GLOBAL POLICYMAKING FOR INFORMATION AND COMMUNICATIONS TECHNOLOGIES:

ENABLING MEANINGFUL PARTICIPATION BY DEVELOPING-NATION STAKEHOLDERS

IMPLEMENTATION TEAM ON GLOBAL POLICY PARTICIPATION

G8 DIGITAL OPPORTUNITY TASK FORCE

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IMPLEMENTATION TEAM ON GLOBAL POLICY PARTICIPATION

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* Members of the United Nations ICT Task Force were also participants in many of the Implementation Team's efforts to provide an effective transition of the group's work. Building on the Genoa Plan of Action, the UN-ICT Task Force also recognizes the critical importance of developing countries' participation in global ICT policymaking, and intends to continue the work of this Implementation Team in order to generate concrete action to enhance participation.

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PART ONE
MEANINGFUL AND EFFECTIVE PARTICIPATION

Perhaps no single issue will loom as large in the coming decades as the success or failure of the world community to make the process of globalization more sustainable and equitable and, consequently, to reduce poverty, raise levels of education, improve standards of health, enhance empowerment, and reverse the loss of environmental resources. Globalization and its attendant trends – democratization, development, interdependence and others – can prove a force for immense good if they are properly harnessed. However, to date, the record of the world community in achieving this goal is mixed, at best; if it does not improve, a number of threats and risks, from terrorism to environmental degradation to expanding human misery, are likely to emerge.

Critical to this agenda is finding ways to make globalization serve the needs of the developing world more directly. A set of institutions is readily available for the purpose: the international fora, most created in the last half-century, which provide convenient, often inclusive venues for the nations of the world to discuss, negotiate and implement mutual agreements in ways that would empower even the smallest and poorest members. Indeed, in at least some cases the original vision of these institutions was to create for a turning point where developing countries have an opportunity to participate in shaping emerging norms, rules, standards and laws. Developing and developed countries together could begin to create a regime of global governance. In addition, a set of new policy institutions has grown up as ICTs have grown.

However, even in those institutions where efforts are made, too few international regimes have achieved the level of developing-country participation required on a regular basis. Barriers of cost, expertise, experience, home-country support, institutional design, among others, have stood in the way of developing an effective world voice in many fora. The evolution of information and communications technologies (ICTs) lies at the heart of the process of globalization and its associated economic, social and political trends. Along with creating effective structures of governance, harnessing the potential of ICTs will be essential to a country's prosperity in the new global era. Meanwhile, an international regime for the governance of ICT issues is rapidly being developed, and disturbing trends signaling developing countries' inability to participate meaningfully are emerging.

Meaningful participation in international fora devoted to ICT issues is critical to the future of developing countries, the evolving shape of globalization, and the degree to which these new technologies either bring together or push farther apart the world's rich and poor. International fora, both traditional and non-traditional, on ICT will play a decisive role in setting many new norms and standards on topics from privacy and information security to intellectual property and key development priorities. These fora will, in short, play a critical role in inventing the rules of the game for the next phase of world economic, political and cultural history. Developing countries will need to quickly find their voice and influence in these fora if globalization is to be a more inclusive and sustainable force, and all stakeholders must play a role in ensuring that that happens.

1. The Increasing Importance Of Global ICT Policymaking

> *The new technologies that are changing our world are not a panacea or a magic bullet. But they are without doubt enormously powerful tools for development. They create jobs. They are transforming education, healthcare, commerce, politics and more. They can help in the delivery of humanitarian assistance and even contribute to peace and security.*
>
> – **Kofi Annan, United Nations Secretary General, November 2001**

In our global, networked economy and society, information is an essential resource for capacity-building and social and economic development. Within that context, ICTs offer individuals, communities and countries the potential to improve their economic and political future, and their quality of life through learning, information-sharing and communication. ICTs can thus be powerful tools for wider development goals, assisting efforts to overcome inequality and improve stability. The DOT Force implementation team's work forged a consensus on the following beliefs:

- ICTs have the potential to shift the development paradigm towards increased inclusion for all nations, offering unique opportunities for all;

- The potential of ICTs to contribute to development depends largely upon the development of national and regional ICT strategies and policies;

- Decisions and policies made in global venues increasingly determine the nature and scope of national ICT policy solutions for socio-economic development;

- All stakeholders, including developed and developing governments, the private sector, and non-profit organizations, should participate in global ICT policymaking;

- Developing-nations stakeholders often fail to engage adequately in ICT policymaking, for a variety of reasons;

- An action plan is needed to develop sustainable ICT-related policy processes and outcomes that are more inclusive of developing-nations stakeholders, comprising both public, private and non-profit representatives.

ICTs cannot substitute for a nation's own good governance, economic reform or social policies. But ICTs can be applied to support democratic processes, improve the productivity and competitiveness of all economic sectors, create new sources of wealth, and increase the efficiency of public services, including healthcare, education and disaster assistance. In the era of the global information economy and society, ICTs are an increasingly important part of development policies and programs.

In its landmark 1996 study *Knowledge Societies: Information Technology for Sustainable Development*, the United Nations Commission on Science and Technology for Development (UNCSTD) recommended that developing countries formulate national ICT strategies. Since then, other international fora including the DOT Force and UN-ICT have re-emphasized this recommendation, and as a result a larger than ever before group of developing countries were aware of the importance of national ICT strategies. However, the most effective strategies will address both internal development activities and external relationships with international development agencies, as well as meaningful participation in a host of international bodies that determine the regional and national ICT policy solutions for socio-economic development.

> *There is no doubt that key policy decisions are being made at various global and international fora, meetings and institutions that directly or indirectly have implications on the development, deployment and the exploitation of ICTs in a number of developing countries including those in Africa. Some of these global policy decisions are also having impact on and shaping the direction and the nature of national ICT for Development policies and programmes in these countries.*
>
> **– Clement Dzidonu and Nii Quaynor,**
> **Accra Roundtable on Global Policy Participation**
> **Ghana, March 2002**

Policy decisions about ICTs have long been made at the international level. The International Telecommunication Union (ITU), for example, has been developing international ICT standards

since 1865 and regulating the use of the radio frequency spectrum for almost a century. Other fora that now play an important role in ICT policymaking have been part of the international scene for decades. These include the World Intellectual Property Organization (WIPO) and the descendents of the original Bretton Woods institutions, including the World Trade Organization (WTO). Until recently, issues often were of secondary priority in the face of more urgent national issues and for a variety of reasons as well.

To date, many developing countries have lacked the capacity to participate effectively in ICT decisionmaking that has been largely restricted to technical matters. Developing countries also had difficulty seeing the global relevance of ICTs as the exchange of raw materials and manufactured goods dominated international economic relations. Most significantly, the global digital divide limited developing countries not only in their access to and use of ICTs, but also in their role as stakeholders in the formulation of ICT policies.

Globalization and the rise of the information and knowledge-based networked economy have changed the picture dramatically. Today, all members of the international community recognize that key policy decisions made at various global fora with regard to ICTs, including intellectual property rights, management of the electromagnetic spectrum, Internet domain name space and market access have major implications for developing countries and their national ICT strategies.

Much has been learned in the last decade that underscores the importance of global ICT policymaking for developing countries — in existing multilateral fora such as the ITU, WIPO and the WTO, in regional fora such as the Organization for Economic Cooperation and Development (OECD), the Council of Europe and the Association of South-East Asian Nations (ASEAN), and in new non-governmental standard-setting bodies such as the World Wide Web Consortium (W3C), the Global Business Dialogue (GBDe) and the Internet Corporation for Assigned Names and Numbers (ICANN).

Actions taken in these venues can have a significant impact on the development, access to, and use of ICTs everywhere. ITU decisions with regard to international frequency allocation and the management of technical standards and revenue sharing arrangements shape the global environment in which national policies and regulatory decisions are made. Decisions made at ICANN meetings shape national policies on how the domain name resources of the Internet are utilized, distributed and owned by various national and local stakeholders. Market access and regulatory commitments made during WTO negotiations on trade in telecommunication services help set the parameters for national telecommunications policies and regulations in such areas as competition, foreign investment, access to telecommunications networks and the use of scarce resources.

2. The Potential Divide in Global ICT Policymaking

> *A number of issues discussed at global fora affect developing countries' socio-economic, cultural, political development directly – either immediately or in the longer term. Issues ranging from standard setting for technology, infrastructure and content to business and investment strategies should equally be the prerogative of both developed and developing nations. It's in the interest of developed nations to ensure current decisions (of government, businesses, NGOs and others) include affirmative views of developing nations to facilitate future implementation. Unfortunately globalization is increasingly causing a paradigm shift; the debate is no longer one of north to (helpless) south – developed and developing markets are increasingly inextricably linked. There must thus be a joint effort to develop these markets for mutual gains.*
>
> – **Mavis Ampah, Executive Director**
> **African Connection, Kenya, April 2002**

If global policymaking determines the capacity of developing-nations stakeholders to exploit ICTs for socio-economic objectives, then their effective participation is critical.

Nations that participate meaningfully in these bodies can (1) enrich the policy debate with their specific experiences, (2) influence the outcome of the debate to ensure that the new policies serve specific development needs and national priorities, and (3) acquire new knowledge and contacts that could facilitate ICT opportunities.

However, for developing countries there are some significant barriers to such participation. Developing countries often lack the financial and human resources to attend important international meetings. Institutional barriers, including arcane policy processes and decisionmaking arrangements disadvantage less developed countries within individual institutions. The multiplication and duplication of institutions addressing ICT policy makes it difficult for developing-nations stakeholders to participate in and contribute effectively to the often complex policy processes related to ICT. These difficulties are exacerbated by the intrinsic complexity of new technologies, by a lack of information about effective models of inclusive policymaking, and by complex structures and changes in the rapidly evolving international scheme of ICT regulation.

These difficulties can create experiences in which international fora are neither transparent nor accountable to developing-nations stakeholders, who may obstruct new and existing ICT policy initiatives or ignore their outcome and implementation as a result. Where there is a gap in developing-country participation, such countries may ultimately call into question the legitimacy, stability and sustainability of international governance processes and outcomes related to ICTs, and impede both developed and developing nations in their national and global ICT initiatives.

It is therefore in the interest of both the developed and developing worlds and the international policymaking venues to enhance the capacity of developing-nations stakeholders to participate meaningfully and effectively – beyond mere attendance – in global ICT policymaking.

3. The Growing Demand for Assistance and Participation

Extensive consultations and outreach have provided a deeper sense of the current demand and needs that should shape work going forward[1]:

- **The demand varies significantly from nation to nation**. The need for assistance and participation exists in countries that have national ICT policies and are affected by global decisionmaking processes. It also exists in countries that are among the least developed and have gone through a period of conflict, and in countries that have undergone positive transitions but require additional technical assistance to consolidate the benefits of change. Solutions must be responsive to the different contexts from which nations join the global debate.

- **The demand is geographically dispersed**. There is an enormous range of ICT interests and capacities among developing countries, from the small and vulnerable countries in West Africa to large countries like China and India. Accordingly, requirements for assistance and participation differ geographically. A responsive action plan must take account of this fact by having not only a strong core, but the capacity for decentralized execution as well.

- **The demand is dispersed across sectors**, including the public, the non-profit and the private. A response is required that employs a multi-sector perspective.

- **Demand exists across ICT venues and issues,** as each issue and venue carries with it new challenges and complexities. In addition, the convergence of the IT, telecom and broadcasting sectors has increased the need for cross-issue expertise and a multi-venue presence. Actions must address the growing complexities of converging technologies and be sufficiently flexible to encompass a variety of needs.

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1 Consultation and outreach in the development of this Roadmap included:
- Discussion within the DOT Force members and in particular Implementation Team #5, which itself represents multiple stakeholders;
- Intensive roundtables and interviews with developing-nations participants (representing more than 60 countries) to global policy conferences and fora (including the ICANN meetings in Accra, Ghana, the ITU World Telecom Development Conference 2002 in Istanbul, Turkey, the International Conference on E-Government for Development in Palermo, Italy, and other events);
- Interviews and meeting with representatives of Global Policy Institutions including ITU, WIPO, ICANN, W3C, IETF, WTO and others;
- Outreach toward the United Nations ICT Task Force Developing Country Regional Networks (in particular the Latin American, Asian, African and Arabic nodes);
- Interviews with various opinion leaders, negotiators and other developing-nations leaders;
- Discussions with potential strategic partners, including members of the funding community.

- **The demand is distributed over time**, as global participatory and policy processes are often cyclical (formulation of policy needs, agenda setting, formulation and creation of policy tools/mechanisms, implementation and enforcement, evaluation and impact assessment). Each cycle requires different tools and actions. To be responsive, an action plan must be able to react to these rhythms of need as they rise and fall.

4. Broader Significance of Inclusive Global Policymaking

The benefits of strengthening developing countries' participation in ICT policymaking goes beyond narrow ICT-related concerns. ICT is but one manifestation of a deepening international interdependence. In the areas of trade and finance, the environment, disease, the prevention of crime and terrorism, and the overall well-being of all our societies, the growing importance of transnational forces is becoming increasingly clear. To reap the benefits of globalization while countering its risks, the international community is increasingly turning to new forms of multinational organizations – formal and informal, regional and global – to tackle challenges no country can solve on its own. A new group of institutions – from the Group of 20 (on global financial reform) and FATF (the anti-money-laundering organization) to the Conference of Parties (on climate change) are taking their place alongside older such organizations as the WTO, WHO and ILO.

As these new forms of international governance proliferate, it will be increasingly important for developing countries to secure an effective seat at the table. As was recognized at the International Conference on Financing for Development, held from March 18-22, 2002 in Monterrey, Mexico, developing countries must be able to participate if their unique concerns and interests are to be met.

> *We stress the need to broaden and strengthen the participation of developing countries and countries with economies in transition in international economic decision-making and norm-setting. To those ends, we also welcome further actions to help developing countries and countries with economies in transition to build their capacity to participate effectively in multilateral fora.*
>
> – **Monterrey Consensus, Para 62, March 2002**

By increasing the technical and policy capacity of developing-country stakeholders, providing financial assistance for travel and developing an expert network within the developing world, developing countries (government, private and non-profit sectors) will be better able to participate in a broad range of international institutions. By modeling processes based on best practices for developing country participation in the ICT policymaking arena, new lessons can also be applied to policymaking in other areas that affect the interests of developing countries.

PART TWO
THE GLOBAL ICT POLICY ENVIRONMENT

The DOT Force working group identified several key questions for understanding the current global ICT landscape and the level of developing-country participation, including:

- *What are the main issues on the international ICT agenda, and where are they addressed?*
- *In which institutions is it most important to foster meaningful participation by developing countries in international decisionmaking?*
- *What are the main obstacles inhibiting developing countries from using international ICT decisionmaking institutions to navigate toward their development objectives?*

To answer these questions, the UK Department for International Development commissioned the Commonwealth Telecommunications Organization (CTO) and the Panos Institute, London, to conduct a study aimed at mapping international ICT decisionmaking bodies and identifying the principal barriers to effective participation by developing countries.

To ensure that the map of international ICT decisionmaking bodies would be as complete and accurate as possible, the CTO/Panos study was designed to draw on several different information sources, each of which represented a different point of view. These sources included participants in a number of the leading international ICT decisionmaking institutions; policy-makers, regulators and ICT stakeholders in a cross-section of developing countries; and an independent advisory group of international experts in ICTs and development. The study's principal findings form the next section of this Roadmap.

1. Global ICT Policy Issues

The international ICT decisionmaking universe is vast and expanding rapidly as a result of the boom in ICT application and penetration that has taken place in recent years. In addition, this universe is highly differentiated in its institutional features and complex in its decisionmaking structures, and contains several black holes into which issues sometimes disappear from the view of the interna-

tional community.

To represent this universe, the CTO/Panos study constructed a matrix that assigns the primary global ICT issues to one axis and the primary global ICT policymaking processes to the other. The general form of this matrix and some of the ICT policy-related questions it helps organize are presented in Figure 1.

Mapping International ICT Decision-Making: Issues Matrix and Some Sample Questions

"Narrow"

Results of International ICT Decision-Making

"Hard"

DEVELOPMENT ASSISTANCE	*How can developing countries be more effectively engaged in trade negotiations?*	*How can developing countries be more effectively engaged in the management of common ICT resources?*	*What can be done to help developing countries provide universal service to modern ICT networks?*	*What can be done to help developing countries implement eCommerce, tele-health and education, etc.?*
POLICY COORDINATION	*Does participation in trade agreements require all countries to adopt the same regulatory policies?*	*Can national sovereignty, public security and cultural identity be reconciled with open access?*	*How should developing countries deal with the policy and regulatory implications of convergence?*	*Does eCommerce require harmonized approaches to taxation or lead to privatizing public services?*
STANDARDS	*How should revenues from international telecom and Internet services be shared?*	*How can the interests of established users of common resources be reconciled with those of newcomers?*	*Should developing countries expend resources on ICT standardization? If so, in what areas?*	*Are standards needed to ensure electronic privacy and security? To guarantee the quality of eServices?*
LAWS AND REGULATIONS	*What principles should govern ICT relations between developed and developing countries?*	*Should international law and regulation always be based on "first-come, first-served" principles?*	*Should "the right to communicate" be recognized in international law and regulation?*	*Is there a need for new international law and regulation on such matters as privacy?*
	Exchange of ICT services and products between sovereign nations	**Use** of common ICT resources	**Development** of ICT technology, networks, services in all countries	**Application** of ICTs for equitable, sustainable global development

Narrow ← Scope of International ICT Decision-Making → Broad

Source: CTO/Panos Study on "Strengthening Participation by Developing Countries in International ICT Decision-Making", 2002

Figure 1

As the horizontal axis of Figure 1 illustrates, decisions are made on four main kinds of ICT-related issues at the international level. The first set of decisions, the most basic, concerns the fundamental laws, principles, policies and practices that govern the exchange of ICT products and services between countries, as well as those that govern ICT-related investments in infrastructure, human capital, intellectual property and others.

Other basic decisions concern the sharing and use of common ICT resources, such as the radio frequency spectrum, satellite orbital positions, telephone numbers and Internet domain names and addresses.

Within the legal and regulatory environment created by these choices, decisions are made on

a continuous basis with regard to the development of ICT technology, equipment, facilities, networks, services, applications, software and content.

At a more general level, there has been increasing discussion in recent years about the impact of ICTs on the economic, social, cultural, and political structures of developed and developing countries, on relations between them, and on the kinds of decisions that must be made in order to ensure that ICTs support sustainable global development and benefit people everywhere.

As the vertical axis of Figure 1 illustrates, a number of decisions are made with respect to these core issues, and each involves a different decisionmaking process:

- Decisions about the fundamental legal principles governing international ICT relations and related regulatory institutions, procedures and practices have traditionally been made by representatives of nation-states and embodied in treaties. This is still the case, but in some areas (e.g. Internet) regulatory arrangements have been established under private law.

- Decisions about international ICT technical, operational and revenue sharing standards are made through a variety of processes, from traditional mechanisms of intergovernmental cooperation to purely private ventures.

- Decisions about ICT policy coordination are made in various ways. Some are formal and carry the full weight of treaty obligations (e.g. commitments to WTO regulatory principles). Others are informal and carry no such obligation (e.g. the Opinions of the ITU World Telecom Policy Forums and the Resolutions of the World Telecommunication Development Conference).

- Decisions by international organizations about providing assistance to developing countries are usually made by the staff of the organizations themselves, following general policies, priorities and guidelines established by their governing bodies.

2. Global ICT Policy Venues

The arena of international ICT decisionmaking is populated by a rapidly expanding number of policymaking institutions, processes and venues. Some are long established. Others are newly invented, or newly involved in ICT decisionmaking. Some are primarily focused on the development of ICT technologies, products or services. Others are mainly concerned with access to and the use of ICTs for economic, social or cultural development. Some ICT decisionmaking venues restrict participation to government representatives, some are purely private ventures, and others are mixed, open to participation by government, the private sector and civil society.

The CTO/Panos study divides the world of international ICT decisionmaking venues into three general categories: a small number of principal institutions that currently have leading roles in international ICT decisionmaking; a slightly larger number of supporting fora drawn from the ranks of the UN family and international financial institutions; and a diverse group of newcomers to the international ICT policy scene representing the interests of the private sector and civil society.

2.1 Principal Players

The CTO/Panos study highlights the roles played by three main institutions in international ICT decisionmaking, the ITU, the WTO and ICANN. The study focused on these organizations not only because their decisions have a significant impact on developing countries, but also because they represent three distinctly different models of global ICT governance, and three contrasting perspectives on the relationship between international ICT decisionmaking and global development.

The ITU traces its origins back to 1865, has 190 Member States and some 650 non-governmental Sector Members. It has the widest decisionmaking scope among international ICT organizations, in terms both of issues addressed and types of decisions made. The ITU treaties provide an international legal framework for cooperation between governments, the private sector, and other actors. They also lay down the legal and regulatory principles that govern the international exchange of telecom services, as well as the allocation and use of radio frequencies and satellite orbital positions. Within this framework, the ITU's main responsibilities include coordination and registry of frequency and orbital assignments and telecom numbering plans, development of technical, operational, tariff and revenue-sharing standards, the provision of policy, regulatory, technical and capacity-building assistance to developing countries, and fora for coordinating national approaches to global telecommunications policy and regulatory issues.

The WTO, established in 1994 as the successor to the General Agreement on Tariffs and Trade (GATT), has 144 Member Countries. In the past decade, the WTO has played an increasingly important role in international ICT decisionmaking as a result of the 1994 General Agreement on Trade in Services (GATS), the 1997 Fourth Protocol to GATS on trade in basic telecommunication services, and the 1998 and 2001 Ministerial Declarations on Electronic Commerce. The principles embodied in the GATS treaty provide a new legal framework for governing the exchange of ICT services between countries. This framework is designed to facilitate foreign access to domestic ICT markets and is based on trade principles such as transparency and non-discrimination. The WTO and GATS treaties provide a legally binding mechanism for resolving disputes between countries, including disputes that might arise over ICT services, products or investments. No such mechanism existed previously. Currently, 84 countries, including many developing countries, have

made commitments to open their domestic markets to foreign investment in and/or foreign supply of basic and value-added telecommunication services. In addition, a substantial majority of these countries have made commitments to apply a common set of principles for pro-competitive regulation of telecommunications in their jurisdictions

The Internet Corporation for Assigned Names and Numbers (ICANN) is a not-for-profit, private sector organization, incorporated in the state of California. It was established in 1998 by the United States government with a coalition of Internet business, technical, academic and user communities as a forum for coordinating the technical management of the Internet domain name system, a task previously undertaken through various voluntary, ad hoc and US government-funded arrangements. ICANN aims to accomplish its objective through an open process that builds consensus among members of the Internet community on an international basis. The ICANN structure currently includes supporting organizations that coordinate the allocation of the numerical addresses used to identify individual computers connected to the Internet and the domain name system that translates these numerical addresses into more user-friendly ordinary language. Governments are only involved in ICANN's work through an international Government Advisory Committee (GAC), which provides advice to the ICANN Board of Directors. As an example of industry "self-governance," ICANN is generally seen as an experiment in international ICT decisionmaking.

2.2 Supporting Institutions

In addition to those of ITU, WTO and ICANN, the decisions made by a number of other intergovernmental organizations influence the international development and diffusion of ICTs and therefore have a significant impact on developing countries.

The World Bank Group (WBG) has 183 Member Countries, and an important influence on ICT development in a number of ways. The five financial institutions that make up the WBG provide loans, equity capital, investment guarantees and development assistance to governments, private investors and foreign investors in developing countries. The WBG has used these tools to encourage market-oriented policy and regulatory reforms, particularly in the telecommunications sector, and has provided an extensive program of research, training and technical assistance in these areas. In recent years, the WBG has broadened its focus to address the role that ICTs can play in reducing poverty and creating the conditions for sustainable development, by facilitating access to knowledge (e.g. the Global Knowledge Partnership and the Development Gateway).

The **World Intellectual Property Organization (WIPO)** has 177 Member Countries and helps

to protect intellectual property rights (IPRs) in ICT technologies, products, software, applications and services, as well as to resolve disputes about these rights. In something of a departure from its "self-regulatory" tradition, the Internet community uses WIPO to resolve disputes about the ownership of some Internet domain names. The international protection for IPRs traditionally provided by WIPO has been enhanced by the provisions of the 1994 WTO agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), and by a formal cooperation agreement between the two organizations.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) supports the development of ICT-based content services (e.g. broadcasting) in developing countries and has championed the adoption of content-oriented perspectives in international ICT decisionmaking.

2.3 New Forums and Actors

In the past decade, a large number of new actors have become involved in discussion and debate on international ICT issues. This reflects the changes that have taken place in the broader international arena. Discussions and debate have taken place mainly outside the formal decisionmaking processes of the previously mentioned international organizations, all of which are founded on treaty agreements between countries, and only one of which (the ITU) admits non-governmental members to its deliberations. It is clear that other actors have had a steadily increasing influence, and a number of initiatives have been launched to engage them informally in international ICT decisionmaking (e.g. the G8 DOT Force, the United Nations ICT Task Force).

The new actors include:

Non-governmental organizations (NGOs), some of which are primarily concerned with promoting the development of ICT-based networks and services in developing countries – particularly via the Internet and community-based initiatives – others of which are focused on the use of ICTs to promote sustainable economic, social, cultural and political development.

Business community organizations (BCOs), including national chambers of commerce whose main interest is in promoting policies, regulations and practices that encourage trade and investment between countries, as well as task forces and roundtables that address emerging global issues of policy, regulation and development from a private sector perspective.

Hundreds of **private sector fora** (PSFs) that have been established by ICT enterprises to develop international standards for ICT technology, networks and services.

Legions of **academics, researchers, policy advisors and regulatory practitioners** who engage in ongoing public discussion, debate and analysis of the basic principles that should guide decisionmaking on international ICT issues.

2.4. Global ICT Policy Themes, Issues and Venues

Concurrently, one can look at these issues from a thematic perspective, as was done within the DOT Force working group and subsequent consultations. The added value of such an approach lies in its mapping of the key priorities on the current global policy agenda. These priorities can be grouped into three main themes: convergence and digitalization; networked economy; and global information society issues. Each theme then corresponds to a set of issues discussed within a set of global and regional venues.

Figure 2. Global ICT Policy Themes, Issues and Venues

POLICY Theme	POLICY Issues	GLOBAL VENUES
Convergence and Digitalization	Wireless and Radio Spectrum Allocation (New Services, Harmonization Frequency Bands, etc.)	ITU
	Universal Access and Interoperability – (Bottlenecks, Essential Facilities, Anti-Trust, Emerging Standards, etc.)	ITU, IETF, W3C, WTO, GBDe
	Common Identifiers (Domain Names, ENUM, Object Identifiers, etc.)	ICANN, IETF, WIPO
	Regulatory Reform (Redefining Regulatory Spheres, Converged Agencies, etc.)	Various, including the Worldbank and IMF
Networked Economy	Consumer Protection (Cross Border Redress and Dispute Resolution, Jurisdiction, etc.)	OECD, ITU, WIPO, UNCITRAL, GBDe
	Electronic Contracts and Signatures (Authentication, Standards, Model Laws, etc.)	UNCITRAL, IETF, W3C, OECD
	Intellectual Property (Copyright, Trademarks, ISP liability, etc.)	WIPO, ICANN, WTO
Global Information Society	Network Security (Cybercrime, Hacking, Critical Infrastructures, etc.)	ICANN, ITU, OECD
	Language and Cultural Diversity (Multilingual Domain Names, Content Diversity, etc.)	ICANN, WIPO, ITU, UNESCO
	Market Conditions (ICT for Trade, Pricing, Affordable Inputs, Credit, Taxation, etc.)	WTO, UNCTAD

3. Barriers

The CTO/Panos study found that the main international ICT decisionmaking venues face a common set of challenges and barriers.

3.1 A Common Set of Challenges

It is clear that there are international ICT fora that are long established, while others are newly-minted, intergovernmental, private sector, civil society or open to all. Some fora draw their inspiration from the world of telecommunications, the world of the Internet, the world of content creation, or the world of trade and commerce. Still other fora are focused solely on ICT technologies, products, services or applications. To remain relevant, however, all international ICT fora as institutions are searching for ways to build multi-stakeholder partnerships between government, the private sector and civil society, and to strengthen participation by developing countries in decisionmaking processes.

There appears to be a general recognition – which is reflected in the work of the DOT Force and the mandate and composition of the UN ICT Task Force – that successful resolution of these two interrelated issues – multi-stakeholder and developing nations engagement – is a prerequisite to effective action by the international community to bridge the digital divide.

Furthermore, there is a set of common challenges that developing countries face. Overall challenges identified by Clement Dzidonu and Nii Quaynor[2] include:

- The limited bargaining power and leverage of developing countries in comparison with other countries and regional blocs;

- The absence of coherent, consistent positions by developing countries on major global ICT issues in advance of their explicit emergence;

- The lack of experience and capacity in the global ICT policy area, and the "brain-drain" of many of the most qualified; and

- The absence of effective cooperation among developing countries on how to engage in collective negotiation on global policy issues for their mutual benefit.

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2 *Broadening and Enhancing the Capacity of Developing Countries to Effectively Participate in the Global ICT Policy Forums and the ICT for Development (ICTfDev) Process. A Concept Paper for the Markle Foundation*. By Clement Dzidonu and Nii Narku Quaynor. International Institute for Information Technology (INIIT), Ghana, Special Working Paper Series No. 5, March 2002.

3.2 Identified Barriers to Participation

Research conducted for the CTO/Panos study at both the international and national level identified a number of specific barriers that stand in the way of effective participation by developing countries in international ICT decisionmaking.

A lack of awareness was cited, with surprising frequency as the most significant barrier to developing-country participation in international ICT decisionmaking in two different senses. In the first instance interviewees reported a lack of awareness of the importance of international ICT decisions for national policies and regulations. More significantly, they reported a lack of awareness of the role that ICTs can potentially play in supporting economic and social development. This was considered a problem in all sectors and at all levels – from the highest reaches of government to the owners of small- and medium-sized businesses, to rural inhabitants and "the person in the street". In the second instance, people simply do not see – in concrete, practical terms – how ICTs can make a difference to their lives, and how ICTs can contribute to their development as individuals, as members of families and communities, and as citizens of a country.

Lack of easy and affordable access to timely information about the key ICT-related issues on the international agenda, the fora where decisions are made on these issues, and the processes that result in these decisions, are additional barriers. The rapid increase in both the range of issues on the international ICT policy agenda and the number of organizations involved in ICT policymaking has made it increasingly difficult even for developed countries to keep track of what is going on, anticipate key events, and plan strategies for successful outcomes. But while the main problem for developed countries might be "information overload," the main problem for developing countries is still very much one of information scarcity. The costs and technical limitations associated with Internet access in many developing countries, along with the costs of paper-based publications and consulting studies on international ICT issues, were cited as significant impediments to effective developing-country participation.

A lack of technical and policy capacity on ICT issues – particularly in such emerging areas as the migration to IP-based networks, the implementation of future generation mobile communication systems, e-commerce applications, and protection of intellectual property rights – also hinders participation of developing nations. Since technical and policy capacity can only be developed through years of education and experience, it is recognized that there is no quick and easy way to overcome barriers in this area. Capacity-building is clearly seen as a long-term challenge that requires the engagement of government, the private sector and civil society from both the developed and developing worlds in a multi-pronged approach that takes advantage of every existing

opportunity to develop human capital and imagines new ones as well. Many of the people interviewed for the CTO/PANOS study drew inspiration from the success that a number of former and current developing countries have had in building ICT capacity, and aim to emulate their example. In addition, it was often suggested that developing countries could make more effective use of the technical and policy capacity they already have, if other barriers were removed.

Challenges in national and regional ICT policymaking processes and institutions. At the national level, reported challenges included a general lack of political leadership reflected in the absence of a national ICT strategy and ineffective coordination between different government departments and agencies with ICT responsibilities. They also included the absence in many developing countries of ICT policy processes open to participation by all stakeholders and based on public discussion and debate. In addition, specific weaknesses were reported in the preparatory processes for international ICT decisionmaking meetings. These included problems or outright failures in the following areas: dissemination of information about meetings to affected government departments and stakeholders; preparation of national positions on the basis of consultations with all interested and affected parties; inclusion of the technical and policy experts best qualified to participate in international meetings on national delegations; and dissemination of information about the results of international meetings to interested parties and the general public. At the regional level, interviewees recognized that the lack of effective institutions and preparatory processes for international meetings has hampered participation by developing countries, all the more so since regional coordination of policy positions is becoming an increasingly important feature of many international ICT decisionmaking fora.

Financial barriers. The high cost of attending meetings in locations such as Geneva and New York, combined with the rapidly increasing number of ICT-related meetings, the cost of accessing timely and high-quality information related to items on the international agenda, and the direct and indirect costs of mounting open, inclusive, and effective preparatory processes at the national and regional levels, clearly presents a significant financial challenge for developing countries.

Today, in spite of the substantial efforts key international ICT decisionmaking fora, actors on the international scene, and developing countries are taking, the CTO/PANOS study found that, taken together, these factors constitute a formidable barrier to effective, meaningful participation by developing countries in international ICT decisionmaking.

At the same time, the study found a surprisingly strong sense of optimism. With a concerted effort by all members of the international community, led by developing countries, barriers can be transformed into opportunities that can enhance the role of ICTs in the economic, social and political life of developing countries, and opportunities to strengthen the voice of developing countries in international ICT decisionmaking to the benefit of all.

PART THREE
LESSONS IN INCLUSION FROM OTHER POLICYMAKING PROCESSES

Creating a meaningful voice for developing nations in global fora on ICT issues is an indispensable component of any agenda to empower these nations to prosper in the emerging global information age. To better understand and develop successful strategies to overcome current barriers to participation, we looked to the participation and experience of developing countries in policymaking fora involving issues beyond the ICT horizon. By examining four case studies and comparing the barriers, solutions and best practices in them, we are able to relate successful strategies in other arenas of importance to developing countries to ICT decisionmaking structures. It is our hope that this knowledge can expand the range of strategies available to our group and others as solutions are developed.

1. Case Studies[3]

1.1 The World Trade Organization

The Institution. The WTO, or its predecessor the GATT, has provided a principal forum for the international community to conduct multilateral trade negotiations on critical issues such as agriculture, goods, services, intellectual property and investment measures; to implement commitments and rules made through negotiations; and to adjudicate trade disputes.

Barriers to Effective Participation. In theory there is much about the WTO that developing nations ought to be able to employ to their advantage. Three aspects of the WTO equation – its formal members are nation-states, it operates on a consensus basis, and more than 100 of its 144 total Member States are developing countries – should have a meaningful impact on developing countries. In practice, however, developing nations have found it difficult to participate constructively.

[3] Developed by the Brookings Institutions for the Markle Foundation. A more elaborate analysis is available at http://www.markle.org/globalpolicy

The first barrier has to do with the *mechanics of effective participation*. Between ongoing discussions and relationship-building in Geneva, ministerial conferences every two years, and regular committee meetings and dispute resolutions and trade notifications, simply staying abreast of the process is a challenge for a smaller and/or less wealthy nation. The countries that participate most effectively often combine their presence at WTO offices and meetings with extensive consultations, research, and coalition-building at home. All of this poses challenges to countries without large numbers of diplomats, highly-skilled experts in international trade or law, or substantial financial resources to fund participation.

A second category of barriers includes the *decisionmaking processes* of the body itself. While open and consensus-driven in theory, in practice the decision process can turn on informal consultations among small groups of countries, and critical participation in these informal processes by developing nations may be hard for them to achieve.

Third and finally, the extensive and complicated activities that occur within the formal ministerial pose a special challenge for developing countries. The dispute resolution process, the recurring studies of country trade practices, the notifications of trade activities, and the implementation requirements of agreed rules can overwhelm the resources of a developing nation.

Strategies for Enhancing Participation. Some of the remedial steps and developing-country strategies for effective participation under way within the WTO stand as potential models for emerging international ICT fora. In the most general terms, four actions and strategies deserve mention:

- **Technical, legal and financial assistance.** Through bilateral aid, programs directed at entire regions, technical training efforts, and financial grants, the WTO is increasing its efforts to bring greater expertise, resources and experience to developing countries.

- **Use of the agenda-setting process.** By the time of the Seattle ministerial, developing countries had become well aware of the importance of agenda-setting, and developing-nation members proposed more than half of the agenda items for the meeting. It was therefore no surprise that the November 2001 Doha Declaration provided for a comprehensive 'development agenda'.

- **Joining ranks with large and/or influential developing countries.** Very large developing states, such as Brazil and India, have championed the interests of developing nations as a whole. These countries chair committees, attend informal negotiations, bring large delegations, and otherwise help to level the overall playing field.

- **Coalitions and alliances.** Developing countries have found coalitions a route to influence, especially in the context of the WTO's consensus-driven decisionmaking process. In the case

of the Cairns group, for instance, developing countries allied with developed states to promote the liberalization of agricultural goods. In debates about trade in textiles and services, a developing world bloc is also sometimes formed.

1. 2 The Codex Alimentarius Commission

The Institution. The Codex Alimentarius is the register of standards that comprise the global food code. Established between 1961 and 1963, the Codex Alimentarius Commission is the standard-setting body that oversees the process of updating the Codex. We include it here partly as representative of standard-setting bodies in general. Many of the challenges facing developing-state participation in such bodies – from the Commission to the International Plant Protection Convention (IPPC) to the International Organization for Standardization (ISO), and others – are similar, as are a number of the possible remedies in the challenges facing ICT policymaking.

All members have equal status. Generally, the Commission operates on a consensus basis. In a few especially controversial cases, it has used its alternative decisionmaking mechanism: a majority vote of members present at its meetings. With the rise of issues such as tainted beef and genetically modified foods, the work of the Commission has become vastly more controversial and politicized in just a few years.

The Codex Commission is a joint endeavor of the Food and Agriculture Organization and World Health Organization, which provide Codex's annual budget. The Commission had 163 members as of 2001, with 80 percent of them developing countries. Its main body meets biannually, alternating between the headquarters of its two host organizations in Rome and Geneva. National delegations can include diplomats as well as representatives from industry, consumer groups and academic institutions. Along with the Office Internationale des Epizooties (OIE) and the International Plant Protection Convention (IPPC), the Commission is one of the "three sisters" of food safety.

Government representatives staff the Commission's 24 committees, and it employs an eight-step procedure – often stretching over a number of years – to create standards, with heavy reliance on advice from expert scientific panels. Member States approve Codex standards, but they are non-binding.

Barriers to Effective Participation. Building a roster of objective, scientifically-based food safety standards was seen as a potential safeguard for developing countries against developed-nation efforts to disguise trade barriers as safety standards. In practice, though, developing-nation influence has remained weak, for a number of reasons.

The presence of developing countries at Commission meetings is often minimal. Unlike the related standards organization OIE, the Commission does not have the budget to subsidize

Member State travel or participation in meetings (its entire annual budget, provided by the WHO and FAO, is just $2.5 million, and its secretariat consists of just six people). In a 2000 survey of Commission and/or ISO members in the developing world, 81 percent replied that they did not attend meetings as often as they felt necessary, and the overwhelming reason given was the cost of attendance. In 1997, for example, only about 60 developing countries sent delegations to Codex, as compared to 20 developed nations.

Tracking implementation requirements is difficult, partly because of the great complexity of a system in which international Codex standards sit uneasily on top of dozens upon dozens of conflicting national ones. In the Commission itself, every year may see 20 committee meetings, held all over the world, each with its own highly technical information to be digested and decisions to be made.

Developing states hold few leadership positions. Of the primary committees listed on the Codex Web site, only two are hosted by developing or transition economies, and these are upper-middle tier nations, Hungary and Mexico. This pattern is common for standard-setting bodies. In recent years, for example, developing countries comprised about 75 percent of membership in the ISO but held only about 2 or 3 percent of the secretariat positions and committee chairs.

Finally, as in other fora, developing-country members of the Commission often receive little meaningful support from their home countries. The lack of effective civil society institutions supporting and/or critiquing government policy on food safety issues is an additional gap.

Strategies for Enhancing Participation. The Codex has recognized these issues. In its "Strategic Framework 2003-2007," the group mentions financial constraints and the requirement for capacity building. A US chairman offered an action plan to enhance developing-country committee leadership and encouraged the FAO and WHO to create an audited trust fund to subsidize developing-country participation and capacity-building. Two practices Codex implemented stand out as especially interesting:

- **The use of regional committees.** Like other standard-setting bodies, the Codex has established a number of regional committees (which it calls "coordinating committees") to ease the burden on developing-country participation. The meetings are held closer to the countries, lessening travel costs and representing a more intimate forum.

- **A mentoring program.** The Codex has established a formal mentoring program whereby developed-country delegations offer advice, for example on the drafting of papers, to developing countries, sometimes by e-mail between meetings.

1.3 The United Nations Framework for Climate Change Convention (UNFCCC) and Kyoto Protocol (KP)

The Institution. Following the World Climate Conference in 1979, governments, groups and individuals lobbied to develop a formal mechanism, under UN auspices, to address the problem of climate change. In 1988, the process acquired major support in the form of the independent Intergovernmental Panel on Climate Change (IPCC), a network of experts that issues periodic reports on the state of the world's climate. Finally, in May 1992, UN Member States created the UNFCCC with the explicit aim of stabilizing greenhouse gas emissions at sustainable levels.

The UNFCCC works largely through an annual meeting, the Conference of Parties (COP), where roughly 10,000 delegates, press, and members of observer groups from the Convention's 186 Member States gather to debate and make decisions. (Since 1997, the session also serves as the formal Meeting of Parties [MOP] of the Kyoto Protocol.) At each COP, the members elect a COP Bureau of 11 officers drawn from the national delegations, whose job it is to promote consensus during the course of the meeting.

Between meetings, two major groups support the COP: the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI). Both are open to all parties, hold biannual meetings, and attract about 1,500 people to their sessions. The Kyoto Protocol agreement emerged from a COP – the third such conference under UNFCCC auspices, held in 1997.

Barriers to Effective Participation. The UNFCCC forum displays many of the same barriers to developing-country participation that are found in other fora. Developing states, for example, can afford to bring only small national delegations. At the sixth COP, held in The Hague in 2000, developed countries routinely brought groups of over 40 experts, while many developing states had three- to five-member delegations. At a forum characterized by the simultaneous meeting of many working groups, this weakness is especially pronounced.

A lack of expertise is also a notable barrier at a forum where issues and negotiating procedures are both highly complex. Apart from scientific issues related to climate change, many developing-country delegations have had difficulty understanding the UNFCCC rules of procedure, negotiating process, voting processes, and the role of documents.

The aspect of this forum arguably most injurious to developing countries is the highly informal character of the real negotiations that go on under the UNFCCC umbrella. It is practically impossible to discuss technically complex, politically charged issues in plenary sessions attended by 10,000 people from nearly 200 countries. Much of the business during and between COPs gets done in informal working groups, contact groups, and bilateral dialogues. Hard-won compromises that emerge from such meetings often prove difficult to implement in shaping the plenary session.

Smaller developing states have trouble getting access to or information about these dialogues and the agreements they generate.

Strategies for Enhancing Participation. Two strategies stand out as meaningful steps in the direction of reducing barriers:

- **Forming coalitions.** Through the G-77 and related coalitions, developing countries have banded together on central issues of concern, creating a powerful bloc that, if it remains united, can significantly influence UNFCCC policies.

- **Training programs.** A handful of specific programs have been created to enhance the capacity of developing-country delegations. These include the Climate Change Knowledge Network's training courses on negotiating, UNITAR courses on technical issues, and UNEP workshops on environmental issues.

1. 4 The Conference on Disarmament (CD)

The Institution. Created by its Member States in 1979, the CD is the world's only multilateral negotiating body for disarmament-related treaties. It is an autonomous body, and therefore not part of the UN system. However, the UN supports its activities, and the CD both takes its agenda proposals from and reports to the General Assembly. The CD fashions a working agenda each year based on its standing agenda. It conducts three sessions per year, totaling 24 weeks, and generally holds one plenary meeting a week when in session.

Today the CD has 66 formal, voting-member states, with the most recent 5 admitted in 1999. More than 40 additional states, mostly developing or transitional countries, have requested observer status, and there is constant pressure to increase the CD membership. Observer states can speak, offer papers and contribute to the dialogue, but cannot vote or block a consensus achieved among the voting members. When working on a specific agreement, the CD will appoint an ad-hoc committee that meets in private to develop the substance of the proposed agreement.

During its history, the CD has provided a forum to accomplish the heavy lifting in negotiations on some of the modern era's most important arms-control achievements: the Limited Test Ban Treaty, the Nonproliferation Treaty, the Biological Weapons Convention, the Chemical Weapons Convention, the Comprehensive Test Ban Treaty, and others. Many aspects of the CD's issues and procedures favor effective participation by developing countries. More than half of the CD's members are developing states (36 of the current 66), while many others are transitional countries from East and Central Europe and developed, non-nuclear powers (such as the Scandinavian countries) sympathetic to the agenda of the developing world. The forum operates by consensus. This gives

a handful of nuclear-weapons states an effective veto, but also ensures that developing countries will have a voice.

The presidency of the CD rotates through all members, so developing-country members have an opportunity to make a mark. Developing-country ambassadors also serve on ad-hoc committees, and assume special-coordinator roles and other CD leadership positions.

While technical issues, such as the details of nuclear test verification, sometimes intrude into the talks, they do not create an undue burden for developing countries. Partly this seems to be because the broad proposals are fairly straightforward (for example, banning nuclear tests), and the primary technical and financial burdens of agreements fall on nuclear weapons states. Moreover, technical advice and assistance are available from developed-country members and from NGOs. A related UN fellowship program in this area has helped to improve the knowledge of hundreds of diplomats and scientists from developing countries.

Barriers to Effective Participation. As impressive as this record of developing-country participation is, the CD also exemplifies the risks of a consensus-based forum that relies largely in formal decisionmaking mechanisms. Since finishing work on the CTBT, the CD has been at an effective standstill because of lack of consensus on its agenda, accomplishing so little that some Member States have wondered publicly whether the forum should be abandoned.

Strategies for Enhancing Participation. Broadly, one can say that the CD as a body sees relatively effective developing-country participation. Two points are worth highlighting:

- The **CD's process for debate and decision-making** integrates developing countries fully into agenda-setting, debate, committee leadership and voting.

- The **affiliated United Nations Disarmament Fellowship program** is an example of a capacity-building strategy targeting mid-career officials from developing countries. It provides seminars in various cities, exposes the Fellows to the work of disarmament fora, and otherwise enhances their knowledge and skills.

2. Solutions and Best Practices

A number of strategies have emerged from analysis of the various fora that directly relate to our main challenges in addressing the area of ICT policymaking:

1. **Procedural equity**. In fora such as the ILO, the CD and the WHO, overall membership, committee leadership, voting procedures and other formal arrangements safeguard devel-

oping-country influence. The CD uses another procedural initiative to enhance equity: rotating its presidency through all member states. The International Civil Aviation Organization has its Assembly elect members to the key decisionmaking Council in three categories (one of which is "geographical representation"), which ensures broad participation.

2. **Technical assistance**. Many bodies offer numerous forms of assistance to underwrite developing-country participation. Some bodies have subsidized travel costs and offered training in substantive issues or in negotiating tactics. Others aim at capacity-building among the policy and related stakeholder communities (e.g. business, NGO, academic) that can have a decisive voice in technical matters. If there is one overarching theme to the examples that involve technical issues, it is the absolute priority of building substantive domestic communities within developing countries that can address technical issues over the long term.

3. **Regional sub-groups.** By empowering regional entities to help set agendas, implement programs and generally serve as a conduit of ideas and information, groups such as the Codex and the WHO are enhancing participation by developing countries. Developing countries also find it less costly and more comfortable to make their views heard in a local setting.

4. **Internal capacity building.** Developing countries realize the importance of domestic expertise and coalitions in creating effective participation, and more international fora are reinvesting in the same goal. Developing governments are creating stronger knowledge and political bases from which to negotiate.

5. **Involvement of NGOs in implementing programs.** The WHO and other organizations work in formal partnership with NGOs who share their mission, creating another source of aid and advice to empower developing countries. NGOs participate vitally in strengthening developing nations in the international policy system. They contribute valuable information and ideas, advocate effectively for positive change, provide essential operational capacity in emergencies and development efforts, and generally increase the accountability and legitimacy of the global governance process.

6. **Human capacity building.** The Codex has a mentoring program for delegates. The UN runs a disarmament fellowship program. In many ways, fora are finding more targeted ways to enhance training programs and invest in the expertise and career development of specific diplomats or scientists. As an example, the ICAO has offered thousands of fellowships as part of its training program.

PART FOUR
FRAMEWORK FOR ACTION

The previous sections have underscored the urgent need for comprehensive action to strengthen the capacity of developing-nations stakeholders to participate meaningfully and effectively in relevant global ICT policy fora.

From the outset, the mandate of DOT Force working group on this issue included the development of actions that would enhance "effective and meaningful participation in global ICT policymaking," as described in Action Point 5 of the DOT Force Genoa Plan of Action:

Action Point 5 Genoa Plan of Action

1. *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;*
2. *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;*
3. *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;*
4. *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 decisionmaking processes;*
5. *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.*

So far, the group has worked from the premise that a successful action plan must endeavor – in a first phase – to understand how and where ICT policy is currently made, the status of developing-nations stakeholders in these and other policymaking processes, and where needs exist that are currently unmet. The findings of this important exploration process are reflected in the previous parts of this Roadmap. Having framed the current landscape and identified key barriers and lessons learned in other policymaking fora, our challenge is to develop strategies and catalyze action to address these barriers. In what follows, an implementation framework is recommended that includes priorities and a set of actions.

The actions will continue to be developed in conjunction with the United Nations ICT Task Force Working Group also focused on this area, to which many DOT Force members also belong, as well as with additional outside partners.

To remain relevant in the long run, the framework developed below will need to be reviewed on a regular basis, and its approaches refined and reconsidered in the light of knowledge gained from the priorities and activities identified.

1. Priorities

To address the needs, vision and objectives for inclusive ICT global policymaking and its role in creating global digital inclusion, priority should be given to:

- *Strengthening the technical and policy capacity of developing-country stakeholders in the area of ICTs, which will not only equip them for the demands of global policymaking but also enhance national and regional ICT policymaking processes and institutions. Special consideration should to be given to:*

  - *Building networks of leaders and experts in developing worlds as a long-term solution. Effective networks will help to resolve many of the intersecting problems that prevent effective participation;*

  - *Empowering regional networks to help set agendas, implement programs, and generally serve as a conduit of ideas and information;*

- *Increasing awareness of the importance of international ICT decisions on national policies and regulations in developing countries, as well as creating a general understanding of the role ICTs can play in supporting economic and social development.*

- *Providing easy and affordable access to timely information about the key ICT-related issues on the international agenda, the fora where decisions are made on these issues, and the processes that result in these decisions;*

- *Overcoming financial and other barriers, including language and ongoing time commitment requirements;*

- *Fostering multi-stakeholder engagement in the search for and implementation of solutions that enable inclusive global ICT policymaking;*

- *Promoting equity enhancing mechanisms and the lowering of access barriers within global ICT policy fora, where necessary.*

These priority areas should be further developed through four specific sets of initiatives. These include:

- *The development of expert resources and networks of opinion leaders to improve technical and policy capacity as well as regional collaboration;*

- *The creation of "participation enabling tools" to overcome financial and other barriers, including travel funds and on-line mediation;*

- *Modeling best practice processes that can reinforce successful outcomes from effective participation by developing-nations stakeholders in global ICT policy fora;*

- *Commitment by existing global ICT institutions and fora to review practices to identify barriers and opportunities.*

2. Recommended Actions

2.1 Development of Expert Resources and Networks

Developing countries have limited access to expertise, and an inability to gain support from regional networks of leaders and experts. Networks of opinion leaders and (regional) centers of expertise must be created to enhance technical and policy capacity among developing-country stakeholders, as well as to improve regional collaboration.

To assist developing countries in becoming the most effective participants possible in global policymaking, it was generally recognized that a new generation of advocates and experts must be nurtured. This generation should be tech-savvy, globally connected, open to the benefits of participating in global policy processes, and able to work within new paradigms of policymaking (public/private, code/law, etc.) that are common to the area of ICTs. Such a generation of leaders is also necessary to complement and support the hard-pressed core of experts representing developing-nation interests today.

Furthermore, while the demand for technical and policy assistance is great, and while there are a number of existing efforts to provide such assistance, greater consistency and coordination is necessary for such assistance to be effective. There is a need for greater communication among individuals who have been involved in representing developing nations at the global level. Those who seek technical assistance and those who provide it must have immediate access to materials and examples so that they can provide alternate models that relate to specific policy needs.

The creation of these networks and regional centers of expertise should be based upon existing structures and networks, but should also be innovative in scope and organization. The identification of promising thought leaders and existing expertise from the developing and developed world can be developed in a first phase through organizations such as the Salzburg Seminar, which has been supporting the participation of such experts in ICANN through grants from the Markle and Ford Foundations, as well as consulting with Southern-based institutions and regional entities such as the Organization of African Unity and the Organization of American States. This type of exercise could provide a multi-sectoral directory of potential and existing expertise, which could be made available on the web.

At a later stage, appropriate structures should be considered for:

- The expansion of training seminars and training materials for global ICT policy issues, as well as curricular materials for use in universities in the developing world;

- Distance learning, the distribution of videos or CDs and other techniques to allow high-quality training to take place in a decentralized way;

- The identification of a target group of leaders from developing nations who can work locally and regionally with government, industry and NGOs to create capacity.

The International e-Development Resource Network (IeDRN) *being developed by Team #1 (e-Strategies) of the DOT Force offers a valuable instrument to support the development and ongoing functioning of such a network. While the primary purpose of the IeDRN is to build and sustain policy expertise on a range of domestic issues related to ICTs (e-strategy development, telecom policy, Internet policy, taxation issues, e-commerce, etc.), the Network lends itself well to the inclusion of international governance elements. For instance, the IeDRN can support the development of a network of experts on international governance issues, and stimulate the sharing of information, the development of common positions, the sharing of knowledge and the upgrading of skills. The IeDRN could then facilitate the combination of domestic and international policy expertise required in government administrations as well as in private-sector and civil-society organizations involved in ICT for Development.*

2.2 Development of "Participation Enabling Tools"

The high cost of attending meetings in locations such as Geneva and New York, combined with the rapidly increasing number of ICT-related meetings, the cost of accessing timely and high quality information related to items on the international agenda, and the direct and indirect costs of mounting open, inclusive, and effective preparatory processes at the national and regional levels clearly present significant financial and logistical challenges to developing countries. To overcome these barriers and enable developing-nations stakeholders to participate in important global policymaking fora, additional resources should be made available, including travel fellowships, online mediation and information resources.

- *Travel Fellowships* should be provided and administered by a neutral party who distributes funds based on need and an adequate demonstration by applicants that they represent significant interests and expertise in their home nation and have invested sufficient time and energy in preparation for effective participation in global ICT policymaking fora. A new program could learn from and combine existing efforts of organizations such as the *info*Dev Conference Scholarship Fund, which finances the participation of developing-countries delegates and participants in international conferences, travel scholarship programs such as the Salzburg ICANN Travel Fund (created by the Markle Foundation and Ford Foundation), and programs co-ordinated by the Agence de la Francophonie and the Commonwealth Telecommunications Organization.

- In addition, improved awareness and knowledge of global ICT policymaking should be generated through the creation of *global ICT policy information resources*. The purpose of these resources would be to track global ICT issues and events, information concerning which could be offered through a one-stop-service, and to share data with interested developing-nations parties via electronic and traditional publishing. Projects could include: a web or email-based newsletter (in various languages); an annual compendium of significant issues; a research team to field queries from members (who might pay on a sliding scale for membership); and conferences on specific issues. Drawing on the IeDRN, these resources could meet developing country needs for the identification of experts.

- Finally, ICT itself should be applied to provide tools that promote greater and more meaningful participation in global policymaking by developing nations. New technologies lend themselves particularly well to sharing information and negotiations and will help to reduce costs associated with participation. E-governance is an unexplored opportunity and could provide sustainable and effective tools for participation by developing nations in global policymaking. Applied at a global level, e-governance tools and applications could overcome distance, fostering communication and collaboration. The Internet is the ideal medium for linking far-flung groups of people to share ideas and positions and build coalitions. New technologies have also driven an unprecedented ability to share technical information, expertise and databases online, thereby helping developing nations overcome their deficits. Global and local perspectives should be linked, and online archiving facilities could provide the institutional and regional memory that many developing nations currently lack. And of course, new digital translation tools should make it possible for individuals and nations to communicate effectively across language barriers and develop shared understandings of complex ideas.

2.3 Initiation of Model Processes

Shared learning and experimentation with best practices can help us to understand how policymaking can be made more inclusive of developing-country stakeholders. Obviously there is no "one-size-fits-all" formula that can address all barriers and venues. A variety of experiments should be initiated through modeling processes around specific global ICT policy issues that will be addressed in the next two years. These experiments could demonstrate how policymaking can be inclusive, making the process more legitimate, and how the outcomes can be appropriate for a broad range of countries. The design of such processes, including the selection of venues and issues, should be done in collaboration with a broad range of stakeholders from different sectors in order to identify the relevant issues, goals, timeframe and deliverables. It will be important to catalog and disseminate the lessons of the demonstration processes so that there is a greater understanding of the merits or drawbacks of the processes developed. The ultimate goal of these experiments should be to teach and inform all involved about long-term, sustainable actions. It is imper-

ative that the process of enhancing the capacity of developing-nations stakeholders be an ongoing learning process where adjustments to strategy are made to accommodate the complex and changing realities of the global ICT policymaking process.

2.4 Commitment by Existing ICT Institutions and Fora to Review Practices to Identify Barriers and Opportunities

Although the initiation of demonstration processes will add significantly to our store of knowledge about how to facilitate meaningful participation by developing countries, experience to date within global ICT and non-ICT policy-related fora, discussed in sections 2 and 3, already provides an important clearinghouse of best practices which might be quickly adopted by existing ICT policy-related institutions. To move this process forward, each institution should undertake a review, in dialogue with all stakeholders from both developing and developed countries, of existing procedures, with an eye to enhancing developing-country participation consistent with the institution's overall mission. This review should focus on the priority areas identified in section 1, above, with particular emphasis on internal processes – such as easy and affordable access to timely information, financial and other access barriers – that are within the institution's own authority to improve.

3. Summary Recommendations

PRIORITIES	RECOMMENDATIONS for ACTIONS
Strengthening **technical and policy capacity**	• Development of expert resources and networks of leaders (including IeDRN) • Experiments with model processes
Increasing **awareness** by developing countries of the importance of international ICT decisions	• Experiments with model processes • Creation of Global ICT policy information resources
Providing **easy and affordable access to timely information**	• Creation of Global ICT policy information resources • Technology based mediation • Development of expert resources • Model processes
Overcoming **financial and other barriers**	• Creation of participation enabling tools • Development of expert resources • Model processes
Fostering **multi-stakeholders engagement**	• Development of networks of leaders • Experiments with model processes
Promoting **equity enhancing** mechanisms.	• Commitment by existing ICT institutions and fora to review practices to identify barriers and opportunities • Experiments with model processes

4. Conclusion

ICTs are an important tool to enhance the development of all nations, and offer unique opportunities for all. Yet, major policy decisions that affect the potential utility of ICTs as such tools are more and more made at a global level and have substantial domestic, economic and political consequences. They determine, among other things, the level of ICT accessibility, compatibility and availability.

The key message of this Roadmap is that improved participation by developing nations in global ICT policymaking is a critical dimension of the potential for applying ICTs to development. A more inclusive process does matter, and enhanced participation will lead to greater equity in outcomes. Where such participation is absent, distrust and non-cooperation can result.

The action plan developed in this Roadmap is aimed at enhancing such sustainable and inclusive ICT-related policy processes and outcomes. Its key components include strengthening the capacity and voice of developing-country stakeholders, increasing awareness of the importance of ICT and international ICT decisions, overcoming financial and other barriers, and promoting participatory mechanisms within global ICT policy fora.

Effective action will require a long-term, multi-stakeholder commitment and, in many instances, a fundamental transition in global ICT policymaking. We believe that the principles and priorities by developing-nation stakeholders set out in this Roadmap present a useful framework for facilitating participation. Of course, our recommendations and proposals need to be interpreted, developed and translated for each ICT policy circumstance. Yet, as more stakeholders – including public and private partners – join in this effort, priority issues get further defined and resources for achieving the goals emerge. We hope this Roadmap will provide an important turning point in inclusive global policymaking.

ACKNOWLEDGEMENTS

This Roadmap is a collaborative effort based on contributions of a large number of organizations and individuals worldwide. At its core, the goal of this Roadmap has been to create a global community that shares the vision - expressed in this document - of assisting developing-nations stakeholders from governments, the private sector and non-profit organizations in participating meaningfully in global ICT policymaking.

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ABOUT THE DOT FORCE

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 and non-profit 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 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, including G8, currently under way or proposed to address these challenges and opportunities;
- To enhance the effective mobilization of resources to address these challenges and opportunities.

ABOUT THE IMPLEMENTATION TEAM ON GLOBAL POLICY PARTICIPATION

The DOT Force, Genoa Plan of Action, stated that policies made in global venues are increasingly determining the nature and scope of regional and national policy options for using ICT for socio-economic development, and that the ability of developing-country stakeholders to engage effectively and meaningfully in those global fora is critical. Specifically, Action Point 5 of the Plan recommended support "for developing-country stakeholders — governments, private companies, non-profit organizations, citizens and academics — to better understand global Internet and related ICT technical and policy issues, and to participate more effectively in relevant global fora." In order to identify and develop action to enhance "universal participation in global ICT policymaking," a key component of the group's mandate has been to understand how and where ICT policy is currently made, the status or barriers experienced by developing-country stakeholders in these policymaking processes, and the specific needs that currently are unmet in order to more effectively

identify action and resources to meet them. Specifically, the key goals guiding the work of the Implementation Team on Global Policy Participation have been to:

- Articulate the needs and expand the voice of developing countries in global ICT policy venues;
- Create an improved and common understanding of the issues and barriers confronting meaningful participation, and identify lessons learned from other global policy issues and venues that have successfully represented developing-country stakeholders;
- Identify strategic priorities that lay a foundation for action, as well as partnerships and resources that can implement them, that will lead to:
  - an enhanced knowledge-base and capacity among developing-country stakeholders for meaningful participation in global ICT policy formulation, including training, outreach and exchange;
  - increased effective participation of and access by developing-country stakeholders at international venues and key policy debates as they relate to ICT;
  - efforts made by global policy and technical fora and organizations working on Internet and ICT issues to bring representatives of developing nations into their discussions and decisionmaking processes.

RESOURCES AND INFORMATION ON THE PARTNERSHIP FOR GLOBAL POLICY PARTICIPATION AT:

http://www.markle.org/globalpolicy