

Digital Opportunities for All: Meeting the Challenge

Report of the Digital Opportunity Task Force
(*DOT Force*)

*including a proposal for
a Genoa Plan of Action*

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Foreword

This report is the result of a unique international collaboration. The Digital Opportunity Task Force (DOT Force), created by the G8 Heads of State at their Kyushu-Okinawa Summit in July 2000, brought together forty three teams from government, the private sector, non-profit organizations, and international organizations, representing both developed and developing countries, in a cooperative effort to identify ways in which the digital revolution can benefit all the world's people, especially the poorest and most marginalized groups. The "digital divide" is threatening to exacerbate the existing social and economic inequalities between countries and communities, so the potential costs of inaction are greater than ever before.

Over several months, through a rich and unprecedented mix of plenary meetings, informal consultations, meetings with stakeholders, and electronic outreach to broader audiences across the world, the DOT Force has examined in depth the challenge of bridging the digital divide and harnessing the power of information and communications technologies (ICT) and global networks to assure opportunity, empowerment and inclusion for all. The DOT Force has analyzed the underlying causes of the digital divide, the poverty-reducing and empowering potential of new technologies, and the complex mix of strategies, policies, investments, and actions required to create digital opportunities for all while addressing key development imperatives.

It has charted the relative roles and responsibilities of various actors - national governments, the private sector, non-profit organizations and community groups, international organizations, and individual citizens - in creating digital opportunities for all. It has mapped the interdependence among these actors and the challenges facing them, and the need for novel forms of partnership and cooperation among them in the creation of a multi-stakeholder "development dynamic".

The DOT Force concluded that, when wisely applied, ICT offer enormous opportunities to narrow social and economic inequalities and support sustainable local wealth creation, and thus help to achieve the broader development goals that the international community has set. ICT cannot of course act as a panacea for all development problems, but by dramatically improving communication and exchange of information, they can create powerful social and economic networks, which in turn provide the basis for major advances in development.

By enabling these new networks to collect and share local knowledge and information, ICT can provide new and more efficient methods of production, bring previously unattainable markets within the reach of local producers, improve the delivery of government services, and increase access to basic social goods and services. There need therefore be no trade-off between investment in ICT and the achievement of development objectives.

ICT can thus help to ignite a virtuous circle of sustainable development. But misapplied, they can result in marginalisation of the poor and the unconnected. In order for their development potential to be realised, all stakeholders – governments and their citizens, business, international organizations, civil society groups and individuals – need to work together towards achieving real change. As with all other development challenges, ownership by developing countries themselves and other relevant stakeholders will be indispensable.

Ensuring the participation of local communities is essential if ICT development is to flourish on a global scale and the fruits of the networked economy and society are to be reaped by rich and poor alike. The establishment of administrative and economic systems based on predictable and transparent rules, most especially good governance, which promote free development of ICT, is the key to success. The DOT Force also recognizes that a rapid response to the so-called “digital divide” in accordance with the rapid pace of ICT innovation is essential, and reaffirms the need for a multi-faceted and multi-layered effort by all stakeholders.

Most importantly, the DOT Force has identified priority actions that must be taken - by national governments and their citizens, the international community, the private sector, non-profit and community organizations - in various forms of partnership, to make this opportunity a reality. The members of the DOT Force greatly appreciate the opportunity afforded by the G8 Leaders to build upon the foundation of the G8 Okinawa Charter on the Global Information Society. Under each of the priority areas identified in Okinawa, the DOT Force has identified detailed actions that should be taken:

- **Fostering Policy, Regulatory and Network Readiness** –through establishing and supporting both developing country and emerging economy *National eStrategies* including *eGovernment*, and universal participation in new international policy and technical issues raised by ICT and the Internet.
- **Improving Connectivity Increasing Access and Lowering Costs** – through establishing and supporting a range of targeted interventions as well as dedicated initiatives for the ICT inclusion of the Least Developed Countries.

- **Building Human Capacity** – through a range of targeted training, education, knowledge creation and sharing initiatives, as well as promote ICT for healthcare and in support against HIV/AIDS and other infectious and communicable diseases.
- **Encouraging Participation in Global e-Commerce and other e-Networks** – through enterprise and entrepreneurship for sustainable economic development, including poverty alleviation, and promote national and international effort to support the creation of local content and applications.

The members of the DOT Force are convinced that the basic right of access to knowledge and information is a prerequisite for modern human development. ICT must be embraced wholeheartedly by the broad development community at the earliest opportunity. Specifically, this will mean fully integrating ICT in G-8 and other donor development assistance policies and programmes, as well as enhancing coordination of multilateral initiatives.

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Part One - The Challenge : Digital Opportunities for All

In recent years, major advances in information and communications technologies (ICT) combined with the rapid growth of global networks such as the Internet, have transformed businesses and markets, revolutionized learning and knowledge-sharing, generated global information flows, empowered citizens and communities in new ways that redefine governance, and created significant wealth and economic growth in many countries. This "*digital revolution*" has been made possible by the potent combination of dramatic increases in the power and versatility of technologies, at significantly lower costs with enormous creativity in the applications of these tools and networks in all aspects of the economy and society.

A historic moment

Despite recent turbulence in the so-called "new economy", it is undeniable that the world is in the midst of a set of profound changes that create enormous new opportunities, while posing equally daunting challenges. Precisely because the digital revolution has the power to transform production processes, commerce, government, education, citizen participation and all other aspects of our individual and collective lives, it can create substantial new forms of economic growth and social development. Therefore, access to, and effective use of the tools and networks of the new global economy, and the innovations they make possible, are critical to poverty reduction, increased social inclusion and the creation of a better life for all.

Yet, both within and between countries, access to these tools and networks, and thus to their transformative effects and the new "digital opportunities" they create, is extremely uneven, in ways that both reflect and exacerbate existing inequalities.

Defining the divide, identifying the opportunities

One third of the world population has never made a telephone call. Seventy percent of the world's poor live in rural and remote areas, where access to information and communications technologies, even to a telephone, is often scarce. Most of the information exchanged over global networks such as the Internet is in English, the language of less than ten percent of the world's population.

This "digital divide" is, in effect, a reflection of existing broader socio-economic inequalities and can be characterized by insufficient infrastructure, high cost of access, inappropriate or weak policy regimes, inefficiencies in the provision of telecommunication networks and services, lack of locally created content, and uneven ability to derive economic and social benefits from information-intensive activities.¹

¹ In its Human Development Report of 1998, UNDP stressed that some 109 million primary-school-age children (i.e. 22% of them worldwide) were out of school, 885 million adults (age 15 and above) were illiterate, and that 4 copies of daily newspapers were circulated per 100 people in developing countries, as opposed to 26 in industrial countries.

In several declarations adopted at the highest level - including the **UN Millennium Declaration** and in the commitments made to address the related **International Development Goals** - the international community has set by consensus a range of goals and political commitments to close some of the economic and social divides, for example halving the proportion of the world's population living on less than \$1 a day between 1990 and 2015.

The International Development Goals and Information and Communication Technologies

The international community has identified seven “International Development Goals” (IDGs) that are at the heart of the fight against poverty and the struggle to create opportunity, prosperity, health, safety and empowerment for all the world’s people, especially the poorest and traditionally marginalized groups. The 7 IDGs are:

- Reduce the proportion of people living in extreme poverty by half between 1990 and 2015
- Enroll all children in primary school by 2015
- Make progress toward gender equality and empowering women by eliminating gender disparities in primary and secondary education by 2005
- Reduce infant and child mortality rates by two-thirds between 1990 and 2015
- Reduce maternal mortality ratios by three-quarters between 1990 and 2015
- Provide access for all who need reproductive health services by 2015
- Implement national strategies for sustainable development by 2005 so as to reverse the loss of environmental resources by 2015

Harnessing the power of information and communication technologies (ICT) can contribute substantially to realizing *every one* of these goals; either directly (e.g through greater availability of health and reproductive information, training of medical personnel and teachers, giving opportunity and voice to women, expanding access to education and training) or indirectly (through creating new economic opportunities that lift individuals, communities and nations out of poverty.) Creating digital opportunities is not something that happens *after* addressing the “core” development challenges; it is a key component of addressing those challenges in the 21st century.

Although ICT are a potentially valuable tool in addressing these more fundamental divides, their contribution to development is not automatic. ICT, by themselves, might either widen or narrow these divides. Mitigating potentially negative impacts (e.g. decreased competitiveness of particular sectors and processes), integrating ICT into national development priorities, securing the public policy environment are crucial in assuring positive outcomes. There is also an urgent need to identify specific initiatives that will have the greatest development impact and genuinely improve the livelihoods of poor people.

Evidence from the experience of successful developed and developing countries suggests that putting in place the appropriate infrastructure and widely deploying ICT is a multi-sectoral and multi-stakeholder task. The right public policy environment will allow suitable initiatives by the public and private sectors, and by civil society organisations, individually or in partnership, to contribute to relevant development objectives.

In this context, a fundamental requirement for reducing the digital divide is for countries to give priority to the development of their communications infrastructure and to provide universal and affordable access to individuals and all geographic areas of their country. A pre-requisite for this is to put in place pro-competitive policies in the communications sector and a regulatory framework that will support such competition. This needs to be complemented by actions that address human capacity development, content and applications that facilitate ICT deployment.

In addition to steps taken by developing country stakeholders and their development partners to address the divide within the developing countries, there is also the need to address the international governance framework. Substantial governance decisions and policies are made daily by new and existing international bodies that have major implications for the way in which ICT and the Internet are and will be deployed. These decisions range from assuring open access across borders and protecting copyright in a digital era to how domain names are allocated. Developing country stakeholders are often the absent player during the formation of these policies, which leads to even more inequity and lack of special provisions that take the unique position of developing countries into account.

Making the Case for ICT in Development

A further critical policy challenge needs to be overcome. Decision-makers in some developing countries as well as in the international development community remain skeptical or unaware of the contribution that ICT can make to development. The experiences of successful countries and initiatives need to be shared and adapted to local needs. These indicate that in many areas, properly designed, adapted and implemented ICT solutions have significantly enhanced local efforts to improve the delivery of public and private goods and services through the automation, streamlining, rationalization and monitoring of repetitive tasks and improved tracking and monitoring in delivery. Corruption has been reduced and development stakeholders' actions have been made more transparent reducing leakages and cutting costs. ICT have also brought forward clear "development opportunities" through its direct use in addressing specific development goals such as health, education and the environment².

To the extent that ICT have facilitated, among other things, the breakdown of time and distance barriers and allowed remote communities and villages to be connected more directly (i.e. through less intermediaries) to the global economy they have allowed for a potentially deeper and more extensive division of labor. New market niches have been created as the existing structures have been redefined and new comparative advantages and opportunities have emerged. Developing countries can benefit from the creation of these new digital opportunities by proactively seeking them and deploying and using ICT on a wider scale either through the creation of a

² A convincing case can be made about the many successful ways in which ICT have already been used to achieve development goals. Although the point is not elaborated in this report, several DOT Force members, individually or collectively, have also produced substantial work in this area, e.g. in the context of the Digital Opportunity Initiative.

competitive ICT productive sector or via its intensive use within traditional sectors of their economies.

Role for the G-8 and other development stakeholders

Because of its genesis³, composition and philosophy, the G-8 initiated Digital Opportunity Task Force (DOT Force) has a specific responsibility and potential in pursuing the goal of Digital Opportunities for All. By offering a fresh vision of how to bridge the Digital Divide both within countries and between rich and poor countries, and by proposing innovative tools and processes to do this in a participatory fashion, the members of DOT Force call on the support and continued commitment of the leaders of the G-8 to initiate a broad range of local, regional and international initiatives to foster a development-supportive process of globalization.

Addressing the issue of the Digital Divide in an open and imaginative fashion could be instrumental in offering an action-oriented vision to all those who, in developed and developing countries, seek to make globalization work for the poor. If no action is taken at this specific point in time, we might never get another chance to build the “global bridges” required to address these critical issues.

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³ See Appendix.

Part Two - Meeting the Challenge through Concrete and Creative Action

Bridging the Digital Divide and turning Digital Opportunities into a development force is not an automatic process. As indicated before, coordinated action by all stakeholders is required. Such action should be both systemic (i.e. going beyond pilot projects and adopting instead comprehensive approaches) and of a “catalytic nature” (i.e. stimulating changes in attitudes, focus and policies). The main responsibility for relevant actions remains in the hands of developing country governments, enterprises and non-governmental organizations, working in tandem. However, the DOT Force can also play a critical and significant role by suggesting, initiating and/or supporting these actions. The challenge of “Digital Opportunities for All” can only be fully and successfully addressed through innovative multi-stakeholder partnerships and path-breaking integrated initiatives.

Thinking differently, acting cohesively

ICT are not just another sector of economic and social development. On the contrary, as mentioned before, the ICT revolution can provide powerful new tools both for addressing people’s basic needs and for enriching the lives of poor people and communities in unprecedented ways. However, most international discussions on development and the basic tenets of development assistance still do not adequately integrate ICT as a critical enabler for development. Development efforts will not realize their full potential if they remain limited to traditional approaches to development and international co-operation.

Fresh thinking and attitudes are required from all sides. Such thinking will need to be cognizant of the need for:

- holistic approaches with multi-stakeholder involvement
- leveraging linkages and partnerships into the global economy
- national ICT strategies which also permit bottom-up approaches
- taking advantage of new and emerging technologies
- new approaches to development assistance

Governments will have to establish the environment within which the new technologies can spread to their citizens, and enable co-operation with other components of civil society, in particular, business, non-profit organisations and local communities.

The private sector, already conscious of its role in building a sustainable business environment for its own prosperity as well as that of others, will need to explore the specific ways of achieving this in the context of development goals and ensure that responsible best practice is consistently maintained. This will apply as much to local

enterprises as to those operating in the global environment. But, most importantly, donor development agencies and the authorities of developing countries will have to work together to integrate the use of digital technologies into their thinking in ways that promote sustainable development.

Fundamentally, awareness must be encouraged among developing countries to help their governments to undertake the reforms necessary to ensure that pro-competitive policy and regulatory frameworks are in place to allow for the development of efficient and sustainable communication infrastructures and services. Such reforms should constitute the basis of overall national strategies to build and attract digital opportunities by inducing faster progress in the use of ICT and the development of a dynamic local ICT business sector. Efficiency gains flowing from these reforms will also improve the effectiveness and competitiveness of more traditional sectors and industries.

In achieving this, a two-tier approach is likely to yield the most fruitful results, combining sectoral initiatives carefully integrated within the context of an overall national ICT strategy or framework. Sector-specific applications of ICT can often contribute to specific development goals, for example in education and health. However, in order to capture the full potential contribution of ICT investment, a concerted strategy at the national level is needed which takes account of the dynamic interplay between infrastructure, human capital, policy, enterprise, and content development.

To make a difference, it is imperative to recognize the diversity of situations in the developing world, the variety of interests and concerns among stakeholders, and the dynamic nature of the world of ICT. Assessing, scaling and disseminating examples of successful implementations of ICT in developing countries will undoubtedly help in the pursuit of these objectives. Special efforts should aim at enhancing the level of connectivity among the poorest, women and children and less densely populated areas of the planet. The power of ICT to address gender issues cannot be underestimated and should be used to its full extent. Appropriate efforts in the direction of the Least Developed Countries should help diminish the overall level of digital inequality.

Making the best of the tools and experiences available

Cost-effective, country-differentiated and empowerment-oriented solutions are now available to combine the pursuit of a more equal access to information and knowledge with an acceleration in the fight against poverty on a global scale. Wherever and whenever such solutions have successfully been implemented, the international community should be encouraged to consider whether such success is (1) replicable (in the same country or region), (2) transportable (to other geographical, social and economic environments), and (3) scalable (within a country, a region or globally). In this respect, the dissemination and exchange of best practices is particularly

important. Moreover, local and international efforts should be stimulated and supported to identify, improve and disseminate new cost-effective and field-tested ways of accessing and exchanging information and knowledge.

A number of DOT Force members and others working on these challenges have developed frameworks for analyzing these challenges and constructing coherent strategies to address them. These strategies typically cover a range of complementary areas. When properly conceived and implemented, the complementary interaction between strategic interventions in several key areas- policy and regulatory frameworks, human capital, infrastructure and access, entrepreneurship/enterprise development, and local content/application development --has the potential to create powerful synergies, resulting in significant multiplier and network effects . These can in turn generate an upward spiral of sustainable social and economic development.

Who does what ?

The need for clear strategies to manage the complexity of the challenge of creating digital opportunities for all points to a fundamental fact: the most important, and in many cases most difficult, decisions and actions will have to be taken by nations and communities themselves, to create the environment, mobilize the consensus, and set the priorities that will shape each nation's path to digital opportunity. At the same time, the international community in its various guises - governments, private sector, non-profit sector, international organizations - can and must play a critical role, mobilizing resources, building partnerships, increasing coordination, extending markets, sharing innovations.

The Digital Opportunity Task Force, itself structured in a way that affirms the importance of these multidimensional partnerships, calls for an enhanced and coordinated global effort to build digital opportunity for all, to extend the power and promise of the digital revolution to all parts of the globe and all segments of society, to help the poorest help themselves to create richer and fuller lives that express and affirm their own distinctiveness in an increasingly interconnected global village.

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Part Three - The way forward : proposed Genoa Plan of Action

In the light of the considerations presented above, some priority actions can be identified. In the spirit of the Okinawa Charter, and as a way to move from statements to real results, we have identified nine action points, which constitute our proposal for a Genoa Plan of Action. We believe that in the context of an increasingly integrated world economy the following Plan of Action provides the basis for developing economies to achieve sustainable ICT-enabled development, both economic and social.

Action Point 1 **Help Establish and Support Developing Country & Emerging Economy National *eStrategies***

- a) As a powerful tool to pursue development goals, national *eStrategies* need to receive the highest level of national political commitment and meet the requirements of each country. These strategies, generated by the countries themselves, should be the result of a consultative process involving all relevant interested parties in the country, including the private sector and non-profit organizations (NPOs). Such *eStrategies* should be regularly reviewed and updated, and benchmarked internationally; they should, where appropriate, be reinforced by regional and sub-regional coordination efforts, notably in the context of economic integration;
- b) These *eStrategies* should commit, in particular, to the establishment of an enabling, pro-competitive regulatory and policy framework as well as the associated institutional policy-making and regulatory capacity, including self-regulatory mechanisms; they should also be explicitly linked to the achievement of development goals;
- c) Countries that express an interest should be supported in the development of such *eStrategies* which would include, if requested, assistance in performing a preliminary *eReadiness* assessment;

- d) *eStrategies* should distinguish and recognize the importance of *eGovernment* for internal efficiency and effectiveness within government, as well as of *eGovernance* for institutional capacity building, transparency, accountability and its ability to enhance democratic governance;
- e) Within 6 months of the Genoa G8 Summit, structure and composition should be finalized for the establishment of an ***International eDevelopment Resource Network*** of regulatory, policy and strategy expertise from both North and South, set up with participation of interested governments world-wide, international organizations, the private sector, and the NPO community, that can be drawn upon by governments and others who want access to quality and affordable expertise in the development, implementation and maintenance of *eStrategies*;
- f) Interested stakeholders, including governments, the private sector, NPOs, and international organizations would support such an ***International eDevelopment Resource Network***, mobilize available resources and offer regulatory and policy expertise to support the network's creation and functioning;
- g) The ***International eDevelopment Resource Network*** should be designed and operated in a truly de-centralized and open fashion, and include the creation or use of existing regional networks and conferences, virtual information exchanges and other means of sharing the knowledge, lessons and experience likely to increase awareness, understanding and political commitment in this area.

Action Point 2 **Improve Connectivity, Increase Access and Lower Costs**

- a) Multiple technologies should be allowed to compete for communications networks and services and access terminals. Awareness of the cost-effectiveness of various technologies for use in diverse situations facing developing countries should be promoted by exchanging relevant experiences and expertise;
- b) The establishment of public and community ICT access points in developing countries should be supported as a key means to facilitate timely, broad, affordable and sustainable access to ICT; for this purpose facilities such as post offices, elementary schools, Internet cafés or community multimedia centers could be used; emphasis should be placed on providing both access and training;

- c) Exchanges of best practices and training in public and community access points should be facilitated through a coordinated interchange of information and experiences among the managers or promoters of such facilities;
- d) Approaches to promote universal access for rural and remote areas in developing countries should be pursued, in accordance with national *eStrategies* and on the basis of existing best practices;
- e) R&D efforts for the development and adaptation of cost-effective technologies suitable for conditions prevailing in developing countries (tropicalisation, alternative energy sources) should be encouraged;
- f) The deployment of national and regional Internet backbones and the creation of local Internet Exchange Points (IXPs), should be encouraged, especially through private investment; the development of national network information centers (NICs) and infrastructure support for domain name services should also be encouraged.

Action Point 3 **Enhance Human Capacity Development, Knowledge Creation and Sharing**

- a) Promote and support ICT dissemination among the children of the developing world – whether in school or not, with special attention paid to girls -, and urge the non-profit and private sectors as well as developing country governments to scale up their efforts in wiring educational facilities and ensuring adequate teacher training;
- b) Enhance the training of teachers on ICT and the “digital literacy” of pupils. Effective measures should be identified to enhance the use of the Internet to improve the performance of staff, teachers, pupils and students in schools and the universities, and for distance learning programmes; *eLearning* should conversely be considered as a powerful tool to enable all types of education and training.
- c) Expand opportunities for training, education and knowledge sharing for people living in rural and remote areas through distance learning;
- d) Give special attention to disenfranchised and illiterate people (particularly youth and women), through innovative partnerships to disseminate knowledge and skills using ICT;

- e) Support the interconnection of education and research networks among developing countries and industrialized countries, for instance through high-speed networks, twinning or bandwidth pooling;
- f) Support university-based “networked centers of excellence” focusing on research and learning at the intersection between ICT and development. Individual centers could be geared toward technology, applications, entrepreneurship, training senior decision makers in both the public and private sectors in ICT regulatory and policy areas, and other aspects of a knowledge-based economy. These centres could also provide teacher training, as well as training to senior decision makers in both the public and private sectors in the areas of regulatory and ICT policy; vocational and life-long training should receive particular attention; centers in developing nations would be “twinning” with those in G-8 nations; a public-private consortium model could be considered;
- g) Enhance the *eAwareness* of senior policy makers with a particular accent on the benefits of *eGovernance* for enhancing democracy, transparency and government accountability;
- h) Encourage companies worldwide to offer a portion of the working time of their skilled human resource base to training developing country civil society in ICT-related subjects;
- i) Promote initiatives in the field of cyber-mentoring, for example enabling the international business community to provide advice and counsel remotely to local entrepreneurs in developing countries.

Action Point 4 **Foster Enterprise and Entrepreneurship for Sustainable Economic Development**

- a) Developing countries should be supported in their efforts to put in place a pro-competitive policy and regulatory environment where local as well as international entrepreneurship can thrive in order to create local capacity to transform all sectors of their economies; an open, predictable and competitive business environment, created by market liberalization and pro-competitive regulation, will also help to create the right conditions to encourage both local and foreign investment, in order to generate self-sustaining growth and achieve development goals.

- b) Private sector mentoring and incubation activities should be further encouraged including through the creation of an “*International Entrepreneur Resources Exchange*”; this could include sharing best practices, business expertise and know-how, ICT expertise, management expertise, knowledge management capabilities, and training of entrepreneurs in developing countries; such initiatives should seek to build on the strengths of developing countries.
- c) Private-public partnerships involving companies, local entrepreneurs, governments, non-profit organizations and labor organizations should be encouraged, in order to foster local enterprise, innovation and lifelong learning.; these should include an emphasis on basic education (including mathematics and sciences), as well as on vocational training and the development of core ICT skills; such partnerships could also provide a means to help establish the centres of excellence described in Action Point 3; development finance institutions should also be encouraged to increase their participation in relevant concerted private-public initiatives.
- d) In support of the above points, the G8 and other donors, as well as multilateral development banks and agencies should be encouraged to integrate ICT-related entrepreneurship into their assistance programmes, including micro-credit facilities, equity capital and other business development programmes, and to consider innovative methods of promoting the availability locally or regionally of seed/risk capital and other resources to help entrepreneurs in developing countries.

Action Point 5

Establish and Support Universal Participation in Addressing New International Policy and Technical Issues raised by the Internet and ICT

- a) Support should be provided for developing country stakeholders — governments, private companies, NPOs, citizens and academics — to better understand global Internet and other ICT technical and policy issues and to participate more effectively in relevant global fora;
- b) The resource network identified in Action Point 1 should provide information on decisions that will be taken at such fora, an open platform for papers by experts, and facilitation of the exchange of views;

- c) Support a network of Southern-based expertise - which could access the resource network identified in Action Point 1- to support the representatives of developing countries as they seek to participate effectively in these fora and address these issues in their own context;
- d) Global policy and technical fora and organizations working on Internet and ICT issues should make a special effort to bring representatives of developing nations into their discussions and decision-making processes;
- e) The United Nations ICT Task Force should be encouraged in its stated goal of identifying options for involving developing country stakeholders in these new issues.

Action Point 6 **Establish and Support Dedicated Initiatives for the ICT Inclusion of the Least Developed Countries**

- a) Encourage efforts to mobilize public and private support for a significant improvement of basic information and communication infrastructure in the countries where such infrastructure is most lacking;
- b) Support partnerships to facilitate the setting up of Internet exchange points and national ISP associations in LDCs. The specific needs of LDCs should also be taken into account while planning regional Internet backbones;
- c) Encourage telecommunications equipment and service providers to work co-operatively with least developed countries to aggregate demand and reduce costs;
- d) Encourage joint stakeholder efforts (such as the African Partnership Initiative, African Connection, and others) to address the unique ICT dilemmas faced by Africa, with a view to sustainable solutions. Policy and regulatory issues pertaining to infrastructure – especially regarding telecommunications systems - should be the core elements of this engagement. In this framework it should be taken into account that ICT is a means of supporting rural-urban linkages and strengthening small farmers along with micro-enterprises and small businesses.

Action Point 7

Promote ICT for Health Care and in Support Against HIV/AIDS and Other Infectious and Communicable Diseases

- a) Enhance the valuable uses of ICT in health education, knowledge sharing, monitoring, statistics, and delivery of care and in meeting internationally agreed health targets, particularly in the areas of HIV/AIDS and other infectious and communicable diseases.
- b) Expand the use of ICT in the campaign against HIV/AIDS and other infectious and communicable diseases utilising appropriate forms of communication such as community radio, broadcast media, telecommunications and the Internet. The initiative should be focussed in severely affected areas with content, applications and strategies shared and replicated more broadly.
- c) Create an “ICT Against HIV/AIDS” network in partnership with governments, the private sector, non-profit and international organizations emphasizing a) the logistical and management aspects of treatment in the field, and b) preventative measures through the dissemination of information to the general public, health sector professionals and policy makers.

Action Point 8

National and International Effort to Support Local Content and Applications Creation

- a) Encourage the software community, including the open source and commercial software communities, to develop applications relevant to developing countries, to make its software available to such countries and localize software applications, while at the same time helping to promote the growth of local application development capacity in these countries;
- b) Encourage the growth of *eGovernment* as a means of achieving a critical mass of on-line content and encourage governments to provide widely-available free-of-charge access to state-owned information and local content, except where it is private or classified;

- c) Encourage local content development, translation and/or adaptation in developing countries to fulfill the needs of learners, scholars, professionals, and citizens for education, learning, training and application development, including provision of online access;
- d) Support national and international programs for digitizing and putting public content online, focusing on multilingual applications and local heritage;
- e) Support participation by local stakeholders in setting technical standards for incorporating local languages in ICT applications;
- f) Encourage networking of bodies which acquire, adapt and distribute content on a non-commercial basis;
- g) Encourage commercial publishers to explore possible business models to enhance greater accessibility for poor people to relevant content;
- h) Encourage the full participation of developing countries in the WIPO process.

Action Point 9 **Prioritize ICT in G8 and Other Development Assistance Policies and Programmes and Enhance Coordination of Multilateral Initiatives**

- a) Bilateral and multilateral official development assistance (ODA) programmes should integrate ICT for development as a strategic, cross-cutting theme in their own development efforts (such as health, education, job-creation, entrepreneurship) and country strategic plans.
- b) Heads of bilateral and multilateral development organizations should coordinate more — within and between organizations — on approaches and initiatives on ICT for development in order to avoid duplication and enhance efficiency and effectiveness.
- c) Donors should refer to national *eStrategies*, where they exist, when designing approaches and initiatives using ICT for development, and strive for consistency and coherence in their efforts.

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Appendix - Genesis and history of DOT Force

At the year 2000 G8 Summit in Kyushu-Okinawa the Charter on Global Information Society was adopted. In the Okinawa Charter, the G8 leaders agreed to establish a Digital Opportunity Task Force (DOT force) aimed at integrating efforts to bridge the digital divide into a broader international approach.

The Charter noted in paragraph 18 that "the DOT Force, in close consultation with other partners and in a manner responsive to the needs of developing countries, would:

- Actively facilitate discussions with developing countries, international organizations and other stakeholders to promote international co-operation with a view to fostering policy, regulatory and network readiness; improving connectivity, increasing access and lowering cost; building human capacity; and encouraging participation in global e-commerce;
- Encourage the G8's own efforts to co-operate on IT-related pilot programmes and projects;
- Promote closer policy dialogue among partners and work to raise global public awareness of the challenges and opportunities;
- Examine inputs from the private sector and other interested groups such as the Global Digital Divide Initiative's contributions;
- Report its findings and activities to our personal representatives before our next meeting in Genoa."

The DOT Force was formed in the fourth quarter 2000. 43 members have participated in its work⁴:

- 1) 17 government representatives :
 - "G8+1" Governments (Canada, France, Germany, Italy, Japan, Russia, United Kingdom, United States of America and a representative from the European Commission)
 - Developing countries Governments (Bolivia, Brazil, Egypt, India, Indonesia, Senegal, South Africa, Tanzania)
- 2) 7 representatives from International/Multilateral Organizations (ECOSOC, ITU, OECD, UNDP, UNCTAD, UNESCO, World Bank)
- 3) 11 representatives from the private sector (one representative per each G8 Country and three global networks: GIIC, GBDE, WEF)
- 4) 8 representatives from the non-profit sector (one representative from each G8 Country)

⁴ At each of the plenary sessions of DOT Force, a practice has been established that the host country had the privilege to invite relevant local or international organizations.

Under the direct responsibility of the DOT Force presidency, the DOT Force Secretariat, co-hosted by the World Bank and UNDP, has assisted the DOT Force in

- preparing the substantive agenda and background materials of DOT Force meetings;
- preparing successive outlines and drafts of the DOT Force report;
- coordinating and synthesizing inputs, including written inputs, from DOT Force members into the draft report;
- coordinating, with DOT Force members, the process of consultation with non-member stakeholders;
- organizing broader outreach efforts on behalf of the DOT Force, including a public Web site for the DOT Force.

The work of the DOT Force has focused on three main objectives:

- to enhance global understanding and consensus on the challenges and opportunities posed by information and communication technologies, and the role that these technologies can play in fostering sustainable, participatory development, better governance, wealth creation and empowerment of local communities and vulnerable groups,
- to foster greater coherence among the various initiatives, both G8 and other, currently underway or proposed to address these challenges and opportunities,
- to enhance the effective mobilization of resources to address these challenges and opportunities.

Participants in the DOT Force have chosen to base their work on a few basic principles :

- DOT Force members must feel and demonstrate active ownership of the DOT Force process in order for the process to be credible and effective;
- the DOT Force process should be as inclusive as possible both through the active engagement of all its members in its work, and through a broader consultation and outreach process;
- the DOT Force should yield concrete, action-oriented results and recommendations that can lead to innovative and efficient cooperation on the part of all relevant actors to bridge the Digital Divide;
- there is no dichotomy between the "digital divide" and the broader social and economic divides which the development process should address; the digital divide needs to be understood and addressed in the context of those broader divides, and the DOT Force needs to articulate approaches to the digital divide and to ICT as a crucial tool for sustainable development, that take into account and actively address those broader divides;
- the DOT Force needs to focus on identifying gaps in existing initiatives and proposing new and well-coordinated actions, as well as synchronizing and enhancing existing initiatives, through which its members and others could make a concrete and measurable difference in addressing the challenges posed by the digital divide; in this context, identifying best practices and scaling up success stories will constitute important bases for action;
- the outcome of the DOT Force should not simply be a report; it should include an action plan backed by political and institutional commitment and resources, and the support of all categories of stakeholders worldwide.

The DOT Force consultation process has been rooted in the following principles:

- A broad, participatory approach to deliberations, securing the views, participation and consensus of a wide range of stakeholders on a global level; special efforts have been made to invite inputs from some developing countries' stakeholders who traditionally have limited access to consultations of this sort;
- All inputs arising from the consultations were considered in the DOT Force's deliberations, but were not automatically incorporated in the conclusions and recommendations of DOT Force's final report;
- In order to facilitate aggregation of the inputs from the consultations, a common template of issues and questions was developed by the Secretariat in cooperation with the DOT Force members;
- In addition to their formal meetings, DOT Force members have convened in several informal meetings, taking advantage, whenever possible, of already scheduled meetings and conferences, as well as of the presence and participation of non-members.

Meetings of DOT Force (not including consultations of sub-groups of members):

Plenary Meetings:

- Tokyo, Japan, 27-28 November, 2000
- Cape Town, South Africa, 1-2 March, 2001
- Siena, Italy, 23-24 April, 2001.

Informal meetings:

- OECD Dubai Emerging Market Economy Forum on E-Commerce, 16-18 January 2001
- Berlin, DSE Policy Forum on "Digital Inclusion", 23-24 January 2001
- Davos, World Economic Forum Annual Meeting, 29 January 2001
- Cairo, IDSC/Egyptian Cabinet Conference on E-Business and Development, 12-15 February, 2001
- Naples, Third Global Forum, March 14-17, 2001.

Consultations

In addition, a number of associated organizations and networks have conducted consultations that have provided useful inputs into the DOT Force's work. The Global Knowledge Partnership, an informal partnership of over 60 public, private, nonprofit and international organizations, conducted a broad array of electronic and face-to-face consultations on DOT Force issues and provided detailed comments and inputs to the Secretariat. Similar consultations and inputs were conducted by organizations such as the Electronic Privacy Information Center, the African Connection Secretariat, and others. Developing countries members of DOT Force had a special high-level meeting in Pretoria (South Africa) on 23-24 March 2001.

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