the ICT Task Force

19. As a recognized global instrument for placing ICT at the service of development, the ICT Task Force has grown in stature and influence since its inauguration in 2001. With the potential of ICT to enable the attainment of internationally agreed development goals becoming widely embraced, the Task Force occupies a key position to influence international norms, policies and practices through the work of its networks, working groups and members, and decisions by the whole.

20. The Task Force is not an operational, implementing, or funding agency, but provides a platform and focal point for establishing strategic direction, policy coherence and coordination, and advocacy in relation to the global ICT4D agenda. It has the mandate to help forge a strategic partnership between the United Nations system, private industry and other relevant stakeholders in putting ICT at the service of development. Meetings, in particular a series of global forums focused on key issues held over the last two years, bring together Task Force members with international development and ICT experts, policy makers, leading

private sector representatives and members of civil society and non-governmental organizations and provide a platform for sharing experiences, exchanging views, catalyzing new partnerships and building consensus in complex and politically sensitive policy areas.

21. The Task Force plan of action and mission statement were built on guidance contained in the United Nations Millennium Declaration, the Ministerial Declaration of the Economic and Social Council of 2000 and the recommendations contained in the report of the Secretary-General (E/2001/7). In 2003, members of the Task Force and its Bureau reviewed and assessed the experience acquired and the lessons learned in its first two years of operation. On the basis of these assessments, a Business Plan was developed to provide a rationalized framework to organize the activities of the Task Force with the primary objectives of linking ICT and internationally agreed development goals, including those contained in the Millennium Declaration; building multi-stakeholder partnerships; addressing ICT policy and governance; and contributing to the creation of an enabling environment for digital development.

22. The Task Force strives for efficiency, accountability, transparency and agility. It has built a global network of thematic working groups and regional nodes as platforms for the implementation of its Plan of Action and Business Plan and for addressing critical elements of the challenge of harnessing the potential of the ICT revolution for development. It has used an open, inclusive and decentralized approach to develop stakeholder campaigns and electronic outreach, utilizing its web site as well as networks composed of government policy makers and representatives of the private sector, foundations and NGOs. It also works in cooperation with other bodies active in the field of ICT-for-development.

23. In January 2004, the Secretary-General extended the mandate of the Task Force until the end of December 2005 in light of the role that it is playing in the follow-up to the Geneva phase of the World Summit on the Information Society and in the preparation for the Tunis phase (November 2005).

IV. Activities and accomplishments

24. The Business Plan defined five priority activity tracks under which the Task Force organized its work in 2004: benchmarking progress in the use of ICT for development, promoting a dialogue on Internet governance and other policy issues, promoting enabling environment, supporting ongoing partnerships, and strengthening supporting activities, especially fundraising.

Benchmarking progress in the use of ICT for development

25. While there are many examples of the positive transformational effects of information and communication technologies on development, debate is continuing regarding how and to what extent the application of ICT furthers the achievement of social goals and economic growth. A variety of tools already exist to monitor ICT readiness and use. Yet the challenge remains to

develop better tools to effectively measure and monitor the current and potential impact of ICT on development and to foster mechanisms to share these tools with the international development community

Working Party on ICT Indicators and MDG Mapping

26. Through its Working Party on ICT Indicators and MDG Mapping, led by Canada, the Task Force has continued to examine the impact of ICT in furthering efforts to achieve the MDGs. At the seventh meeting of the Task Force in November 2004, the Working Party presented a working paper, "Measuring, Monitoring and Analyzing ICT Impacts", that proposes a measurement framework, including qualitative and quantitative indicators, that would provide a basis for assessing the impact of ICT on the achievement of the MDGs. The paper also reviews a number of selected case studies illustrating how ICT have had a clear and important impact on four development areas: economic development, education, health and the environment. The review of the measurement methodologies used in each of these case studies will contribute to the development of impact indicators. The framework proposed in the paper will be further developed during 2005 and be part of the ICT Task Force contribution to key international events such as the High-level Plenary Meeting of the General Assembly (Millennium Summit +5) and the second phase of the WSIS.

27. The Working Party has joined the Partnership on Measuring ICT for Development formed under the leadership of UNCTAD to work toward defining and collecting a set of common ICT indicators and assisting developing countries in their efforts to produce Information Society statistics. The partnership, which includes key stakeholders involved in the statistical measurement of ICT, such as ITU, OECD, UNCTAD, UNESCO Institute for Statistics, UNECA, UNECLAC, UNESCAP, UNESCWA and the World Bank, provides an open framework for coordinating ongoing and future activities, and for developing a coherent and structured approach to advancing the development of ICT indicators globally, and in particular in the developing countries. The Working Party is contributing to the work of the Partnership by, in particular, promoting the list of ICT indicators that is being developed and by examining more closely which of the indicators are most relevant to developing countries and could be used to measure progress in achieving the MDGs.

28. In February 2005, the Partnership on Measuring ICT for Development organized a WSIS Thematic Meeting on Measuring the Information Society in Geneva. The meeting, co-sponsored by the ICT Task Force, addressed the subject of the statistical measurement of the Information Society, including a core list of ICT indicators that could be harmonized at the international level and that all countries might consider collecting; the needs of national statistical offices in developing countries as regards technical assistance in the compilation of ICT indicators; and mechanisms to measure impact and to quantify the relevance and contribution of ICT towards advancing development and achieving the MDGs.

Contribution to the work of Task Force 10 of the Millennium Project

29. Building on the efforts of the Working Party, the UN ICT Task Force was invited to contribute to the work of the UN Millennium Project Task Force on Science and Technology for Development, as part of the United Nations review on progress toward the attainment of the MDGs. The Task Force contributed both an ICT chapter within the general report "Innovation: Applying Knowledge for Development" as well as a comprehensive sub-report "Innovation & Investment: Information and Communication Technologies and the Millennium Development Goals"[2] in support of the Millennium Project. The work asserts that despite the obvious benefits to economic growth, including pro-poor growth, of the global explosion in ICT supply and demand, it is as a generic platform technology and enabler for the achievement of development goals that ICT will most profoundly impact the MDGs, within a broad and integrated development approach, rather than simply as a stand-alone production sector.

Promoting a dialogue on Internet governance and other policy issues

30. The first phase of the World Summit on the Information Society (WSIS) agreed to pursue a dialogue on Internet governance in the Declaration of Principles and Action Plan adopted in December 2003, with a view to preparing the ground for a decision at the second phase of the WSIS in Tunis in November 2005. The ICT Task Force made use of its position as a truly multi-stakeholder forum to engage relevant actors in exchange of viewpoints on this sensitive issue in order to contribute to the international discussion, help create a foundation for a meaningful and consensual debate and make a tangible contribution to the second phase of the WSIS in Tunis. The Task Force has also made concerted effort to strengthen capacity of and promote dialogue among policy-makers at municipal and other sub-national levels.

Global Forum on Internet Governance

31. The Global Forum on Internet Governance, held in conjunction with the Sixth Meeting of the UN ICT Task Force on 25-27 March 2004 was opened by the United Nations Secretary-General. The Forum was conceived as a contribution to a process of consultations that would lead to the establishment of a working group on Internet governance, as requested by the Geneva phase of the WSIS.

32. The Forum attracted participation of more than 300 representatives of all stakeholders, including leaders of the Internet community. Despite the diversity of views expressed by various stakeholders, the forum fostered a climate of confidence and trust and a willingness to seek creative solutions to the complex issues of Internet governance.

33. The results of the meeting were fed to the Working Group on Internet Governance. As an outcome of the Global Forum on Internet Governance and a contribution to the WGIG, a book entitled *Internet Governance: A Grand Collaboration* was published and widely circulated. The collection of papers contributed to the Global Forum reveals emerging commonalities in views on Internet governance, including recognition of the need for a multi-stakeholder

[2] Available online at http://www.unicttaskforce.org/perl/documents.pl?id=1519

approach to preserve the stability and utility of the Internet and to engage developing countries so that they can participate effectively in the governance process.

African Online Discussion Forum on Internet Governance

34. The Economic Commission for Africa (UNECA) in collaboration with the UN ICT Task Force organized an online discussion forum on Internet governance in March 2004 to promote debate on Internet governance issues from an African perspective and within the framework of the African Information Society Initiative (AISI), aiming at ensuring meaningful and effective participation of African countries in this process. Policy makers as well as a broad range of AISI stakeholders interacted and exchanged views on the challenges of the global Internet and ICT governance in Africa, not only from a technical perspective, but also in ethical, societal and legal contexts. The discussion and recommendations focused on the global dimension, the African context and the WSIS process.

Internet Governance Analysis

35. During the Global Forum on Internet Governance, the ICT Task Force was requested to undertake a study to map the current status of governance, identifying the issues, institutional responsibilities and gaps. Research was conducted by the Internet Governance Project (IGP), an interdisciplinary consortium of academics at Syracuse University, Georgia Institute of Technology, and Institut für Politikwissenschaft der Universität Zürich. The final report, "Internet Governance: The State of Play", was presented to the WGIG.[3]

36. The paper's key recommendations included a proposed definition of Internet governance, suggestions on the adoption of a normative end-to-end principle to govern internetworking, and conclusions on the need to find a foundation of legitimacy for non-state actors in governance. The paper also summarized the state of agreements, disagreements and gaps in issue areas and charted organizational involvement by issue area.

Regional Meetings on Internet Governance

37. Following its Global Forum, the Task Force continued to promote the international debate of this important issue by organizing, in cooperation with its Regional Networks, regional workshops on Internet governance in Shanghai (China), Cuzco (Peru), Port of Spain (Trinidad & Tobago) and Accra (Ghana). The outcomes of each of the meetings were presented to the WGIG.

Asia/Pacific

38. The Asia and Pacific Regional Meeting on Internet Governance, co-sponsored by the UN ICT Task Force and the Ministry of Science and Technology of the People's Republic of China and

[3] Available online at http://www.unicttaskforce.org/perl/documents.pl?id=1389

organized by the Asia Regional Network Secretariat of the UN ICT Task Force, was held on 21 May 2004. Its objectives were to further discuss the challenges and solutions in the process of implementing the WSIS decision and action plan, and to bring together experts, practitioners and private sector representatives from the region and the world. The meeting was an important parallel session for the 4th Annual Forum on City Informatization in the Asia-Pacific Region (CIAPR IV) (see paragraph 43 below).

Latin America

39. The Latin American Forum on the Information Society, held in Cuzco from 13-15 October 2004, was organized by the ICT Task Force Latin American and Caribbean Regional Network (LACNET), ICANN-at-Large and the NGO Alfa-Redi. Approximately fifty ICT practitioners and country representatives from Latin American countries came together to formulate common positions and stakeholder interests regarding Internet governance and other issues. Participants discussed the role of Internet governance as a core part of governance in the Global Information Society and a possible roadmap of discussions toward Tunis. Special emphasis was given to areas that require international articulation and/or regulation. The meeting included a pre-event tutorial on Internet governance presented by ICANN. The meeting concluded with the proposal to create a Latin American and Caribbean working group to report to the WGIG in order to provide the regional point of view on the subject of Internet governance.

Caribbean

40. The Caribbean Forum on the Information Society (CFIS), held 26-27 October 2004 in Port-of-Spain, was convened by LACNET and the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) as part of the preparation process for the WSIS. Approximately seventy ICT practitioners and country representatives, all from CDCC Member Countries, came together with the objectives of building the inclusion of the UN/CDCC Member countries and their vital constituents in the WSIS, addressing lessons and opportunities of specific ICT experiences in the CDCC Member States, building partnerships for the Caribbean Information Society and advancing proposals for Internet governance. The meeting discussed, in depth, a common definition of Internet governance and the social and economic aspects. Participants also addressed the importance of multilateral cooperation under the United Nations framework, the provision of universal access to a stable and secure Internet system, the protection of intellectual property rights and the creation of wealth, the provision of affordable access to broadband capacity and capability, and the establishment of transparent and democratic procedures with full involvement of government, private sector and civil society.

Africa

41. The UN ICT Task Force together with UNECA, Industry Canada and the Organisation Internationale de la Francophonie (OIF) organized a workshop on Internet governance to provide African stakeholders with a forum to learn, comment and provide input into the official African position on the subject. The workshop was organized as a pre-event to the African regional preparatory meeting to the second phase of the WSIS in Accra on 28-29 January 2005, providing an opportunity for IT engineers, ICT experts and representatives from governments, private sector, civil society, academia, and regional and international organizations to exchange views and visions on the technical, ethical, societal and legal dimensions of the global Internet governance with a particular focus on its implication to Africa.

42. The workshop focused on different aspects of the Internet governance debate such as its relationship to the WSIS, public policy issues, Internet resource management and Africa's role in the creation of Internet governance policies. The workshop clearly showed the need for capacity-building and awareness raising in Africa regarding the issues related to Internet governance. The outcomes of the meeting fed into the plenary session of the Regional Conference for WSIS as well as into the activities of the WGIG.

City Informatization in the Asia-Pacific Region

43. The 4th Annual Forum on City Informatization in the Asia-Pacific Region (CIAPR IV) was held on 20-22 May 2004 in Shanghai, China. The Forum has been initiated by the Shanghai Municipal People's Government and the United Nations Department of Economic and Social Affairs. CIAPR is co-sponsored by the United Nations Development Programme, the International Telecommunication Union, the United Nations Information and Communication Technologies Task Force and the Chinese Government, including: the State Council Informatization Office, the Ministry of Science and Technology, the Ministry of Information Industry, the Ministry of Commerce as well as the Chinese Academy of Sciences.

44. Three main themes addressed were e-governance, e-technology, and e-application (China's ICT strategy for development and its use). A number of additional events were organized around the meeting. Working sessions, including on e-government, city informatization in the Yangtze Delta, and a Workshop for Assessment Index on City Informatization, as well as the ICT Task Force's Regional Meeting on Internet governance took advantage of the gathering of worldwide ICT stakeholders. A Shanghai International Informatization Expo on ICT for Development was also organized.

Municipal Policy Making on ICT4D - Wireless Internet Institute

45. The Wireless Internet Institute (W2i) and the UN ICT Task Force have developed the Global Municipal Government and Local Authorities Series to accelerate the adoption of broadband wireless Internet in municipalities and underserved urban populations around the world. Undertaken in partnership with industry leaders such as IBM and Intel, and international development organizations such as UNITAR and the Inter-American Development Bank, the

Series aims to raise awareness about opportunities for local government to build high-capacity wireless communications infrastructure in support of municipal economic, social and educational development. Three conferences were held within the period covered by this report: Wireless Internet and Municipal Public Safety (USA, June 2004); Wireless Internet and Municipal Government in Latin America: The Mexican experience (Mexico, September 2004); and Wireless Internet and Municipal Government in Latin America: The Brazilian Experience (Brazil, February 2005).

The Global ePolicy Resource Network (ePol-NET)

46. The Global ePolicy Resource Network (ePol-NET)[4] provides a focal point for global efforts in support of national e-strategies for development. The network provides ICT policymakers in developing countries with the depth and quality of information needed to develop effective national e-policies and e-strategies. The ICT Task Force Working Group on National and Regional e-Strategies has supported ePol-NET's efforts since its launch at the WSIS in December 2003. In 2004, 3Pol-NET has been active in building capacity in particular amongst policy makers in Africa.

C. Promoting enabling environment

47. The ICT Task Force Business Plan underlines the decisive role of an enabling environment for the emergence of a global development-oriented Information Society. The creation of an enabling environment for ICT-driven development relies on establishing a legal and policy framework that encourages investment, innovation and entrepreneurship as well as promotes the realization of its benefits throughout society. As identified by the Task Force, the ideal framework for maximizing the contribution of ICT to development consists of a set of public policies that operate at several levels: first, the development of national strategies at the macro-policy level, which favour the development and deployment of ICTs in pursuit of social and economic development goals; secondly, economic strategies that involve the design, development and implementation of effective policies toward ICT in such areas as telecommunications policy and regulation, spectrum management and electronic commerce; and, finally, accurate measurement and benchmarking in order to assess the effectiveness of implementation of policy objectives in relation to development goals and targets.

48. Among the priority areas for action contained in the third track of the Business Plan is the promotion of regulatory regimes conducive to the elimination of barriers to competition and encouraging investments in communications infrastructure, and support for the development of comprehensive and sustainable ICT-for-development policies and national e-strategies. The Task Force has made consistent efforts to bring the issue of an enabling environment to the attention of world leaders and help strengthen coherence in the development and implementation of concrete measures to shape the kind of enabling environment necessary for

[4] See http://www.epol-net.org/ and http://www.epolafrica.org.

attracting investments and stimulating the development of applications in various sectors such as education, health, e-government and e-commerce.

Enabling Environment Expert Meeting

49. Bringing together a group of ICT4D experts representing governments, the private sector, civil society and intergovernmental organizations, the Task Force convened a special meeting on an Enabling Environment on 27 May 2004 at United Nations Headquarters in New York. This meeting explored modalities and partnerships for implementing an integrated programme to promote and support an enabling environment for the emergence of a global, development-oriented Information Society. This meeting and the subsequent output formed the basis for the Task Force's November 2004 Global Forum on the subject

Global Forum on Enabling Environment

50. The Global Forum on Promoting Enabling Environment for Digital Development and the Seventh Meeting of the ICT Task Force took place on 19-20 November 2004and was hosted by the German Government in Berlin. The Forum aimed at raising awareness about issues concerning policy, financing and partnerships for the creation of an enabling environment. The Forum attracted the participation of more than 250 representatives of all stakeholders, including senior officials of governments of a number of developed and developing countries, executives from the private sector, and prominent representatives of the ICT-for-development community, civil society and academia.

51. At the core of the meeting were two substantive sessions, the first on policy and regulatory issues, including low-cost access, promotion of competition and market development and institution and capacity building, and the second on financing ICT for development, which included a presentation of the work of the Task Force on Financing Mechanisms by UNDP. Break-out sessions explored in more depth policy and regulatory issues, new models for financing ICT4D, and promoting private sector investment and entrepreneurship.

52. In the intensive two-day discussion, there was strong agreement that all stakeholders have a role in the creation of an enabling environment. Particular emphasis was placed on the responsibility of governments and independent regulatory bodies to produce policy and regulatory environments conducive to the propagation of ICT4D applications and to attracting investment, and of the private sector to provide infrastructure, devices and content targeted at the needs of people. Participants stressed the need to measure, benchmark and share information on successful policies in creating an environment that would lead to an inclusive, people-centered and development-oriented Information Society. On financing, opinions diverged over whether there was a need for new resources or existing resources used more effectively would adequately fund ICT4D. A number of proposals were presented on potential revenue streams, including the creation of various funds, taxes and other innovative models.

53. As an outcome of the Global Forum on Enabling Environment, the Task Force published the sixth volume in its series, entitled *Creating an Enabling Environment: Toward the Millennium Development Goals.* The book contains key presentations and contributions which address policy and regulatory issues, identify areas and modalities for engaging stakeholders in innovative partnerships, outline models and modalities conducive to the elimination of existing barriers to infrastructure and services diffusion, and evaluate the adequacy of existing financial mechanisms to meet the challenges of ICT for development.

Open Access Workshop

54. Recognizing that access is essential to bringing the benefits of the information age to all, the Working Group on Low Cost Access and Connectivity organized, in partnership with Sida and the Kista-IT University, a second international workshop on Open Access which aimed to identify successful solutions and standards for access networks promoting open universal access on a very practical level, as well as sustainable business models for operation and maintenance of such networks, which could be disseminated as best practices. The workshop was held in Stockholm in May 2004 and focused on access issues related to health, education and entrepreneurship. It was attended by over 50 members of governments, civil society organizations and the private sector.

Development Cooperation Workshop

55. The Task Force co-sponsored a two-day conference and workshop on "ICT – a Tool for Poverty Reduction? – Challenges for Development Cooperation", held in Uppsala in September 2004. The conference was arranged by the Uppsala, Sida and ideal/ICT4Africa, with the support of Swedish Development Forum (FuF), the British Council, Kista-IT University and the United Nations ICT Task Force. The conference focused on ICT possibilities and challenges for development in poor countries, with a special focus on access: access in schools and urban slums, access for women, and a possible access for all.

D. Building Partnerships

56. Partnerships, and the synergies they can produce, are at the core of the Task Force's mandate. Throughout 2004, the ICT Task Force has strengthened existing relationships and built new ones. Memorandums of Understanding on cooperation were signed with UNITAR, the AllAfrica Foundation, the World Summit Award, The Stockholm Challenge Award and The World Federation of Scientists.

57. At the same time, the Task Force, its Working Groups and Regional Nodes continued to support its long-term partners in a number of successful ongoing activities and events.

The Global e-Schools and Communities Initiative

58. The Global e-Schools and Communities Initiative (GeSCI) was launched in December 2003 in Geneva at the World Summit on the Information Society. Originally a joint project of the Working Group on Human Resource Development and Capacity Building and the Working Group on Low-cost Connectivity and Access of the Task Force, GeSCI is now supported by an independent secretariat headquartered in Dublin, Ireland. At the core of this partnership are the four founding countries – Canada, Ireland, Sweden and Switzerland – along with a number of private sector organizations and international donor agencies.

59. GeSCI works at local, national and international levels to support developing countries as they create and implement strategies to harness ICT for education and community growth. Using a multi-stakeholder approach, GeSCI focuses on delivery, offering project development and management, strategic support, facilities and resource mobilisation, and implementation in partnership with a wide variety of stakeholders, including governments of developing countries, non-governmental groups, academics and private sector companies.

60. Since the Initiative was founded, workshops have been held in Namibia and Ghana to assess the work required in each country so that a comprehensive e-schools strategy can be established in the near future. Studies have been launched in India to identify states that are most suitable to develop such work. Research is being conducted to identify an appropriate region within Central America and the Caribbean for GeSCI to focus its work.

Contribution to the development of an ICT Strategy for the United Nations System

61. In order to take advantage of the unprecedented opportunities that ICT offer for system-wide knowledge creation and management, the UN ICT Task Force, in collaboration with the secretariat of the Chief Executives Board of the United Nations system for Coordination (CEB) and the IT Managers Network, has embarked on a collaborative effort to develop an ICT Strategy for the United Nations system. Task Force members have participated in periodic meetings and have prepared a number of papers containing expert advice and recommendations. Through its contributions, the Task Force helped formulate a comprehensive set of actions and deliverables that would contribute to improved UN organizational and management practices.

Policy Awareness and Training in Information Technology Series

62. Organized by the ICT Task Force and UNITAR in collaboration with Intel, the Policy Awareness and Training in Information Technology series (PATIT) continued in 2004 to enable diplomats to the United Nations in New York and in other countries to acquire specific computer skills and be exposed to workings of the Internet; to raise awareness and understanding of policy and security issues related to the information society among diplomats and policy makers; and to help provide input into preparation for the World Summit for Information Society by exposing Member State delegates and officials in capitals to technologies that are discussed in WSIS.

63. In 2004, four cycles of the five-module certificate programme were conducted, with 67 workshops delivered and 130 participants from 88 countries trained. Of those, 86% were from developing countries and 40% were Ambassadors or senior delegates. Around 240 participants attended the three open High-level seminars that were held in 2004 which covered a variety of subjects of concern to policy-makers, including information security, e-health, e-government, distance learning and free and open source software (FOSS).

64. Over 100 participants in 10 different ministries (including foreign affairs, finance, industry, ICTs and justice) from 35 developing countries were accepted into the year-long Global eLearning (GeL) programme for senior policy makers in capitals.

Wireless Internet Institute Series

65. In 2004, the Wireless Internet Institute and the ICT Task Force continued the series of multi-year programmes aimed at accelerating the adoption of wireless Internet in support of universal connectivity.

66. The objectives of the programmes are: accelerating dissemination of information on wireless Internet benefits as countries move from discovery phase to experimentation to full deployment in local communities; supporting best practices sharing among field practitioners and regulators and building a comprehensive knowledge base; fostering a dialogue among local wireless Internet stakeholders with high-visibility conferences in key regions; and providing comprehensive contribution to WSIS in Tunis in November 2005.

67. Groundwork for the National Regulators Capacity-Building Series was laid in 2004 and will begin in 2005. In addition to the three meetings held in the Global Municipal Government and Local Authority Series (see paragraph 45 above), W2i, the ICT Task Force and other partners organized a conference on “Jumpstarting Broadband Internet Infrastructure with Wireless Technologies” in conjunction with the World Economic Forum meetings in Amman, Jordan in May 2004.

International Council for Caring Communities

68. The Task Force continued its collaboration with the International Council for Caring Communities (ICCC), sponsoring the conference “Age of Connectivity: Harnessing the Generations” held in New York on 11 February 2004. The Conference's purpose was to build bridges and develop projects, services and products that support the needs of people of all ages. The programme examined the role of ICT in influencing the quality of life of older persons in the world. It fostered a framework of how to think about ICT as an agent of change and offered a quality blueprint for an enriched “Society for All Ages”.

69. On 11 February 2005, the ICCC organized in New York a conference “Caring Communities for the 21st century: Imagining the Possible”. The conference was part of a series of

interlinked conferences addressing the “Age of Longevity” organized by ICCC and the ICT Task Force in coordination with the UN Human Settlements Programme (UN-HABITAT), the United Nations Focal Point on Ageing, the Department of Public Information, NGOs, and the private sector. The conference was organized in support of the United Nations Commission for Social Development. The conference addressed, among other issues, how to utilize opportunities to expand work, education, health care and other personal growth/sharing experiences via new pathways and opportunities opening up along the digital highway. The conclusions of these conferences will contribute to preparations for the Tunis phase of the WSIS.

E. Fundraising

70. As the ICT Task Force is funded through voluntary contributions, fundraising has been an important activity since its founding. In the period covered by this report, the following organizations contributed to the budget: Canada/CIDA, Cisneros Group, Finland, Nokia Corporation, STMicroelectronics, Sweden, Switzerland, Talal Abu-Ghazaleh Organisation, UNESCO and the World Economic Forum. However, the financial position of the Task Force remains constrained.

V. Assessment and the way forward

71. At their meetings, Task Force Members have identified and discussed achievements and challenges with a view to improving working methods and impact of the Task Force. It was agreed that many elements have contributed to the prominence and influence the Task Force has achieved since its launch in November 2001. The Task Force fills a recognized need for a truly global policy forum and platform for multi-stakeholder interaction and consensus building on ways and means to harness the potential of ICT for servicing and advancing development, especially poverty reduction. The Task Force helps promote cross-sector dialogues on key policy concerns and issues, linking the ICT and development agendas in the WSIS and other forums. It enjoys a unique legitimacy and universality as an inclusive body endorsed by all Member States that meaningfully engages all relevant stakeholders. Special patronage of the Secretary-General, direct link to the Economic and Social Council (ECOSOC) and participation of key United Nations agencies provide global visibility and attract active high-level and expert participation. The decentralized structure of thematic Working Groups and Regional Networks has achieved global reach by gaining access to and providing an outlet for (sub-) regional needs and concerns, and provides a platform for presentation of views and perspectives of under-represented constituencies. The Task Force has also been successful in facilitating partnership and synergy between the different groups. It has been able to function in a cost-effective, flexible and relatively non-bureaucratic manner with light Secretariat support by joining with interested partners in undertaking its activities.

72. The Task Force will face several challenges in the final year of its mandate. It must maintain the engagement of its Membership and sustain the energy and interest necessary to contribute substantially to the Millennium Summit +5 and to Phase II of WSIS at Tunis. The

effectiveness of the Task Force in reaching its goals is also contingent on the continued involvement of partners, especially governments, key institutions and other actors engaged in ICT4D activities.

73. Funding, based on voluntary contributions, remains a challenge. Implementation of agreed plans of the Task Force is sometimes impeded by unpredictability of incoming resource flow. In addition, there has been a persistent uneven distribution of the financial burden of supporting the activities of the Task Force among members.

74. In 2005 the Millennium Summit +5 and the second phase of the WSIS provide a unique opportunity for mainstreaming ICT into the broader development agenda. A programme of reform and renewal of the United Nations also provides a chance for the Task Force to perform its mandate of providing advice to the Secretary-General on the ICT matters, in particular on effective integration of ICT into UN processes to help achieve greater efficiency and effectiveness.

75. In July 2004, the Secretary-General communicated his support of a proposal of the Chairman of the UN ICT Task Force that a broad-based global alliance for ICT and development be launched to build upon the work of the Task Force after the conclusion of its mandate. The Task Force has undertaken extensive consultations to fulfill this request. Preliminary consultations launched after the Berlin meeting of the Task Force in November 2004 have identified the need for an open, multi-stakeholder platform linked to the United Nations and working under the patronage of the Secretary-General and the auspices of the ECOSOC, that would build on the work of and cooperate with existing institutions and networks by enhancing multi-stakeholder, cross-cutting and cross-sectoral dialogue on global ICT4D and Information Society issues. An alliance would build on the experience and strengths of previous initiatives, including the DOT Force and the ICT Task Force, and sustain and strengthen the global and regional networks that have been created.

VI. Conclusion: Making the attainment of the MDGs possible

76. The digital divide between rich and poor countries is an effect not a cause. It is largely a reflection of deeper more fundamental divides in economic opportunity, health, education and empowerment. For champions of ICT4D, a key objective in recent years has been to mainstream information and communication technologies into development. This has involved articulating the role of ICT in the development portfolio, attempting to achieve the right balance of analytical and qualitative arguments, and linking into the existing vocabulary of development in the areas of poverty, health, education, gender and environment.

77. Since the Millennium Summit in 2000, development activities have been increasingly viewed through the lens of the MDGs. And, in the context of the MDGs, ICT are no longer seen as ends in themselves but rather, increasingly, as critical enablers in the development process. In

essence, with the strategic, intensive, widespread and innovative use of ICT in development policies and programs, the ambitious agenda of the MDGs becomes much more possible to realize.

78. After years of experimentation on ICT in often standalone, frequently unsustainable pilot projects, attention is now being drawn to the need to leverage ICT for poverty reduction strategies and the MDGs through a focus on integration, scaling and replication. From experience it is clear that ICT and technology "push" projects have generally been ill-suited to fulfilling the requirements of the MDGs. Rather, "pulling" ICT into development projects where appropriate and relevant at an early stage – often with a mix of traditional and new media and achieved via multi-stakeholder partnerships – to achieve greater efficiency and service delivery will have far greater poverty impact.

79. The fact that the unique characteristics of ICT, if conceived as means and not ends, can, in theory, act as powerful development enabler does not mean that it will necessarily do so. In order for ICT to positively foster development goals, they must be employed where relevant, appropriate and effective, as part of a truly integrated and multi-stakeholder development approach. Strategic alliances between government, business, civil society and international organizations are a growing feature of both developed and emerging economies. Such multi-stakeholder partnerships (MSPs) are necessary because it is increasingly clear that no one sector in society can deliver the complexities of sustainable human development alone.

80. With vision and leadership from all relevant players in the ICT community – whether government, business, civil society, academia or international organizations – these objectives can be achieved. The United Nations system, in particular, must embrace elements of a coherent approach comprising: MDG-focused e-strategies and their integration in national development strategies; policy and regulatory reform; multi-stakeholder partnerships; pro-poor business models; connectivity, capacity-building and content; participation in ICT policy governance mechanisms; and financial mechanisms.

81. The emerging consensus is that ICT-for-development policies and programs must to a great extent be understood as subordinate to, and in the service of, the MDGs. The measurement of success for ICT policies and programs is not an increase in basic access to ICT – not mere statistics – but the impact of those ICT on progress toward the achievement of the MDGs. For the moment, mainstreaming ICT for the achievement of the MDGs remains very much work in progress.