

Information Society for the South:

# Vision or Hallucination?

Briefing papers towards the World Summit  
on the Information Society



Instituto del Tercer Mundo (ITeM)

Montevideo, Uruguay

November 2005

Information Society for the South:  
**Vision or Hallucination?**

Briefing papers towards the World Summit  
on the Information Society



Published by  
Instituto del Tercer Mundo (ITeM)



Made possible by the financial support of the  
International Development Research Centre (IDRC)

**WSIS Papers** - [wsispapers.choike.org](http://wsispapers.choike.org)

WSIS Papers is a project by the Third World Institute (ITeM) - [www.item.org.uy](http://www.item.org.uy)

#### **Project Board**

Ziad Abdel Samad (Arab NGO Network for Development, ANND), Anriette Esterhuysen (Association for Progressive Communications, APC), Martin Khor (Third World Network, TWN), Robin Mansell (London School of Economics, LSE), Daniel Pimienta (Fundación-Redes-y-Desarrollo, FUNREDES), Victoria Tauli-Corpuz (Tebtebba Foundation - Indigenous Peoples' International Centre for Policy Research and Education), Mukhtar Trifi (League Tunisienne Pour la Defense des Droits de l'Homme, LTDH).

The WSIS Papers project and this publication were funded by the International Development Research Centre - Canada (IDRC - CRDI) - [www.idrc.ca](http://www.idrc.ca)

#### **ITeM Director**

Roberto Bissio

#### **ICT Area Coordinator**

Magela Sigillito

#### **Project Coordinator**

Pablo Accuosto

#### **Research Assistance**

Inés Campanella  
Ana Inés Abelenda

#### **Editor**

Soledad Bervejillo

#### **Translation**

Virginia Alba	Alvaro Mailhos
Corinne Cordier	Richard Manning
Patricia Draper	Alejandro Santi
Karine Ducloyer	Victoria Swarbrick
Bachir El Omari	

#### **Graphic design**

MONOCROMO

Phone: + 598 (2) 908 62 41  
[info@monocromo.com.uy](mailto:info@monocromo.com.uy)

#### **Website**

Andrea Antelo  
Ximena Pucciarelli

#### **Technical support**

Arturo González

#### **Acknowledgements**

ITeM gratefully acknowledges the contributions and support given by the following institutions:

ArabDev  
Association for Progressive Communications (APC)  
Bread for All / Pain pour le Prochain  
Centro Egipcio de Cultura de Montevideo  
FUNREDES  
Third World Network (TWN)

#### **Printed by**

MONOCROMO, Montevideo, Uruguay.

ISBN: 9974-574-45-5  
Dep. Legal: 334575

© Copyright 2005  
Instituto del Tercer Mundo (ITeM)  
Jackson 1136, Montevideo 11200, Uruguay  
Fax: +598 (2) 411 9222  
[item@item.org.uy](mailto:item@item.org.uy)

The content of this publication may be reproduced, distributed and displayed for non-commercial purposes mentioning the source and author(s). For any reuse or distribution, you must make clear to others the license terms of this work. Any of these conditions can be waived if you get permission from ITeM.

# TABLE OF CONTENTS

ROBERTO BISSIO

Preface: Vision or Hallucination? ..... 7

## **1. Financing a Sustainable Information Society**

PABLO ACCUOSTO / NIKI JOHNSON

Financing the Information Society in the South:  
A Global Public Goods Perspective ..... 13

FERNANDO PRADA

A Systemic Vision for Financing the Information Society  
as a Global Public Good ..... 47

SUSANA FINQUELIEVICH

Proposed Strategies for the Information Society in the South ..... 71

SEÁN Ó SIOCHRÚ

Community Ownership of ICTs: New Possibilities  
for Poor Communities ..... 91

ANITA GURUMURTHY / PARMINDER JEET SINGH

Political Economy of the Information Society: A Southern View ..... 103

JOËLLE CARRON

Financing Universal Access ..... 117

## **2. The Information Society Global Governance Processes**

CARLOS AFONSO

Internet Governance: A Review in the Context of the WSIS Process ..... 129

GUSTAVO GÓMEZ

The Cultural Diversity Debate in Current Multilateral Processes ..... 143

SANGEETA SHASHIKANT	
Intellectual Property and the WIPO “Development Agenda” .....	165
JAMES LOVE	
Risks and Opportunities for Access to Knowledge .....	187
ANNA BADIMO	
Pursuing Development Goals through ICTs: Making ICTs Work for the Poor .....	207

### **3. Regional Perspectives**

LISHAN ADAM	
Progress and Issues in Financing ICTD in Africa .....	221
ANA LAURA RIVOIR	
The Information and Knowledge Society in Latin America and the Caribbean: Different Approaches and their Implications for Policies .....	235
LEILA HASSANIN	
Fostering Local Resources and Technologies in the South: Perspectives for the Arab World .....	255

## PREFACE

# Vision or Hallucination?

*“An open, inclusive information society that benefits all people will not emerge without sustained commitment and investment.” That was the main message by UN Secretary-General Kofi Annan to the world leaders gathered in Geneva in December 2003 at the first World Summit on the Information Society.*

*The Geneva Summit ended with a declaration of principles. Human Rights were emphasized as the cornerstone on which “to build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life”. Yet those high principles did not find at the time consensus on how to finance the investments needed to bridge the “digital divide” and provide all women and men access to the wealth of information and the potential to communicate that the new technologies offer. Nor was there agreement on how to govern that new territory called “cyberspace” or, to be more precise, whether the management of the Internet would continue to be the exclusive privilege of the United States or a shared responsibility involving all governments and other “stakeholders”, a term which includes every person in the planet, considering the global nature of the network.*

*Finances and Internet governance, plus most of the issues that particularly concern developing countries, were left to be decided on during a second round or “phase” of the Summit, to be held in Tunisia mid-November 2005. Yet, the process of the Summit exposed many difficulties that Southern countries and civil society actors have in ensuring that their proposals are taken into account. In general, developing countries do not find it easy to make their voices heard and influence international*

*arenas where decisions are made on issues that directly affect them. With respect to information and communication technologies, the governments of these countries often do not have sufficient resources and information to be able to make informed decisions and negotiate effectively.*

*The opportunities for countries in the South to participate in an active and effective way depend on the ability that decision-makers have to access timely and appropriate information and analysis about the issues at stake, their impact and the possible alternatives. Frequently the views and interests of minority groups, women, young people and, in general, all those who have limited possibilities of influencing the policies adopted at global level are not expressed. The resulting policies end up privileging the already powerful elites.*

*In the negotiations leading to the Tunis Summit, and in order to articulate the points of view of developing countries and of the poor within them, the Third World Institute (ITeM) convened a team of researchers to look, with a Southern perspective, into the key issues at stake and to draw from their investigations concrete policy recommendations. The first of those papers, focusing on finances and making the case for recognizing the Information Society as a global public good, was commissioned by the Association of Progressive Communications (APC) and debated during the first meeting of the preparatory committee of the Summit. The others were possible thanks to the generous support of the International Development Research Centre of Canada (IDRC).*

*“Briefing papers” summarizing the outcomes of the investigations and offering alternatives for the debates and negotiations circulated widely among diplomats and civil society participants in the preparatory meetings of the Summit and were discussed in public events.*

*Special recognition should go to the members of the project’s advisory board, who offered their guidance throughout the process, helped in identifying unexplored issues and recruiting investigators and provided useful comments to the drafts of the papers. Richard Fuchs encouraged us to develop the idea into a practical project and Alicia Richiero sorted*

*out all obstacles to make it possible for the results to be delivered in time. Magela Sigillito, head of the Internet operations of ITeM, provided the supportive network, leadership and inspiration for the team, while Pablo Accuosto coordinated the work with patience, dedication and enthusiasm. Inés Campanella and Ana Inés Abelenda committed to providing indispensable research assistance and Soledad Bervejillo's editing was essential in making the papers suitable for printing.*

*The results of that effort, which mobilized researchers from three continents to produce in record time a comprehensive package of analysis and proposals, are brought together in this book. Some of their recommendations made up their way into the final documents. Others kicked off a debate that will continue after the Summit.*

*At the moment of writing these lines the outcome of the meeting is still uncertain. This is a good sign. If all documents had been agreed upon two months before the Summit that could have been a sign of the negotiators having avoided the tough issues and settling instead for the lowest common denominator. Instead, all of the important questions were raised: How should the Internet be governed? How do we make sure that the infrastructure reaches every village? How should it be funded when the market fails to provide the investments needed?*

*Many of the key principles have been agreed upon. The "digital divide" has been identified and diagnosed, market failures have been recognized, civil society has been invited to the discussion table. But the political will seems to be missing when it comes to put those principles into practice and redistribute a share of power or resources. The decision-makers, whose responsibility is now to walk the distance from words to action, should remember what entrepreneurs like to repeat as a mantra: "Vision without implementation is just hallucination".*

Roberto Bissio  
Executive Director  
Instituto del Tercer Mundo

1

# Financing a Sustainable Information Society

# Financing the Information Society in the South

## A Global Public Goods Perspective

PABLO ACCUOSTO AND NIKI JOHNSON

INSTITUTO DEL TERCER MUNDO  
WWW.ITEM.ORG.UY

*This paper looks at the question of financing the provision of information and communication technologies (ICTs) in the South, in the context of the WSIS, advocating the adoption of a “global public goods” (GPGs) perspective on the issue. First, the authors provide an overview of what a GPGs approach means in conceptual terms, looking both at general definitions of GPGs and the applicability of this concept in relation to ICTs. They then review the debate about existing or alternative innovative financing mechanisms that might be used for GPGs provision, linking the proposed strategies to the ICTs sector. Finally, the authors put forward a concrete proposal for a financing mechanism, which could be appropriate for expanding access to and use of ICTs in the South.*

This document is based on a paper prepared by ITeM for a series of discussion papers on ICT policy and Internet rights by the Association for Progressive Communications (APC). Available at: [rights.apc.org/papers.shtml](http://rights.apc.org/papers.shtml).

هذه الوثيقة تهدف الى النظر في مسألة تمويل توفير تكنولوجيا المعلومات والاتصالات في الجنوب، وذلك في إطار القمة العالمية لمجتمع المعلومات، وتطالب بثنوي منهج " المنافع العامة العالمية" للتعامل مع هذا الموضوع. أولاً، يقدم المؤلفان عرضاً لما يعنيه منهج " المنافع العامة العالمية" من حيث المفاهيم، بالنظر سواء الى التعريفات العامة لـ " المنافع العامة العالمية"، او تطبيقات المفهوم في تكنولوجيا المعلومات والاتصالات. يتم بعد ذلك عرض للنقاش الجاري حول موضوع محدد هو ما هي آليات التمويل القائمة أو البديلة الجديدة والتي يمكن استخدامها من أجل توفير المنافع العامة العالمية، مع ربط الإستراتيجيات المقترحة، كلما أمكن ذلك، مع قطاع تكنولوجيا المعلومات والاتصالات. وفي النهاية، يقدم المؤلفان مقترحاً محدداً فيما يمكن اعتباره آلية تمويل ملائمة للتوسع في توفير النفاذ على تكنولوجيا المعلومات والاتصالات في الجنوب.

Este documento explora el tema del financiamiento para la provisión de tecnologías de información y comunicación (TIC) en el Sur, en el contexto de la CMSI, argumentando a favor de la adopción de una perspectiva basada en el concepto de "bienes públicos globales" (BPG). En primer término, los autores analizan el significado de este concepto, sus definiciones generales y su aplicación al caso específico de las TIC. A continuación, examinan mecanismos de financiamiento - existentes o alternativos - que podrían utilizarse para la provisión de los BPG, vinculando las estrategias propuestas al sector de las TIC. Finalmente, proponen un mecanismo de financiamiento que podría resultar adecuado para la expansión del acceso a las TIC en el Sur.

*Ce document explore la question du financement des technologies de l'information et de la communication (TIC) dans le Sud, dans le contexte du SMSI, en proposant l'adoption d'une perspective fondée sur la notion de "biens publics mondiaux" (BPM). Tout d'abord, les auteurs analysent la notion des BPM, ses définitions générales et son application au cas spécifique des TIC. Ils examinent les mécanismes de financement - existants ou alternatifs - qui pourraient être employés pour la fourniture des BPM, et établissent des rapports entre les stratégies proposées et le secteur des TIC. Pour finir, ils proposent un mécanisme de financement spécifique pour l'expansion de l'accès aux TIC dans le Sud.*

## Introduction

The issue of financing information and communication technologies (ICTs) for development in countries in the South was one of the two pending issues in the second phase of the ongoing World Summit on the Information Society (WSIS). The question of how to bridge the so-called digital divide between the North and the South is addressed here from the same perspective as that adopted in the WSIS discussions, focusing on the promotion of universal access through the expansion of ICT infrastructure and the challenge of finding ways to finance the latter. This does not mean that we regard these as the only issues to be taken into consideration when tackling the digital divide.

For instance, beyond the emphasis placed on how to get hold of resources, there is a need for discussion of how these resources should be invested to ensure that they are used to benefit those most in need and in order to achieve far-reaching structural changes in countries in the South. In this respect we believe that there is a need for in-depth studies of local technological requirements, that consider not only the implantation of new technologies, but also support for community-level communications based on “traditional” media, and strengthening of social structures and processes of capacity-building and citizenship construction.

Second, while expanded infrastructure may ensure physical access to the global communications network there are other non-physical barriers to access that also contribute to the digital divide. The right to access and use information is one that may be blocked only too easily, for example, by pricing, patents<sup>1</sup> or censorship policies.<sup>2</sup> On another level, high-tech equipment may be necessary but it is useless unless people have the literacy, education, computer-training and capacity-building required first to operate the equipment, and then to make full use of the knowledge or information they access. Similarly, developing

---

1 Such as the WTO-sponsored Trade Related Intellectual Property Rights (TRIPs) or the World Intellectual Property Organisation's (WIPO) Patent Law Treaty.

2 See Stiglitz (1999) and the UN Committee for Development Policy's report on the fifth session of the Economic and Social Council (UNCDP 2003).

countries' high level of foreign indebtedness inhibits their capacity to contribute to the generation of knowledge, for example, through national investment in research.

Furthermore, the proposals that emerged in the WSIS process not only did not question the North-producer/South-consumer model, but did not contemplate factors that have a decisive impact on development in the South, such as current systems of protection of intellectual property rights, the global trading system that relegates the interests of countries in the South, or the impact of debt service payments, all of which could provide the starting point for thinking about real alternatives for financing. On the other hand, it is necessary that mechanisms be put in place to ensure that the resources raised are effectively transferred. While we believe that new strategies for financing for development in the South need to be developed, we also believe that at the same time commitments already made must be effectively complied with, in the understanding that countries with better overall levels of human development will create more favourable environments for the implementation of specific policies to strengthen "information and knowledge societies".

We believe that these other dimensions to the question of how to finance ICTs for development in countries in the South - which were notably absent from the WSIS debates - are equally relevant, and should be incorporated into the Summit agenda. However, it is beyond the scope of this paper to address them in further depth here.

In this paper we explore the potential for addressing the issue of financing ICT expansion from a global public goods (GPG) perspective. First we provide an overview of what such an approach implies in conceptual terms, looking both at general definitions of GPGs and the applicability of the concept to ICTs. We then go on to review the debate that has been taking place around the specific issue of which existing or alternative innovative financing mechanisms might be used for GPG provision, linking the proposed strategies whenever possible to the ICT sector. Finally, in our conclusions we review the main elements of the argument in favour of regarding universal ICT access as a

GPG and offer a concrete proposal with respect to what we consider to be the most appropriate financing mechanism for funding expanded ICT access in the South.

## The issue of financing in WSIS

### *The background*

At its 1998 Plenipotentiary Conference in Minneapolis, the International Telecommunication Union (ITU)<sup>3</sup> passed a resolution<sup>4</sup> to explore the possibility of holding a high-level meeting to discuss global issues relating to the information society. In December 2001 the United Nations (UN) General Assembly resolved that the meeting would take the form of a world Summit at the level of heads of State and government, and assigned to the ITU the leading managerial role in the executive secretariat of the Summit and its preparatory process.<sup>5</sup> The WSIS was scheduled to take place in two phases: the first in Geneva, in December 2003, and the second in Tunisia, in November 2005.

For developed nations the Summit offered an opportunity to promote expansion of their telecommunications companies in countries in the South. The way had been paved by the signing in 1996 of the World Trade Organization's (WTO) Telecommunications Agreement<sup>6</sup> promoting the liberalization of communications markets at the expense of the national companies (which were frequently state monopolies) that had regulated the sector until then. The agreement assured competitive conditions for foreign investment in national markets, and held the promise for developing

---

3 Fifteenth Plenipotentiary Conference of the International Telecommunication Union (ITU), Minneapolis, USA, October 1998, [www.itu.int/newsarchive/press/PP98/](http://www.itu.int/newsarchive/press/PP98/). The ITU, headquartered in Geneva, Switzerland, is an international organization within the United Nations System where governments and the private sector coordinate global telecom networks and services. For more information, visit [www.itu.int](http://www.itu.int)

4 ITU Resolution 73 (Minneapolis 1998): [www.itu.int/council/wsis/R73.html](http://www.itu.int/council/wsis/R73.html)

5 UNGA Resolution A/RES/56/183: [www.itu.int/newsarchive/press\\_releases/2002/UNGA\\_res\\_56\\_183.html](http://www.itu.int/newsarchive/press_releases/2002/UNGA_res_56_183.html)

6 [www.wto.org/english/tratop\\_e/serv\\_e/telecom\\_e/telecom\\_e.htm](http://www.wto.org/english/tratop_e/serv_e/telecom_e/telecom_e.htm)

countries of increased access to communications, a drop in charges for international calls and more efficient national telecommunications systems. Previously, global communications resources had been managed by the ITU according to an international accounting rate system<sup>7</sup> and it was aware of the fears expressed by developing countries that liberalization and the opening up of their communications sectors to foreign investment might not benefit areas lacking services. However, the ITU found itself sidelined in the new international telecommunications framework promoted by the WTO and backed by the G7, OECD governments and the international financial institutions (IFIs), in which access prices to communications services are regulated by market forces. Organizing WSIS therefore represented an opportunity for the ITU to regain its central role within the cohort of multilateral bodies. The ITU, which at one time had promoted a vision of international communications that took into account the interests of the least developed countries,<sup>8</sup> arrived in 1998 at the proposal for the Summit with its agenda updated in line with the new dominant paradigms and in the midst of the growth phase of the “communications bubble” that was to burst in 2000.

The year 2003 found the WSIS process taking place against a backdrop of political changes in multilateral negotiation processes, marked by a new central role for countries from the South and a high level of involvement by organized civil society. Tensions between alliances of countries in the South and the North led to the collapse of the WTO ministerial meeting in Cancun in September 2003,<sup>9</sup> coinciding with the third WSIS

---

7 See “Accounting Rate System”, ITU: [www.itu.int/osg/spu/intset/](http://www.itu.int/osg/spu/intset/). A statement issued by the Civil Society Working Group on Access, Infrastructure on WSIS Action Plan section D (funding mechanisms), calls for “a rehabilitation of the international ‘accounting rate system’ to its former state and functioning” (before 1998). It states that “the settlement on tariffs for international calls should be considered as an effective mean of raising financial resources for developing countries” and that “the shift from the former tariffing rules to the actual ones has led to an annual loss in African operators revenue by nearly 2 billion dollars a year.”

8 See, for example, the “Maitland Report”, Independent Commission for World Wide Telecommunications Development, ITU, December 1984.

9 Fifth WTO Conference, Cancun (September 2003): [www.choike.org/nuevo\\_eng/informes/1236.html](http://www.choike.org/nuevo_eng/informes/1236.html)

preparatory meeting and one of the most difficult moments in the inter-governmental negotiations during the WSIS first phase. Furthermore, the Summit was led by an organization attempting to recover its leading role through an agenda based on the expansion of telecommunications following the laws of the market, at a time when international communications are in the hands of a few transnational companies and following a period of economic contraction and drop in foreign investment, in particular in the telecommunications sector, where interest dropped sharply at the end of the 1990s.<sup>10</sup> Justifiably, then, expectations around what could be achieved at the Summit were not high.

### *The issue of financing*

The expressed aim of the UN General Assembly in organizing WSIS was to provide an effective means of providing support to the ITU in achieving the goals set at the Millennium Summit<sup>11</sup> by developing a global framework to address the challenges posed by the information society. One of the clearest challenges in this respect was the new expression of historic structural inequalities between rich and poor countries that was given the name of the “digital divide”.<sup>12</sup>

In the preparatory process it soon became clear that developed country governments (the United States and European Union in particular) would do everything in their power to avoid broadening out the WSIS agenda to include issues that have a decisive impact on the creation and growth of this divide, such as the conditionalities imposed on countries in the South by the IFIs or the policies promoted by developed countries within such bodies as the WTO and the World Intellectual Property Organization (WIPO) with respect to international trade or intellectual property rights. For the most powerful

---

10 In the case of developing countries, investments during the period prior to the bursting of the telecom bubble were concentrated in densely populated centres and in the mobile phone sector.

11 UN Millennium Declaration (September 2000): [www.un.org/millennium/summit.htm](http://www.un.org/millennium/summit.htm)

12 The gap between those who can effectively use new information and communication tools and those who cannot. See “Digital Divide Network”: [www.digitaldividenetwork.org/](http://www.digitaldividenetwork.org/)

governments discussion on the digital divide in WSIS should be limited to analyzing the problem of lack of access to digital technology affecting the majority of the world's population<sup>13</sup> and to exploring how to resolve it through the development of economically profitable communications infrastructure.

### *The Digital Solidarity Fund*

In this context, during the second and third meetings of the Preparatory Committee (PrepCom), the Senegalese delegation argued for the need for a transfer of resources from the North for the development of Information and Communications Technologies (ICTs) in the South, with the aim of bridging the digital divide. This transfer would be based on the notion of “digital solidarity” and channelled through a “Digital Solidarity Foundation”. The foundation’s mission would be to manage a “Digital Solidarity Fund” (DSF) that would be fed by voluntary donations made, basically, in the North.

### *Reactions to the DSF proposal*

While developing countries generally supported the Senegalese proposal, the governments of developed nations - in particular the United States (US), the European Union (EU) and Japan - strongly opposed the initiative, which - together with other factors such as modifications to the current Internet governance schema - caused friction in the discussions during the preparatory process to the point that it was feared that the first phase of the Summit would be a complete failure and that the Geneva meeting in December would be reached without any prior agreement on the Declaration of Principles and the Plan of Action. As a result, new rounds of negotiations had to be added to the agenda in addition to those originally scheduled. Declarations by the

---

13 Nineteen per cent of the world population accounts for 91% of Internet access. For detailed statistical information on access see UN Economic Commission for Europe’s “Monitoring the Information Society: Data, Measurement and Methods”: [www.unecce.org/stats/documents/2003.12.wsis.htm](http://www.unecce.org/stats/documents/2003.12.wsis.htm) and ITU’s “Digital Access Index”: [www.itu.int/ITU-D/ict/dai/index.html](http://www.itu.int/ITU-D/ict/dai/index.html)

president of Senegal during the preparatory process even evinced the possibility that, were references to digital solidarity not included in the WSIS official documents, Southern countries would walk out, leading to the collapse of the negotiations as had happened shortly before, at the fifth WTO ministerial meeting in Cancun.

The US, one of the main opponents of the creation of the Fund, has argued that financing should be sought through existing mechanisms, not by creating new ones. US policy for the development of communications in Africa advocates the liberalization of African markets, which should be opened up to US private sector investment. This policy finds its practical application in the “Digital Freedom Initiative” (DFI).<sup>14</sup> This proposal represents the further development of the “Leland Initiative” (LI), launched by the US Agency for International Development (USAID) in 1996 as part of the USAID Africa Global Information Infrastructure Project. The LI claimed as its overall objective “to extend full Internet connectivity to 20 or more African countries in order to promote sustainable development”.<sup>15</sup> Despite this laudable expressed aim, the information provided on the LI web site shows that promotion of US state and private-sector interests remained the primary goal of this initiative, determining both whether Internet connectivity was deemed “desirable and feasible” for any given country and whether Internet access was expanded nation-wide, including secondary cities and rural villages. While both the LI and DFI use the rhetoric of ICT for development it is clear that their ultimate goal remains the creation of “enabling environments” for the expansion of US corporate interests in Africa. This role adopted by the US as champion of private sector interests was made explicit in a press release on the WSIS outcomes issued by the US delegation, which stated that it was “pleased that commercial and economic interests from around the world will continue to have a center seat at the table in the development of the Internet”.<sup>16</sup>

---

14 Digital Freedom Initiative: [www.dfi.gov/](http://www.dfi.gov/)

15 Leland Initiative: [www.usaid.gov/regions/afri/leland/](http://www.usaid.gov/regions/afri/leland/)

16 US Press release on the outcome of WSIS (December 2003): [www.us-mission.ch/press2003/1210USWSIS.html](http://www.us-mission.ch/press2003/1210USWSIS.html)

The position adopted by governments of the developed world was backed up by the private sector, one of the three stakeholders - together with governments and civil society - participating in the WSIS preparatory process. While companies like Cisco, Microsoft and Hewlett-Packard maintained a low profile in the process as individual actors, preferring to participate collectively under the umbrella of the Coordinating Committee of Business Interlocutors (CCBI), they did take advantage of the platform provided by WSIS to announce that they were injecting hundreds of millions of dollars into communications for the South through partnerships with governments or international organizations like the ITU or UNDP. In fact, the majority of these resources consists of transfer of equipment and software programmes for education centres in the South, a strategy designed to create loyal new markets.

For their part, civil society organizations participating in the Summit, concerned at the lack of progress during the preparatory process on essential issues related to the information society, made several statements indicating that market-based development solutions often fail to address more deep-rooted and persistent inequalities in and between countries of the North and South and that democratic and sustainable development of the information society can therefore not be left solely to market forces and the propagation of technology.

### *WSIS first phase outcomes*

In December 2003, following complex negotiations, a Declaration of Principles and Plan of Action were approved in Geneva, as official WSIS outcome documents. The final text of the Declaration of Principles did not establish the fund as proposed by Senegal. Instead, it recognized “the will expressed on the one hand by some to create an international voluntary ‘Digital Solidarity Fund’, and by others to undertake studies concerning existing mechanisms and the efficiency and feasibility of such a fund.”

Since no consensus could be reached on the creation of the DSF, the governments agreed to include a “Digital Solidarity Agenda” in the Plan of Action (section D, paragraph 27). In short, what this agenda

proposes is the proper implementation of existing financing mechanisms, such as those agreed on in the Monterrey Consensus, which have not been effectively applied by developed countries, and an evaluation study of them to be completed by December 2004. This review was to be conducted “by a Task Force under the auspices of the Secretary-General of the United Nations and submitted for consideration to the second phase of this Summit”.

Shortly before the conference closed, the cities of Geneva and Lyon and the Government of Senegal announced contributions totalling about one million euros, representing the first three payments towards the DSF, thus rescuing the initiative from a sense of total failure. Many local and national governments then expressed their willingness to contribute to the DSF. The United Cities and Local Governments<sup>17</sup> has made a call for their constituents to participate.

### *WSIS second phase*

The Task Force on Financial Mechanisms (TFFM)<sup>18</sup> was set up by the United Nations Development Programme (UNDP) on behalf of the UN Secretary General. The TFFM main goal was to complete its review by December 2004, in order to submit it to the WSIS community for discussion at the PrepCom-2 of the second phase. Both the process and the outcomes of the TFFM raised serious concerns, particularly from civil society organizations, as the process of convening the TFFM suffered from lack of clarity and transparency and the report did not succeed in finding a way out for the entangled governmental negotiations. APC - the only civil society organization participating in the TFFM - in a letter addressed to former UNDP Administrator Mark Malloch Brown expressed that the TFFM findings and conclusions would not contribute to resolve the impasse on financing issues between governments that led to the establishment of the TFFM.<sup>19</sup> The

---

17 United Cities and Local Governments: [www.cities-localgovernments.org/uclg/](http://www.cities-localgovernments.org/uclg/)

18 Task Force on Financial Mechanisms (TFFM): [www.itu.int/wsisis/tffm/](http://www.itu.int/wsisis/tffm/)

19 [www.choike.org/documentos/TFFM\\_Open\\_letter\\_from\\_APC.pdf](http://www.choike.org/documentos/TFFM_Open_letter_from_APC.pdf)

negotiations on financing ICTs in the second phase of the WSIS process were therefore resumed more or less from the same point at which they had been left at the end of the first phase and, consequently, by the end of the PrepCom-3 of the second phase - the last meeting originally scheduled in the WSIS process - there were still paragraphs on finance that remained into brackets in the draft documents.

Some general agreements were, nevertheless, reached at PrepCom-2 in February 2005, including a sudden “welcome” to the DSF established in Geneva “as an innovative financial mechanism of a voluntary nature” that would “complement existing mechanisms for funding the Information Society, which should continue to be fully utilized to fund the growth of the new ICT infrastructure and services”. Continuing lobbying actions from civil society organizations also achieved the inclusion of some timid language into the official documents, that state that “market forces alone cannot guarantee the full participation of developing countries in the global market for ICT-enabled services” and recognizes the crucial role of public finance in providing ICT access and services to rural areas and disadvantaged populations.

The official WSIS outcomes, then, express good intentions, acknowledge an existing fund - and, maybe, open a new space of policy dialogue - but in no way provide concrete mechanisms to address the disparities in access to information and communication in developed and developing countries.

## The global public goods approach

The rejection by several Northern governments to promote the creation of new and innovative financial mechanisms for ICT for development on the grounds that existing financing for development mechanisms should be used to bridge the digital divide - presumably along the lines of the US DFI project - poses the question of whether there are feasible alternative approaches to ensuring provision of universal ICT access. This implies not only looking at which existing funding sources could be tapped or alternative financing mechanisms developed, but also raises

the issue of how the goal of universal ICT access should be conceptualised and how it fits in with or differs from traditional development goals. One conceptual approach that has gained ground in terms of its applicability to the issue of expanded ICT access is the “global public goods” (GPG) framework. In the sections that follow we look at how GPGs may be applied to global connectivity, global communications networks and the Internet.

### *Defining global public goods*

The concept of GPGs came to the fore in 1999 with the publication of the UNDP book *Global Public Goods - International Cooperation in the 21st Century* (Kaul et al 1999). Since then the concept has gained prominence in the context of international efforts to achieve sustainable development, while at the same time subsequent studies and discussions - both theoretical and practical policy applications - have both refined and complicated the original definition. While its basic conceptual elements are generally agreed upon, some commentators have criticized the “fuzziness” of the concept, especially in its application in policy-making (Sagasti and Bezanson 2001), and there continue to be differences in both emphasis and scope regarding how the concept should be defined.<sup>20</sup> However, the appeal of the notion is unlikely to abate in the context of an increasingly globalized world. As Kaul et al point out, globalization and GPGs are inextricably linked: discontent with globalisation often arises because GPGs are not provided or are mal-provided due to a series of shortcomings or “gaps” in current global policy-making structures and practices. The extent and form of provision of GPGs therefore determines whether globalization is an opportunity or a threat.

Taking the three elements of the concept in reverse order, we can highlight some of the agreed notions that comprise the concept of GPGs.<sup>21</sup>

---

20 See Binger (2003) for a review of the different definitions in use so far.

21 This draws on Binger (2003), Ferroni (2002), Kaul et al (1999), Kaul et al (2002), Kaul et al (2003), Morrissey et al (2002), Reisen, Soto and Weithöner (2003), Sagasti and Bezanson (2001) and Stiglitz (1999).

First, the term **goods** does not refer to merchandise or services, but the benefits to society that derive from the provision of certain utilities or the satisfaction of wants, such as the eradication of disease or the reduction of pollution; thus the elimination of a public “bad” is itself a public good.

Second, a good is **public** if in principle every member of the public can derive benefit from provision of the good (likewise, public “bads” generate shared costs). Although the goods themselves do not have to be provided by governments or public bodies, they should have the potential to be enjoyed by all, regardless of whether the end user has paid for them or not. Further precision of the public nature of a good is provided by an evaluation of how it is consumed. If a good can be consumed by many people (or countries) without becoming depleted, it is *non-rival* in consumption. Likewise, if no one (or country) can be prevented from benefiting from the good, it is *non-excludable*. These characteristics differentiate these public goods from private goods, whose use by one consumer effectively prevents another from accessing them. Those goods that meet both criteria are called “pure” public goods; however, such public goods are rare, and in reality, most GPGs are significantly, but not entirely, non-rival and non-excludable. One of the problems that arises in relation to the provision of pure public goods - in particular - is what is known as the “free-rider” syndrome. A free rider is someone who enjoys the benefits of a good without contributing to its cost; precisely because pure public goods are non-excludable there is little incentive to pay for them, since everyone benefits whether they paid or not. A final point to make in relation to the publicness of public goods is that the potential availability of benefit to everyone does not necessarily imply that everyone derives the same measure of benefit. As Morrissey et al (2002) point out, the utility derived by individuals “will depend both on their preferences and on their capacity to consume”.

Finally, a public good is **global** if its benefits are inherently global in range, which does not mean that in practice everyone on the planet benefits. In fact not all GPGs are truly global in their reach but they

are, at least, regional and/or international in that their benefits extend across several countries. To further qualify as global, public goods should provide benefits that “are quasi-universal in terms of [...] people (accruing to several, preferably all, population groups) and generations (extending to both current and future generations, or at least future generations)” (Kaul 1999). In other words, public goods exist at all levels and the spatial reach (or spill-over range) of the benefits determines whether the good can be regarded as a local, national, regional, or global public good.

### *Externalities*

The concept of *externality* is closely connected to, although separate from, the notion of GPGs. Externalities are the unintended positive or negative effects arising from any action, which are not borne directly by the person(s), organization or country responsible for the action. Public bads in particular are very often the result of such negative externalities, and likewise, the motivation for providing public goods stems from the desire to generate or enhance positive externalities and correct negative ones. With globalization, negative and positive externalities are increasingly borne or reaped by people in other countries. So, GPGs are essentially about “cross-border externalities”, which occur when action or omission by one country has consequences for others.

With the question of financing GPGs, there has been much discussion around the strategy of “internalising externalities”, which Binger (2003) explains as follows: “If the cost associated with a negative externality is effectively attributed to the responsible agent the externality is regarded as *internalized*. Positive externalities are *internalized* when the value added by an actor’s initiatives is confined to that actor.” The logic behind the GPG approach dictates that governments must assume full responsibility for the cross-border effects that their own actions or those of their citizens generate, and develop national policies designed “to reduce or avoid altogether negative cross-border spillovers and preferably to go beyond that to generate positive externalities in the interest of all” (Kaul et al 1999).

### *Classifying global public goods*

In short, a GPG is “a benefit providing utility that is in principle available to everybody throughout the globe”. As Binger (2003) notes, different approaches have been adopted in attempts to identify and classify key GPGs. Some authors simply classify GPGs thematically into those relating to the environment (the global commons), health (communicable disease eradication), knowledge generation and dissemination, governance (international financial stability, a free and open trade system), and peace and security (including global peace and protection from crime and narcotics) (Speight 2002; Reisen et al 2003). Others (Gardiner and Le Goulven 2001) classify GPGs sectorally as environmental, social (including health, peace and security), economic (including trade and financial stability regimes) or institutional (knowledge and governance). Yet other commentators opt to typify GPGs in more abstract terms. For Ferroni (2002), for instance, “international public goods include the knowledge, standards and rules required to address [transnational challenges and threats to stability], the institutions that monitor and enforce the rules, and the benefits that arise and are shared indiscriminately among countries.” For their part, Morrissey et al identify three types of interrelated benefits that tend to give rise to pure public goods - risk reduction, direct provision of utility, and enhancing capacity - of which the first two are commonly global in reach since in principle everyone benefits, while the third is more likely to be spatially limited to national or local levels.

Another distinction that has been made is between “final” or “core” GPGs and “intermediate” or “complementary” GPGs.<sup>22</sup> The former are the final benefits that people consume, while the latter are benefits that feed into or facilitate access to the former. Thus Ferroni distinguishes between “core” activities to produce public goods - “noncountry-specific investments in knowledge, dialogue, basic research into

---

22 ODS 2002 and Ferroni (2002) refers to “final” and “intermediate” GPGs, while other studies, including GDF (2001), Morrissey et al (2002), Sagasti and Bezanson (2001) use the alternative terminology.

technologies meant to be in the public domain..., negotiation of agreement on shared standards and policy regimes [and] intercountry mechanisms for managing adverse cross-border externalities or creating beneficial ones” - and “complementary” activities which aim to “prepare countries to consume the crossborder public goods that the core activities make available”.

### *A GPGs approach to ICTs*

In his Millennium Report, the UN Secretary-General made reference to the GPG attributes of information and information networks: “Finally, the core product in this sector - information - has unique attributes, not shared by others. The steel used to construct a building, or the boots worn by the workers constructing it, cannot be consumed by anyone else. Information is different. Not only is it available for multiple uses and users, it becomes more valuable the more it is used. The same is true of the networks that link up different sources of information. We in the policy-making world need to understand better how the economics of information differs from the economics of inherently scarce physical goods - and use it to advance our policy goals.”<sup>23</sup> The reference to information “networks” as also meeting the criteria of non-rival consumption and non-excludability signals the possible adoption of a GPG conception of the information society.

Although knowledge and information - final products - are generally classified as GPGs, all the different elements contributing to their production and dissemination, while seen to have attributes of GPGs, are not so widely accepted as GPGs per se, or at least as core GPGs, but rather are seen by some as complementary. What interests us here in particular are those elements contributing to knowledge production and dissemination that relate to the “information society”. Several studies have explored the public good dimension of connectivity, global telecommunications, new information technologies and the Internet (Sy 1999; Spar 1999; ODS 2002; Guermazi 2003).

---

23 UN Secretary-General’s Millennium Report: [www.un.org/millennium/sg/report/](http://www.un.org/millennium/sg/report/)

The UNDP Office of Development Studies' publication *Profiling the Provision Status of Global Public Goods* (2002) starts by looking at the question of global connectivity - "the state of people being connected to each other for communication as well as knowledge and information-sharing purposes" across national borders. Global connectivity, it argues, can be defined as a GPG since no one can enjoy connectivity alone, but requires the existence of others to whom she or he can connect, and therefore "connectivity is theoretically, by definition, and practically, by policy choice, a non-rival and non-exclusive condition".

The authors further argue that the global communications network and the Internet, which are the principal building blocks of global connectivity, "have themselves important dimensions of global publicness". The global communications network is largely non-rival and services that use the network - like Internet - are neither depletable nor excludable: "Both the global communications network and the Internet exhibit network externalities - their value to any single user increases as they are expanded and as more users join. The higher the number of telephone users, the greater the number of interconnections that become possible. On the Internet, each new user may be a potential supplier or consumer of goods and services, and can expand the global market for electronic commerce..." As Spar points out, "theoretically any number of users can simultaneously interact in cyberspace. By ratcheting up the necessary physical infrastructure - adding servers, increasing telephone lines, building additional satellite capacity - new users can simply piggyback on to the existing system: it is almost infinitely expandable."

While Morrissey et al acknowledge the public good dimensions of the global communications network and the Internet, they argue the case for seeing them as complementary to the core GPG of knowledge: "in principle, knowledge is available to all equally. Although some may be constrained in their ability to access or use the knowledge, implying the need for complementary public goods, knowledge itself is nevertheless an international public good. Education enhances national capacity, and

therefore is a national public good. It also enhances the capacity to produce global knowledge, and is therefore an activity complementary to providing the international public good. [...] Internet sites and global networks are complementary activities that contribute to disseminating knowledge; provision of education and access to information are complementary activities that facilitate the use of knowledge.”

Another public goods attribute of cyberspace identified by Spar is its capacity to generate positive externalities, including the provision of low-cost, high-quality services, such as long-distance medical treatment or tele-education, or purely commercial benefits: “With access to the Net, small producers in remote locations can gain exposure in, and thus access to, wider markets. Rather than having to link themselves to intermediaries and retail distributors, producers can advertise their wares directly on the Net, attracting the kind of consumers most likely to purchase a particular product.” Likewise, one could also argue that the global public nature of the Internet is attested to by the negative cross-border externalities it generates - spamming, computer viruses, dissemination of pornography or materials inciting racial intolerance or violence - which may be seen as global public bads.

The expansion of communications networks clearly creates national public goods, by generating important benefits relating to health, education, productivity and democratic participation, and thus contributing significantly to overall development goals. However, ensuring network development does more than just benefit the countries receiving the new communications infrastructure. What is not always recognised is the fact that what some label a “complementary activity” - that is, network development in developing countries facilitates their access to the GPGs of connectivity or knowledge and information - can also generate positive cross-border externalities. On the one hand, as Guermazi argues, “given the information-based nature of the modern economy, the globalization of the telecommunications industry, and the interdependent global environment, the value of the global network grows as more national networks and users are interlinked”, and therefore “funding for the universal service component of such a

network should not be conceived simply as funding for those who are gaining access *in* developing countries but also as funding for those who are gaining access *to* developing countries” (emphasis added). On the other hand, expanded ICT access not only creates the conditions for these countries’ consumption of the GPGs of knowledge and information, but also increases their capacity and potential to contribute to the production of such GPGs. This issue becomes particularly relevant when we consider the question of who is to bear the costs of GPG provision and what form their financing is to take.

Clearly, this conceptualisation of global connectivity and its main building blocks requires further refinement and precision, just as its implications for practical policy application need to be further explored. However, the brief review of the literature above shows that convincing arguments are being marshalled in support of adopting this approach to the challenge of how to bridge the digital divide.

### Providing global public goods: financing mechanisms

The question remains, then, of how such a GPG could or should be financed. This question not only refers to whether existing funding sources could be tapped, or alternative or innovative mechanisms should be explored, but contains a second dimension relating to its implications for existing policy-making processes and structures and whether there is a need to develop new institutional arrangements to co-ordinate the chosen fundraising strategies and to manage and disburse the funds raised.

Just as analysts fail to agree on the scope and applicability of the concept of GPGs, so debate continues on the question of which financing mechanisms are most appropriate and effective for ensuring universal provision of GPGs.

### *Foreign direct investment*

The most traditional way for a country to access external financial resources is by seeking to attract foreign direct investment (FDI). As long as there is an appropriate political framework for that investment, FDI is without doubt an important engine for development, job creation and technology transfer. However, the laws of the market do not guarantee equitable development. Over the last decade, for example, 75% of FDI was concentrated in just 10 middle-income countries and a select few economic sectors (the automobile industry, and the chemical, engineering, energy and pharmaceutical sectors). This has further marginalized developing countries and strongly restricted their capacity to participate in the global economy. The scope of provision through FDI will always be limited by the profit principle, and in the case of ensuring universal access to ICT infrastructure it is only too clear that expansion of communications networks to isolated rural areas or the most marginalised and poorest communities holds little prospect of profitable returns for investors.

If, then, the GPG approach implies that these goods should have the potential to be enjoyed by all, regardless of whether the end user has paid for them or not, this means that their provision cannot be left up to the play of market forces. Indeed, traditionally, most national public goods were provided by public authorities. However, domestic provision of GPGs in developing countries is obviously problematic, otherwise the need to attract FDI would not exist. A wide range of factors limit the financial resources of developing countries, including “limited tax and capital bases, underdeveloped taxation systems, capital markets, and the diversion of substantial resources to servicing foreign debt” (Panayotou 1994). With respect to ICT expansion in particular, it may not be regarded as a development priority by poor countries that have limited funds to address much more urgent problems, such as critical poverty levels, conflict resolution, or communicable disease epidemics.

So, if neither the market nor the state have the capacity to ensure provision of GPGs in developing countries, what other existing sources of financing could be brought into play?

### *Official development assistance*

One of the reasons that the notion of GPGs was received with such enthusiasm is that it was seen as a potential motor to revive political commitment to official development assistance (ODA). The question of how to revitalize ODA has been present on the agenda of the international community since the Five Year Review of the World Summit for Social Development (Reisen 2003) and was a central issue at the high-level UN Forum on Financing for Development in Monterrey, Mexico, in March 2002. The persistent failure of rich countries to meet the long-standing target of 0.7% of their gross national income (the highest level reached was 0.35%, dropping to a low of 0.22 in 2001) has fuelled debate concerning the problems with the system, including the question of aid conditionality or donor earmarking against recipient country “ownership” and freedom to set its own development priorities; accountability and transparency in spending, and the problem of corruption; and the link between ODA and other development objectives such as the defence of human rights and governments’ eligibility for aid.

The clear links between GPGs and development goals may further support the idea that that funds should come from what is currently the main source of financing for development. However, not only is ODA itself beset by problems, but in some ways GPGs challenge the very characteristics of traditional ODA. Global policies and programmes can complement national development efforts in three principal ways: through “beneficial cross-border spill-overs, reduced harmful spill-overs, and improved national outcomes” (Ferroni 2002). On the one hand, the provision of GPGs supports and stimulates the development process; on the other, development itself is a prerequisite for nations to take full advantage of the benefits of GPGs, and therefore insufficient development may imply lack of capacity to benefit from GPGs. Moreover, development generates a resource base which enhances a country’s capacity to contribute - both financially and with expertise - to the provision of GPGs. As Binger (2003) argues, viewing the world from a

GPGs perspective has brought greater awareness of the interdependence between developed and developing countries in that it “highlights both the *unidirectional* and *multi-directional* nature of spill-over”, which clearly has implications for global cooperation and development, and challenges the traditional one-way relationship between affluent donor nations and poor recipient countries.

While some analysts (see, for example, Lamb 2002) argue that GPGs should be funded by creating more space within existing ODA or by drawing out the GPG dimension of the Millennium Development Goals (MDGs), others highlight the risks involved in diverting ODA to fund GPGs. As the EU has recognised: “A key concern is that additional funding for GPGs should not be to the detriment of the poorest countries and of funding for the core objective of poverty eradication. As GPGs benefit both developing and developed countries, one of the consequences of increased policy attention to providing and financing GPGs could be that the real level of official development aid (ODA) reaching the poor would be even lower than the current official figures if the resources for GPGs were to come from ODA.”<sup>24</sup>

If donor countries are tempted to focus ODA on pure GPGs that, while public in consumption, may not be valued equally, or be given the same priority status, by all countries, the use of aid to fund these goods could result in the reallocation of resources from low-income to middle-income countries or from certain low-income countries to others, and in a context of declining aid flows, such diversion could have serious consequences. These concerns are addressed in Reisen et al’s study (2003) analysing ODA financing of global and regional public goods by OECD donors. The study shows that over a five year period (1997-2001) 30% of ODA was allocated to global (15%) or regional (15%) public goods and the authors find some evidence of crowding out, although this is insignificant in the case of aid to the poorest countries,

---

24 European Commission, ‘EU focus on global public goods’, “The EU at the WSSD, 2002”: [europa.eu.int/comm/environment/wssd/publicgoods.pdf](http://europa.eu.int/comm/environment/wssd/publicgoods.pdf)

but significant (with an offset coefficient of 25%) in the case of traditional aid. The authors conclude that “these results favour the separation of traditional ODA and spending on the provision of international public goods, to both maximise ‘ownership’ of ODA partner countries and the provision of international public goods”. A similar conclusion was reached by the high-level panel on financing for development established by the UN Secretary-General in 2000 and chaired by former Mexican president Ernesto Zedillo. The Zedillo report cautions that the identification of new needs - such as those relating to the provision of global public goods - seldom generates additional funding, and stresses that “it is imperative to separate finance for development and humanitarian assistance from finance for global public goods”.<sup>25</sup>

Likewise, Andersson (2002) argues that “since the provision of global public goods is beneficial to all countries, developed as well as developing, new funds should be raised to contribute to the provision of global public goods” and urges the international community to find innovative ways and means to ensure that provision, including through the involvement of the private sector. Kaul et al (2002) also recommend that the financing of GPGs should not come out of ODA. They highlight a range of problems relating to the use of aid resources for global public goods purposes: “the overlap between aid and global public goods financing often occurs without country-specific analyses or fully participatory international policy dialogues. Thus we do not know to what extent a country’s national development priorities are indeed identical with aid-driven global public goods priorities. We do not know whether and to what extent a growing concentration of aid on global public goods entails neglect of critical national public goods in recipient countries. Moreover, developing countries may not have had an adequate say in shaping the global public goods to which they are expected to contribute or link up to through the use of aid.” The authors conclude that rather than using ODA, which primarily involves country allocations of assistance,

---

25 High-Level Panel on Financing for Development - Recommendations & Technical Report, United Nations, A/55/1000, 26 June 2001, [www.idlo.int/texts/IDLI/mis5712.pdf](http://www.idlo.int/texts/IDLI/mis5712.pdf)

new financing should be sought involving national and international-level allocations to particular global public goods, incorporating “a clearly articulated dimension of international cooperation into the existing public finance framework”.

### *Debt swaps, private-public partnerships and voluntary donations*

Some analysts have sought to address some of the problems signalled above with ODA, domestic funding and FDI for financing GPGs by exploring other newer funding mechanisms.

For example, some authors argue that given the burden of debt service for developing countries, it is unfeasible to think of financing for development mechanisms that do not take into account the outflow of resources from the South to the North, and suggest different forms of debt relief as a more effective way to finance GPGs. The Plan of Action approved in the first phase of WSIS makes the following reference to this issue: “For those developing countries facing unsustainable debt burdens, we welcome initiatives that have been undertaken to reduce outstanding indebtedness and invite further national and international measures in that regard, including, as appropriate, debt cancellation and other arrangements. Particular attention should be given to enhancing the Heavily Indebted Poor Countries initiative. These initiatives would release more resources that may be used for financing ICT for development projects.” While the effectiveness of the HIPC initiative is at best questionable and it has come under strong criticism from civil society, there are other debt-relief related mechanisms that merit further exploration.

One such mechanism is the use of debt swaps, which are “legal and financial instruments that transform developing country debt with official or commercial creditors into direct budget allocations” for development objectives (Sagasti and Bezanson 2001). Debt swaps have taken a variety of forms, some more general - debt for development or debt for equity - and others more specific - such as debt for environmental protection or debt for education, health or nutrition. Several authors have supported exploring debt swaps further as a potential

mechanism for financing GPG provision. However, the tying of debt relief to particular areas of development on the part of creditors has the same negative implications for developing countries' freedom to set their own development priorities as earmarking aid. And, as mentioned above, were countries in the South to receive debt relief, in most cases it is unlikely that ICT development would be regarded as a priority area for channelling the freed-up funds.

Another trend that has gained ground in recent years is the creation of private-public partnerships (PPP) to promote investment in areas with some commercial prospects and that in parallel allow financing of activities to promote development of public goods. These partnerships bring together private companies with national and/or international public institutions, such as the World Bank, the UNDP and international NGOs. For example, the Medicines for Malaria Venture is an initiative designed to produce new medicines against malaria, in which the World Health Organization and the World Bank participate alongside private foundations like the Rockefeller Foundation and pharmaceutical companies represented by the International Federation of Pharmaceutical Manufacturers Associations and the Association of the British Pharmaceutical Industry. Some authors have argued that ICTs represent a propitious area for the development of similar partnerships, and indeed, Senegal's DSF proposal includes a strong PPP component, in that funds would be administered by a foundation comprising a coalition of governments, international organizations, the private sector and civil society. However, Southern civil society organizations and networks have raised objections to this type of venture, pointing out that PPPs are often no more than veiled forms of privatization and, while it may be supposed that there is considerable potential for generating funds through voluntary engagement of the private sector in developmental issues,<sup>26</sup> it represents an unpredictable source of revenue, since it depends entirely on individual voluntarist actions.

---

26 For example, in 2002 private donations amounted to around 2% of the GNP of the United States, equivalent to USD 220 billion.

Multisectoral Global Funds (MGFs), such as the Global Fund for AIDS, Tuberculosis and Malaria, the Global Environment Facility and the Global Alliance for Vaccines and Immunization are a new type of funding structure that combines both of these last two strategies - public-private partnerships and voluntary donations. Although Heimans (2003) argues that MGFs hold considerable promise as focal points for generating additional public and private resources to address urgent global problems and to finance GPGs, he nonetheless casts doubts on their effectiveness in fundraising. Unlike contributions to membership-based international organizations, contributions to MGFs are usually voluntary and so governments will only contribute to those funds they find politically attractive, and their interest in specific funds may wane over time or be transferred to emerging new issues. He also points out that the argument that they will act as magnets for private sector funding has yet to be demonstrated in practice (the exception being the USD 750 million donation to the Global Alliance for Vaccines and Immunization by the Gates Foundation, far exceeding any government contribution), while some NGOs have expressed fears, firstly, that an excessive focus on the private sector could distract attention from donor governments' core responsibilities, and secondly, regarding a possible conflict of interests, since corporate actors may have an economic stake in MGF activities through procurement decisions.

Finally, there are two types of innovative alternative financing mechanisms that appear to have a strong rationale for their use in funding GPG provision, in that they represent an effective way of internalising externalities: taxes and user fees.

### *Taxes*

A range of suggestions has been made - some dating back several decades - as to how to tackle global public bads, such as ozone depletion, pollution or financial instability, through global taxation systems. In this section we shall examine how such funding proposals for the provision of what are universally acknowledged as GPGs may provide a starting point for thinking through financing strategies for

global communications. One productive approach may be to consider whether notions like “pollution”, traditionally linked to the study of environmental problems, are extendible to communications spaces, like the Internet. The growing vision of the Internet as a platform for business, designed to “recruit consumers” by any possible means, has produced an exponential explosion in commercial web sites of little or no value to the general public, as well as a massive increase in spamming. These developments not only degrade network traffic but also generate “noise” in communications and limit users’ chances of accessing information of real value. This “pollution” is a negative factor for those initiatives that use the Internet as part of educational processes that seek to further human development or promote capacity-building for an informed and responsible citizenry. In countries with limited communications infrastructure, where access to the net is more costly and optimization of online time is vital, this becomes a significant problem. An interesting approach therefore might be to explore the possibility of extending the concept of “sustainability” to the global communications network and analyze whether the mechanisms proposed for environmental protection - increasingly based on the idea that “the polluter pays” - could be applied to the sector of electronic communications.

A range of taxes has been suggested both at local and global levels to finance GPGs, such as the Carbon Tax, Aviation Tax, Currency Transaction Tax (CTT) or Tobin Tax, World Trade Tax, International Arms Trade Tax (Binger 2003). These proposals have a dual purpose - to obtain funds to develop the “goods”, while at the same time penalising the “bads” - and likewise generate a “double dividend”.

With respect to the possibilities of applying fundraising mechanisms based on taxes in the ICT sector, one antecedent is the “Bit Tax” or “Email Tax”, first proposed in the 1999 UNDP Human Development Report.<sup>27</sup> The report estimated that a tax of one cent on every 100 e-mails sent daily (with an average size of 10 Kbytes per e-mail) would

---

27 United Nations Development Programme (1999). “Human Development Report 1999. Globalization with a Human Face”. [hdr.undp.org/reports/global/1999/en/](http://hdr.undp.org/reports/global/1999/en/)

have raised USD 70 billion in 1996. Taking into account the growth in e-mail traffic in recent years and their increase in size, even smaller tax rates would produce considerable revenue that could be used to finance the development of communications in the South. The proposal contained in the UNDP report was rejected outright by countries like the United States. This fact, together with the objections raised regarding the difficulties involved in its practical application, stopped the proposal from being developed any further. In the end the UNDP issued a communiqué stating that it did not officially support the proposal included in the report and the initiative ended there.<sup>28</sup>

### *User fees*

The geostationary orbit, used by communications satellites, or the electro-magnetic spectrum, used for radio and television-based communications, are limited resources that could be regarded as “heritage wealth” and there is a certain degree of consensus regarding the fact that all of humanity should have access to them. The Centre for Science and Environment (CSE) has argued that “the South needs ecological space to grow, but this space has already been colonised by the North”.<sup>29</sup> The same idea could be applied to communications spaces. Several years ago proposals first started emerging for the creation of “user fees” for finite global resources such as fishing or cultivable land, and suggestions have been made to apply similar fees to the use of resources used for communications purposes. Organizations like the ITU or UNESCO have at different moments considered the possibility that a percentage of the resources generated by international telecommunications be used to promote the development of more equitable communications systems.

---

28 See ‘Caslon analytics e-taxation and tariffs guide’ for more information on the “Bit Tax”, [www.caslon.com.au/taxationguide2.htm](http://www.caslon.com.au/taxationguide2.htm)

29 CSE: [www.cseindia.org/](http://www.cseindia.org/)

It is clear that there are many mechanisms that could potentially fund GPG provision but, as Sagasti and Bezanson (2001) point out, “the appropriateness, convenience and feasibility of using one or another of these mechanisms will depend on the specific characteristics of the public good in question and on a variety of other factors” including: the amount of funds a given mechanism can generate; the sustainability of funding; the fairness and equity of the mechanism; its flexibility and capacity to adapt; the administrative complexity it involves; and whether it is politically feasible or can mobilize political support. Several of these factors relate to the other dimension of providing GPGs mentioned above - what new or existing institutional arrangements are required to co-ordinate potential financing mechanisms and global policy-making.

## Conclusions

This paper has focused on presenting the current state of affairs with respect to the issue of financing communications in countries in the South, in the context arising from WSIS. We have argued in favour of treating the challenge of universal ICT access as a GPG issue and sited the financing issue within a broader discussion on appropriate mechanisms for GPG provision, and a review of the current situation of financing for development.

Adopting a conceptual starting point that sees ICT expansion as an issue of GPG provision provides a normative framework for thinking about how this objective should be funded. Following the arguments outlined above, we do not believe that funding should come from current ODA. Nor do we regard a fund fed solely by voluntary donations - as proposed by Senegal as the basis of the DSF - to be the best option, partly because it risks deepening the model of dependence of the South on “charity” from the North, partly because it is doubtful whether a sufficient degree of sustainability of funding could be achieved. Moreover, a voluntarist solution runs the risk of generating a “free-rider” problem, since those actors most likely to benefit from expansion of

the communications network - in particular the transnational corporations that manufacture ICT soft- and hardware - could choose not to contribute and yet still stand to gain from the “800 million [new] consumers” in Africa, referred to by President Wade of Senegal. On the other hand, a fund that is too closely dependent on contributions by private companies in the North could find its hands tied with respect to its freedom of choice. While the interest expressed by companies like Cisco, Microsoft or Hewlett-Packard in developing communications in Africa can be seen in a positive light, as President Wade suggests, we would argue that this is so only insofar as that interest does not take the form of imposing technological solutions that transform Southern societies into captive markets.

Given these potential difficulties with a fund based purely on voluntary donations and returning to the issue of what financing mechanism would be most appropriate given the positive cross-border externalities generated by the expansion of the communications network, we advocate the application of a tax on information and communications technology. However, in contrast to Senegal’s proposal that funds should be raised at the end-user end of the production-consumption chain, we believe that the tax should be levied at the other end - on the manufacture of the microchips used in such technology. This would obviously simplify revenue collection, as it would involve taxing a handful of transnational companies rather than billions of consumers purchasing at millions of outlets, and thus also obviate the potential problems linked to transparency and respect for national sovereignty. Finally, there is clearly a very strong rationale for using revenue raised from taxing information and communications technology to fund expansion of the communications network, and at the same time the mechanism itself guarantees that the fund is self-sustaining, since ICTs expansion would in turn generate more revenue.

Finally, it is clear that responsibility for collection and management of the resources raised through such a tax would have to be assigned to a specific institution. However, the precise structure, jurisdictional scope and location of such a body is open to debate, and both existing - such

as the Global Environment Facility - and proposed institutions - such as Senegal's Digital Solidarity Foundation or Guermazi's Global Universal Service Foundation - provide an interesting starting point on which to build. As we have already stated, while it is essential that the private sector be involved in the process, it is important to analyze how to balance private and public interests and to develop mechanisms to ensure the independence of such a fund and its freedom to make the best use of the monies raised, including the adoption of those technological options that best adapt to local realities. We believe that civil society in the South has an important contribution to make in pointing the way in this respect and should therefore play a central role in the administration of the fund, both at global and local levels. ■

## REFERENCES

- Andersson, Gun-Britt (2002). "Exploring Financing Options for the Provision of Global Public Goods" in Kaul, Le Goulven and Schnupf. [www.undp.org/ods/ffd-monterrey.html/andersson.pdf](http://www.undp.org/ods/ffd-monterrey.html/andersson.pdf)
- Binger, Albert (2003). "Global Public Goods and Potential Mechanisms for Financing Availability". Background paper prepared for the *Fifth Session of the Committee for Development Policy meeting*, April 7-11, 2003. [www.un.org/esa/analysis/devplan/al\\_binger.pdf](http://www.un.org/esa/analysis/devplan/al_binger.pdf)
- Ferroni, Marco (2002). "Financing Regional Public Goods" in Kaul, Le Goulven and Schnupf. [www.undp.org/ods/ffd-monterrey.html/ferroni.pdf](http://www.undp.org/ods/ffd-monterrey.html/ferroni.pdf)
- Gardiner, Rosalie and Katell Le Goulven (2001). "Sustaining our Global Public Goods". Economic Briefing No. 3, UNED. [www.earthsummit2002.org/es/issues/GPG/gpg.pdf](http://www.earthsummit2002.org/es/issues/GPG/gpg.pdf)
- GDF (2001). "Effective Use of Development Finance for International Public Goods", Chapter 5 in *Global Development Finance*, World Bank.
- Guermazi, Boutheina (2003). "Towards Digital Inclusiveness: Can Universal Service Policy Go Global?". Draft Memo. [www.ssrc.org/programs/itic/publications/knowledge\\_report/memos/guermazimemo.pdf](http://www.ssrc.org/programs/itic/publications/knowledge_report/memos/guermazimemo.pdf)
- Heimans, Jeremy (2003). "Multisectoral Global Funds as Experiments in Global Governance and the Financing of Global Priorities". Paper presented at the *UN Wider Conference "Sharing Global Prosperity"*, Helsinki, 5-7 September 2003. [www.wider.unu.edu/conference/conference-2003-3/conference-2003-3-papers/Heimans-2006.pdf](http://www.wider.unu.edu/conference/conference-2003-3/conference-2003-3-papers/Heimans-2006.pdf)
- Kaul, Inge, Isabelle Grunberg and Marc A Stern (eds) (1999). *Global Public Goods - International Cooperation in the 21st Century*. Oxford/New York: Oxford University Press.
- Kaul, Inge, Katell Le Goulven and Mirjam Schnupf (eds) (2002). *Global Public Goods Financing: New Tools for New Challenges: A policy dialogue*. [www.undp.org/ods/ffd-monterrey.html](http://www.undp.org/ods/ffd-monterrey.html)
- Kaul, Inge, Pedro Conceição, Katell Le Goulven, and Ronald U Mendoza (eds) (2003). "Why do Global Public Goods Matter Today?" in *Providing Global Public Goods - Managing Globalization*. Oxford/New York: OUP.
- Lamb, Geoffrey (2002). "Synergies between Aid and the Financing of Global Public Goods" in Kaul, Le Goulven and Schnupf. [www.undp.org/ods/ffd-monterrey.html/lamb.pdf](http://www.undp.org/ods/ffd-monterrey.html/lamb.pdf)
- Morrissey, Oliver, Dirk Willem te Velde and Adrian Hewitt (2002). "Defining International Public Goods: Conceptual Issues" in Ferroni and Mody (eds), *International Public Goods: Incentives, Measurements and Financing*. Dordrecht: Kluwer.

- Office of Development Studies (ODS) (2002). *Profiling the Provision Status of Global Public Goods*. New York: UNDP, ODS Staff paper. [www.undp.org/globalpublicgoods/globalization/pdfs/background-paper-profiles.pdf](http://www.undp.org/globalpublicgoods/globalization/pdfs/background-paper-profiles.pdf)
- Panayotou, Theodore (1994). "Financing Mechanisms For Environmental Investments And Sustainable Development". UNEP, Environmental Economics Series Paper No. 15. [www.unep.org/unep/products/eeu/ecoserie/ecos15/ecos152.htm](http://www.unep.org/unep/products/eeu/ecoserie/ecos15/ecos152.htm)
- Reisen, Helmut (2003). "New sources on development finance". Paper presented at the *UN Wider Conference "Sharing Global Prosperity"*, Helsinki, 5-7 September 2003. [www.oecd.org/dataoecd/56/27/28321228.pdf](http://www.oecd.org/dataoecd/56/27/28321228.pdf)
- Reisen, Helmut, Marcelo Soto and Thomas Weithöner (2003). "Financing Global and Regional Public Goods through ODA: Analysis and Evidence from the OECD Creditor Reporting System". Paper presented at the *UN Wider Conference "Sharing Global Prosperity"*, Helsinki, 5-7 September 2003. [www.eldis.org/static/DOC14272.htm](http://www.eldis.org/static/DOC14272.htm)
- Sagasti, Francisco and Keith Bezanson (2001). "Financing and Providing Global Public Goods: Expectations and Prospects". Development Financing 2000, Study 2001:2. Ministry for Foreign Affairs, Sweden. [www.gm-unccd.org/FIELD/Bilaterals/Sweden/Sweden1.pdf](http://www.gm-unccd.org/FIELD/Bilaterals/Sweden/Sweden1.pdf)
- Spar, Debora L (1999). "The Public Face of Cyberspace" in Kaul, Grunberg and Stern.
- Speight, Melanie (2002). "Global Public Goods: How Much Should DFID Allocate to Global Actions and Funding?". Strategic Review of Resource Allocation Priorities Working Paper Work Stream 3. Department for International Development (DFID), UK. [www.dfid.gov.uk/Pubs/files/International%20Public%20Goods.pdf](http://www.dfid.gov.uk/Pubs/files/International%20Public%20Goods.pdf)
- Stiglitz, Joseph (1999), "Knowledge as a global public good" in Kaul, Grunberg and Stern. [www.worldbank.org/knowledge/chiefecon/articles/undpk2/index.htm](http://www.worldbank.org/knowledge/chiefecon/articles/undpk2/index.htm)
- Sy, J Habib (1999). "Global Communications for a More Equitable World" in Kaul, Grunberg and Stern.
- WSIS Declaration of Principles. "Building the Information Society: a global challenge in the new Millennium". December 2003. [www.itu.int/dms\\_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0004!!PDF-E.pdf](http://www.itu.int/dms_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0004!!PDF-E.pdf)
- WSIS Plan of Action. December 2003. [www.itu.int/dms\\_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0005!!PDF-E.pdf](http://www.itu.int/dms_pub/itu-s/md/03/wsis/doc/S03-WSIS-DOC-0005!!PDF-E.pdf)

# A Systemic Vision for Financing the Information Society as a Global Public Good

FERNANDO PRADA

RESEARCHER

FORO NACIONAL-INTERNACIONAL / AGENDA PERÚ

[WWW.AGENDAPERU.ORG.PE](http://WWW.AGENDAPERU.ORG.PE)

*Global public goods (GPG) have acquired renewed relevance in response to a critical question: how can financial resources be increased in a context of declining flows of international cooperation for development? The WSIS has prompted negotiations geared to obtain an international commitment which would allow the benefits of the information society to be extended worldwide by 2015. This document proposes financing strategies for information and communication technologies within the GPG conceptual framework. Several financial mechanisms are evaluated which could facilitate the growth of international cooperation flows for developing the information society in Southern countries.*

This document is based on the research paper “Mechanisms for financing the Information Society from a Global Public Goods perspective”, by the author, available online at [wsispapers.choike.org/](http://wsispapers.choike.org/)

اكتسبت المنافع العامة العالمية أهمية إضافية رداً على سؤال حيوي: كيف يمكن الزيادة في الموارد المالية في إطار من تراجع التدفقات المخصصة للتعاون الدولي من أجل التنمية؟ بالتوازي، تبذل الجهود لضمان الموارد المالية من أجل تنمية مجتمع المعلومات. دفعت القمة العالمية لمجتمع المعلومات مفاوضات تستهدف الحصول على التزام دولي يسمح لمنافع مجتمع المعلومات بالانتشار عالمياً بحلول عام 2015. تركزت المناقشات حول آليات التمويل لمقابلة هذه التحديات، من خلال الإقرار بدور المعلومات وتكنولوجيات الاتصالات في التنمية الاجتماعية والاقتصادية. تقترح هذه الوثيقة إستراتيجيات تمويل للمعلومات وتكنولوجيات الإتصال في إطار مفهوم المنافع العامة العالمية. يتم تقييم عدة آليات تمويل مشتركة تُيسر من نمو تدفقات التعاون الدولي من أجل تنمية مجتمع المعلومات في دول الجنوب.

El concepto de bienes públicos globales (BPG) ha cobrado relevancia en respuesta a una pregunta crucial: ¿Cómo aumentar los recursos financieros en un contexto de tendencias declinantes en lo referente a la cooperación internacional para el desarrollo? La CMSI ha expresado la necesidad de obtener acuerdos internacionales tendientes a asegurar que los beneficios de la sociedad de la información alcancen a todas las regiones del mundo para 2015. Este documento propone estrategias de financiamiento para las tecnologías de información y comunicación utilizando el marco conceptual de los BPG. Asimismo, se evalúan diversos mecanismos financieros que podrían fomentar un aumento en los flujos de cooperación internacional orientados al desarrollo de la sociedad de la información en los países del Sur.

*Le sujet des biens publics mondiaux (BPM) a repris de l'importance en réponse à une question fondamentale: comment augmenter les ressources financières dans un contexte de diminution des budgets de la coopération internationale pour le développement? Le SMSI a entamé des négociations afin d'obtenir des engagements internationaux permettant d'étendre les bénéfices de la société de l'information à toutes les régions du monde, d'ici l'an 2015. Ce texte propose des stratégies de financement pour les technologies de l'information et de la communication dérivées du cadre conceptuel des BPM. L'article évalue également différents mécanismes financiers qui pourraient contribuer à l'augmentation de la part de la coopération internationale visant le développement de la société de l'information dans les pays du Sud.*

## Introduction

The first phase of the World Summit on the Information Society (WSIS) has prompted talks geared to obtaining an international commitment and a Plan of Action to allow the benefits of the information society (IS) to be extended worldwide. The discussion has partly focused on the financial mechanisms needed to meet these challenges, as well as other important aspects of the IS, such as Internet governance, the relation between information technologies and development and the setting of concrete goals to be met by 2015.

The “global public good” (GPG) perspective originally emerged from concerns of the international community when faced with specific global problems (*global public bads*). However, when putting this concept into practice, a complex group of negotiations and agreements at the global, regional and local levels are necessary to make up a “GPG delivery system”.<sup>1</sup> The political process that leads to setting this up has far-reaching implications when it comes to the financing mechanisms that are most suitable for providing this type of goods.

This document is aimed at presenting a summary of the analysis included in our study “Mechanisms for financing the Information Society from a Global Public Goods perspective”, where we propose financing strategies for the IS by using the GPG conceptual framework and we evaluate the combination of different financial mechanisms which could promote increased flows of international cooperation aimed at developing the IS in Southern countries.

---

1 Sagasti, F. and K. Bezanson (2001), *Financing and Providing Global Public Goods: Expectations and Prospects*, Institute of Development Studies, Sussex, United Kingdom-Ministry for Foreign Affairs of Sweden, Stockholm.

## The GPG framework

GPGs have gained relevance in response to a crucial question - How can financial resources be increased in a context of declining trends in international cooperation for development? Although the concept of GPGs has been widely used by economists,<sup>2</sup> it sprang from a study published by Kaul, Grunberg and Stern in 1999.<sup>3</sup> Since this publication, a series of academic and policy documents have been produced and seek to call attention to the potential gains of collective action aimed at tackling different common problems whose externalities go beyond the action of individual states.

In spite of the enthusiasm generated by this new perspective and efforts by the international community and academy to make this concept operative, no clear specification has been made as to how this concept can contribute to solve the problem of additionality of international cooperation resources and the under-provision of GPGs. Another of the problems that arise when dealing with GPGs is that, since the concept is still not clear, it has been incorrectly used to proclaim that almost any activity could be considered as a public good and thus should be financed by the international community.

Traditionally, the concept of public goods has been associated with three interrelated characteristics. First, public goods produce significant *externalities*;<sup>4</sup> second, there is *non-rivalry* in their consumption and

---

2 Samuelson defined public goods in 1954 based on the principles of non-rivalry in consumption and non-exclusion from benefits. However David Hume had previously coined the idea of “common good” (in 1793), and Adam Smith, David Ricardo and David Malthus had stressed that concerted action could serve to provide goods that would benefit the community as a whole.

3 Kaul, I., I. Grunberg and M.A. Stern (Eds) (1999), *Global Public Goods: International Cooperation in the 21st Century*, New York: Oxford University Press.

4 “Externalities” are the unintended positive or negative effects arising from any action, which are not borne directly by the person(s), organization or country responsible for the action. Public bads in particular are very often the result of such negative externalities, and likewise, the motivation for providing public goods stems from the desire to generate or enhance positive externalities and correct negative ones.

*non-exclusion* from benefits to a significant degree;<sup>5</sup> and third, they generate opportunities to improve individual and social well-being through collective action. However this concept should not be defined only in an abstract way<sup>6</sup> since social and cultural preferences - which are expressed through public opinion and political will - determine which public goods will be provided and the trade-offs that societies are willing to make. When it comes to GPGs - and international public goods, to include regional public goods - these trade-offs are determined within a domain that goes beyond nation States, but which does not necessarily conflict with them.<sup>7</sup>

Complex negotiations have to take place from the time international public opinion becomes aware of a specific problem until a global public good is defined and even a longer period before such good is provided. This process requires a great effort in terms of collective action and the results are strongly influenced by public opinion and policy decisions at international level, involving national governments, private corporations and civil society organizations.

- 
- 5 If a good can be consumed by many people (or countries) without becoming depleted, it is said to be “non-rival” in consumption. Likewise, if no one (or country) can be naturally prevented from benefiting from the good, it is “non-excludable”. It is these characteristics that differentiate these public goods from private goods, whose use by one consumer effectively prevents another from accessing them.
  - 6 Ver Eecke, W. (1999), “Public goods: An ideal concept”, *Journal of Socio-Economics*, Vol. 28: 139-56. Ver Eecke has found problems in the conceptual definition of public goods and has identified around 13 possible definitions in the academic literature on this subject.
  - 7 Sagasti, F. and G. Alcalde (1999), *Development Cooperation in a Fractured Global Order: An Arduous Transition*, Ottawa: International Development Research Centre (IDRC). In a fractured global order there are fissures between states and also fissures within states themselves, but there are also forces which put the actors involved in contact with each other, such as international civil society, transnational enterprises, regional associations, etc. In this context GPG not only fall within the sphere of states, but are also a spot where pressures from diverse agents meet and converge.

## The IS as a GPG

We briefly analyze here the different aspects considered in the definition of GPGs and their relation to the IS.

### *Public awareness and political decision*

Concerns about deep fissures in the IS (knowledge and digital gaps) in some countries and within them have varied over time, incorporating new issues. Different actors have different perspectives about the IS, its benefits and main characteristics. These perspectives range from “holistic” visions - such as the WSIS Declaration of Principles that links the IS to the quest of sustainable development and human welfare - to more specific visions that focus on new technologies, information flows and the creation of knowledge for the promotion of social and production changes.

The changing policy challenges show how public awareness evolves and how new elements and findings contribute to create and re-create the concept of IS. This process takes place before any political decisions are made or mechanisms are designed for the provision of the IS as a GPG.

### *The IS produces a significant degree of externalities*

The dissemination of information and communication technologies (ICTs) means that knowledge can be transmitted at low cost, generating benefits for the whole population (including poverty reduction, territorial integration, better quality of life and lower production costs). Moreover, exclusion from the IS causes negative externalities, which thus increase existing inequalities. Indicators show that technology access and knowledge gaps are deeper than economic inequalities.<sup>8</sup> This is a matter of concern given the fact that new technologies and the capacities to use them represent essential means within the emerging production methods.

---

8 For details on economic, technology access and knowledge gaps indicators, please refer to the original document.

*The IS shows a high degree of non-rivalry in consumption and non-exclusion from benefits*

Both public good conditions are met to a large extent by the IS at the global, regional or national level. The Internet, for example, has non-rival and non-exclusion properties to a significant extent at the global level.<sup>9</sup>

Let us suppose that the whole world population has full access to the IS. In this ideal world an individual's consumption would not alter other people's consumption and all the members would be able to share the same benefits. Technological progress has created new technologies with greater capacity (e.g. more powerful processors and faster communications), as well as new means to provide access to the IS that could cover the whole world - at least in theory.<sup>10</sup>

*The IS generates opportunities to improve the well-being of agents through collective action*

The potential advantages offered by the IS have been widely recognized and different countries and regional organizations have launched programs that are designed to include the largest possible number of people in the IS through solidarity schemes and direct economic support.<sup>11</sup> These approaches suggest that the IS could be better developed through the collective efforts of different actors. Furthermore, countries can

---

9 Accuosto, P. and N. Johnson (2004), "Financing the Information Society in the South: A Global Public Goods Perspective", prepared for the Association for Progressive Communications (APC) by the Third World Institute (ITeM), Montevideo, Uruguay.

10 Part of the explanation can be found in the economies of scale that apply to this kind of infrastructure. It is capital intensive and is installed in many layers and dense networks known as backbones which allow the capacities of transmission from a centre to peripheral points to be diffused. In the centre the cost tends to be much lower and there can be a problem of over-capacity which is not easily transmitted to distant locations.

11 For example, European Union policies have paved the way for the development of the e-Europe initiative. [www.europa.eu.int/information\\_society/index\\_es.htm](http://www.europa.eu.int/information_society/index_es.htm) Likewise, Latin America and the European Union joined efforts in the @LIS Programme (Alliance for the Information Society) and cooperated to develop the first Latin American network for research and education (CLARA) and to establish direct interconnection between it and the European network GÉANT.

take advantage of catching up with new technologies and benefit from their development.<sup>12</sup> The great paradox is that the means and technologies to make this possible are already known or being developed, but for a variety of reasons this is not being put into practice intensively enough to bring about the integration of some regions into the IS.<sup>13</sup>

## An idealized delivery system

A GPG cannot be defined only by taking into account its degree of non-exclusion and non-rivalry and the existence of externalities. The definition must also include those elements that make up the delivery system to better analyze the financial strategies that can be put into practice. Sagasti and Bezanson<sup>14</sup> proposed an *idealized delivery system*<sup>15</sup> for GPGs. They propose a way of integrating the concept of GPG, the decision-making processes of different agents involved in their provision, and the financial implications.<sup>16</sup>

The system considered allows to answer the question of how the different elements for providing the GPG interact. These elements form a continuum from the *global domain* through to the *national/local domain*. In this delivery system, the *global domain* (related to the whole of humanity and to public awareness) interacts with the *network domain* (related to institutional agreements at international level) and with

---

12 Fink, C. and C. J. Kenny (2003), “W(h)ither the digital divide?”, in *Info: The journal of policy, regulation and strategy for telecommunications*, Vol. 5, No. 6. The authors analyzed the dynamic of technological innovations (TV, telephones, Internet) and showed how developing countries have adopted Internet faster than other innovations.

13 UN Information and Communication Technologies Task Force (ICT TF) (2004), Second Annual Report, presented at the Economic and Social Council (E/2004/62).

14 Sagasti and Bezanson (2001), *op cit*.

15 When considering an ideal system, subjects such as asymmetric knowledge, power relations and the capacity to acquire benefits, among others, are not taken into account. They will be considered at a later stage of the analysis.

16 For details of the proposed conceptual system, please refer to the original document.

the *local domain* (related to national governments, private enterprises and civil society).

The aim of this delivery system is to recognize the different elements needed to provide a GPG in a coherent way, so that they form a continuum, extending from the global domain to the local/national domain. A critical decision has to be made to distinguish those elements that constitute the *core component* of the system from those which represent *complementary activities*. This decision determines what kinds of organizations and programs should be involved in the production of the core component and, even more important, how the provision of the GPG should be financed. In the next section we will try to answer this question for the particular case of the IS.

## Components of the IS delivery system

The WSIS Declaration of Principles shows a wide range of components that make up the GPG known as “information society” and the domains where they operate. Although a series of institutions, regimes, norms and standards are emerging and/or being consolidated, it is still unclear how the delivery system will be eventually structured.

### *The global domain: Knowledge, public awareness and political decisions*

As mentioned above, public awareness with regards to the benefits of the IS and the so-called “digital revolution” and the consequences of access and knowledge gaps is progressively being considered by public authorities, civil society, private sector and international organizations. Therefore, the WSIS represents an opportunity to make political decisions about which aspects of the IS should be given priority and gain the attention of the international community, what institutions will be in charge of providing this public good, what concrete agreements will be made to finance the various activities needed to produce the good, and what will be the role of developed and developing countries and all the stakeholders.

The main challenges are related to the political decisions discussed within the context of fora such as the WSIS. This means solving some crucial problems in terms of the design and orientation of the agreements that will serve as framework for the IS. The discussion revolves around what criteria, values and principles should prevail when it comes to designing the governance of the IS and, in a wider sense, of the knowledge society.

### *IS regimes (international arrangements)*

As the IS has expanded, regimes<sup>17</sup> have been developed. Again, the WSIS provides a window of opportunity to establish international agreements and institutions to pave the way to setting up a global framework of norms and regulation activities. It should be noted that efforts made by stakeholders are directly related to their spheres of influence. The main challenge is to make regimes the result of debate and consensus, so as to reflect the many interests and visions and to ensure that they do not cater exclusively to the interests of corporations and governments in industrialized countries. The regimes emerging from these interactions shape future types of institutions, as well as the strategies that will be used to finance them.<sup>18</sup>

### *The networks domain: International organizations, financial mechanisms, policies and procedures*

International organizations, financial mechanisms and operational policies and procedures reflect the agreements that have been reached. The connection, regulation and utilization standards and norms, for instance,

---

17 In the case of GPGs, “regimes” are international agreements (standards, etc.) that regulate the relations between agents for the provision of public goods. These rules are not necessarily treaties or international law documents, but also informal/implicit rules of interaction.

18 Regimes for the information society are still under construction and depend on the interaction of the stakeholders’ interests. An example is the case of Internet resources management: ICANN faces pressures not to represent corporative interests based on the unilateral vision of the US government on how the industry should develop.

contribute to create and develop institutions and modes of production, as well as procedures aimed at ensuring and enforcing such agreements.

In the area of ICTs it is clear that international agreements contribute to reinforcing current trends in the adoption and use of technologies in the IS. In spite of this, concerted action by the international community could contribute to generate financial mechanisms and institutions that would promote solidarity among nations, aimed at achieving global objectives in connectivity, for example. In this context, mechanisms to mobilize financial resources for the development of technologies at reasonable cost or programs to build local capacities among the less-advantaged population groups should be considered as a priority.

### *Contracts and agreements*

*(from global agreements to local policies)*

When it comes to contracts and agreements<sup>19</sup> that link the networks (international policies) domain to the local/national domain, the main challenge is how to ensure the effective implementation of commitments. The many and varied commitments undertaken by governments do not often include suitable financial mechanisms, nor they pose specific changes in terms of national priorities or influence the structure of the public budget.<sup>20</sup> In the area of new technologies, the main trend has been to allow competition in order to stimulate private investment.<sup>21</sup>

---

19 Negotiations between international bodies and national/local organizations.

20 Sagasti, F., F. Prada and A. Espinoza (2004), *Public Finance in a globalizing world: Peruvian case study*, UNDP-Office of Development Studies.

21 The International Telecommunication Union (ITU) 2004 annual report indicates that, while 40% of basic services (fixed telephone lines, and data transmission lines) are produced by monopolies and 60% by private competition, when it comes to new technologies (local wireless networks, mobile telephony, cable television, internet providers) private competition accounts for 85% of the market. In some regions we can notice differences in this trend and these differences influence the provision of public goods at the global level.

Just as regimes have an impact on actors at the international level, so agreements and contracts have an impact on the local/national level. For instance, following the adoption of free software by the public sector, consumers and business at the national/local level would tend to adopt free software, as well.

*The local/national domain: Activities of national and local bodies within the IS*

To a large extent, activities aimed at the provision of GPG take place within the local/national domain.<sup>22</sup> This is particularly true when it comes to the IS. There are three main subjects involved at this level:

- Strategies to provide infrastructure for communications and information flows, which may be provided publicly, privately or through a mixed system, and may be subsidised or covered by users, under a monopoly or in competition,
- the role of education in building capacities so that people can take advantage of information and knowledge, as in the case of national universal access programs,<sup>23</sup> affirmative action programs for sectors with limited access, the incorporation of local content and the development of research programs to establish a critical mass of experts, among others; and

---

22 In general, the activities described in the local/national domain probably do not have the properties of non-exclusion and non-rivalry, and their externalities are manifested only in this domain. This situation disqualifies them from being considered as global public goods. This is what often causes confusion about whether a good can be classed as a global public good. Sagasti and Bezanson (2007) argue that a GPG exists when the international community, through knowledge, policy decision and public awareness, considers it so.

23 Universal access policies are aimed at increasing access to communication and information technologies, either at households or through public facilities providing that prices are affordable for users in the community. These conditions are defined by the regulator in each country, in order to determine which communities would be covered by the market and which communities would need a subsidy, and which cannot be provided with any available technology and thus need alternative mechanisms to be included. See ITU report, *Trends in telecommunication reform 2003/2004: Promoting universal access to ICT*.

- strategies for adapting national activities to international standards, such as the decisions on free or proprietary software and the regulation of intellectual property rights, among others.

Each of these subjects is included in the WSIS lines of action.

## GPG information society:

### Core component and complementary activities

Activities for delivering a GPG form a continuum from the global domain to the local/national domain.

As stated above, different elements must be considered when defining a GPG, especially regarding the activities that would make up its core component, and its complementary activities. Core components activities can be defined in two ways. The decision about where the GPG core component is located will have an impact on the design of the mechanisms that are more suitable to finance its provision.

- *Option 1: The GPG core component is defined in the global level.* In this case the core component is exclusively defined according to the public good characteristics: existence of externalities, non-rivalry, non-exclusion, and the welfare gains from collective action. The subjects under consideration, for example, are the flow of information that is generated and transmitted through the Internet, the proposals and agreements for standardizing information technologies, the regimes of Internet governance, the design of enforcement mechanisms and the design of mechanisms to improve security in information technologies, among others. Likewise, we could consider - if it keeps developing - the infrastructure which scope is strictly global, and the rules that govern it (the use of electromagnetic space, the incorporation of new technologies to extend coverage of information technologies to a global level, such as stratellites).
- *Option 2: The GPG core component includes the local domain.* Concerns about inclusion into the IS and the access and knowledge gaps have prompted a wider definition of the GPG core component.

That is to say, one that agrees more with those activities taking place in the local/national domain and which, for other kinds of GPGs, could be considered as “complementary” to the GPG delivery system. In this case, the subjects considered as part of the core component, apart from those indicated in the first option, are the provision of connectivity infrastructure for countries, or people within countries, with more difficulties in terms of access to the IS, as well as support for the adoption of standards, at the local level, which would allow greater connectivity and access. This would be compatible with the aim to set “universal access” schemes for new technologies in developing countries, as has already been done in the European Union and the United States.

In both options the implications for financial strategies are important. In the first option, the financial strategy could involve mechanisms to reduce externalities by making ICT users pay for the services they receive. However this vision of the IS only ensures the rights of those users who already benefit from it. In short, this arrangement seeks to protect rights and provide better service to those who are already in the IS.

The international community has stressed the importance of adopting the widest possible definition of IS in order to progressively include the whole world’s population in its benefits and potentials. This wide vision also appears in the governments’ Declaration of Principles and in the Civil Society Declaration of the WSIS first phase.

Based on this general aspiration it is possible to design a financing strategy which would allow to channel and distribute resources from those who are part of the IS to those not yet included in it. Moreover, it is possible to go beyond a user-service vision such as that described in the first option and include innovative financial mechanisms, in harmony with the market, to channel resources towards communication and information infrastructure. International and domestic resources can be mobilized to build capacities in countries that are currently left behind, thus enabling them to take advantage of the IS.

## Exploring financing strategies for the IS

The academic literature proposes some schemes to link financial resources to the intrinsic characteristics of a GPG as an option to efficiently allocate resources and reach multilateral agreements. But how can wide-ranging agreements and automatic results be achieved when the public good includes components with different degrees of non-rivalry, non-exclusion and externalities, decision-making asymmetries and differences in patterns of consumption and provision? The IS includes elements that encompass different degrees of such properties:

- A first global public component is located in the global domain and regimes (information freely flowing through the Internet, connectivity standards and governance regimes, among others).
- A second component is located in the networks domain that shows the higher degrees of rivalry in consumption, and influences the national/local domain by means of agreements and contracts (the so-called information technologies market, which includes connectivity infrastructure and related services and the design and use of technologies for transmitting information and increasing productivity, among others).
- The third component is more localized in the local/national domain and shows a higher degree of exclusion from benefits (skills to access information flows, knowledge building capacities, people's educational level to take advantage of benefits of the IS, the capacity to adapt knowledge to generate increases in productivity).

The complexity of a GPG does not always allow to discern the most efficient way to provide a public good or allocate financing responsibilities in an automatic way.

Although it is possible to apply general criteria for allocating resources to provide specific goods (such as "*who pollutes pays*" when proposing the creation of a market for emissions in the fight against climatic change), it is not always possible to clearly assign responsibilities

without negotiations where politics have more weight than technical criteria (as in the case of “*the richest countries should finance the provision of global security against the threat of terrorism*”).

The United Nations Development Programme (UNDP) has taken a step forward in conceptualizing three dimensions of what is “public” in a GPG: the consumption of goods, the policy decisions related to their provision and the appropriation of benefits.<sup>24</sup> Accordingly, the ideal provision of public goods is achieved when these three dimensions are in balance.

A GPG perspective provides criteria for identifying which options are most suitable for financing the IS though not in an automatic way. Negotiations at the political level must seek to make operative the aims and values of societies in the provision of a GPG, especially when it comes to financial resources and regimes. Only if proposals can be implemented will the vision of the IS be feasible.

## Financing mechanisms for the IS

From a public goods perspective, the first option for financing is to ask if it is possible to *internalize externalities*. In other words, what is the limit of market dynamics in terms of creating conditions to benefit a larger part of the population in the IS and taking advantage of economies of scale and the network effect? This mechanism has its limitations when it comes to the IS.

First, the incorporation of new users through more investment (private, public or mixed) financed through user payments is limited, due to poverty and low incomes. There is also a geographical barrier and the academic literature distinguishes between “universal service” (ICT coverage of each household) and “universal access” (population can access ICTs on a geographic basis). Secondly, it is not possible to predict the

---

<sup>24</sup> Kaul, I., P. Conceicao, K. Le Goulven and R.U. Mendoza (2003), “How to Improve the Provision of Global Public Goods”, in *Providing Global Public Goods: Managing Globalization*, UNDP, pp. 26-94.

impact of innovations in reducing access costs and increasing coverage. For example, what would be the effect of the accelerated development of low cost computers for the access of poorer populations or the use of community radios together with Internet? A third limitation is that while externalities are internalized, the results are not technologically neutral, and this could lead to higher costs when adopting a new technological standard in the future (the mobile phone sector provides examples for this).

So, what happens when the mechanisms for internalizing externalities do not operate automatically? There exist many financial options and specific instruments to cater to the diverse requirements of developing countries. Some of them have not been widely applied to the IS and others are being developed.

These instruments can be differentiated according to their financial source, the amount of resources mobilized, the institutions involved, the kinds of activities financed, the criteria for eligibility, the administrative capacities required, and their sustainability. The IS can be financed by a combination of the financial instruments summarized below:<sup>25</sup>

---

25 This section is based on Sagasti, Bezanson and Prada (2005) and supplemented by the preliminary report of the Task Force on Financial Mechanisms (TFFM) (20 November 2004). For a more detailed explanation of each source please refer to the original document.

## 1. BILATERAL SOURCES

<b>Financial instruments</b>	<b>Sub-types of financial instruments</b>
Regular and concessional loans	Programs, project and sector loans (direct or through official financial intermediaries, such as in the case of revolving funds)
Grants for public and civil society organizations	Pre-investment of public or private projects and technical cooperation Fiscal support to cover the costs of maintaining infrastructure Grants to ensure access to multilateral or private investment funds
Debt management	Exchanging debt for specific investment (education, infrastructure)
Funds to promote foreign investment (FDI)	Loans, shares and joint ventures guaranteed by bilateral agencies against political, regulatory and exchange rate risks (e.g. OPIC)

## 2. INTERNATIONAL ORGANIZATIONS (UN system and regional organizations)

<b>Financial instruments</b>	<b>Sub-types of financial instruments</b>
Grants	Technical cooperation; grants for institutional development (regulation)

3. MULTILATERAL DEVELOPMENT BANKS  
(WB, regional and sub-regional banks)

Financial instruments	Sub-types of financial instruments
Regular and concessional loans	Program, project and sector loans to the public or private sector  Pilot programs to build capacity (learning and innovation loans)
Grants (mainly public institutions)	Technical assistance and capacity building grants  Pre-investment grants
Risk mitigation and risk management instruments (primarily for the private sector)	Guarantees against political, contractual, regulatory, credit and exchange rate risks  Financing of hedging operations (exchange rate and interest rate swaps)  Securitization, syndicated loans, leasing  Equity (direct, quasi-equity, preferential shares)
Debt reduction	Debt for investment swaps
Additional instruments	Resources mobilization from other bilateral and multilateral sources (catalytic financing)  Local currency bonds to strengthen domestic markets

#### 4. PRIVATE SECTOR

Financial instruments	Sub-types of financial instruments
<i>a. Corporations</i>	
Foreign direct investment	FDI: subsidiaries, equity investment, joint-ventures, privatization  Participation in the private provision of public services (concessions)
Donations and social responsibility activities	Corporative donations to public and civil society institutions  Social responsibility activities
<i>b. Commercial and investment banks</i>	
Loans	Investment programs and specific projects
Risk management instruments	Derivatives, options, futures, swaps, hedging instruments  Guarantees and provision of insurance
Portfolio investment	Purchase of bonds and shares (standard, performance linked bonds, convertible bonds, subordinate, among others)  Investment on developing country capital markets and socially responsible investment (SRI)
<i>c. Private foundations, non-profit and non-governmental institutions, individuals</i>	
Donations	Funds for specific projects
Financial remittances	Workers' funds to guarantee investment in rural areas

## 5. INTERNATIONAL TAXES (single fund for a specific purpose)

Financial instruments	Sub-types of financial instruments
Institutional arrangements for taxes	Global tax on information transmission (Bit Tax) Global tax on computer inputs (e.g. production of chips or Chip tax)

## 6. PARTNERSHIPS

Financial instruments	Sub-types of financial instruments
Multi-donor funds	Information society fund (e.g. Digital Divide Fund) Ad-hoc version of the International Finance Facility (IFF)

## Towards a financial strategy for the IS<sup>26</sup>

### *Internalization of externalities. Mobilization of domestic and international resources*

The first element of the strategy is to create and consolidate mechanisms to internalize externalities, with special emphasis on the infrastructure sector. Densely populated urban areas in developing countries have experienced an explosion in the use of ICTs, and this trend should continue as far as possible. However there is a wide range of instruments to strengthen regu-

---

<sup>26</sup> In addition to the financial instruments and sources a financial strategy needs to combine two additional elements to be complete: The type of countries, divided among low-income countries (with low capacity to mobilize domestic and foreign resources), middle income (with middle capacity), and middle-high income (with high capacity); and the components of the information society which have diverse characteristics and require different financial mechanisms. Please refer to the original document for the challenges and financial instruments that are most important and most suitable according to the type of country and GPG component.

latory capacities so as to avoid excessive dependence on particular types of technology, on the one hand, and to reinforce current consumption patterns, on the other. This is probably more operative in situations in which a country has a greater capacity to mobilize domestic resources (middle-high income developing countries). Nevertheless, the international community could direct financial resources and technical cooperation (mainly through UN programs) to strengthen these capacities in countries that have less capacity to mobilize resources.

#### *Existing mechanisms. Debt reduction, debt swaps*

The second element is to take advantage of the range of financial mechanisms that are currently offered and use them according to the needs of each country and each component of the IS. We believe that access to the IS ought to take place on the terms agreed by each individual country. Middle and middle-high income countries can press for fixed-time investment programs (10 years) through framework agreements with the International Monetary Fund, proposing connectivity projects with high social return to be financed with private capital resources. In this way the countries would have great freedom to decide what the best strategies for access are, and would depend less on loans from multilateral and bilateral institutions. Low-income countries, in turn, could include more ambitious proposals for connectivity investment programs in their Poverty Reduction Strategic Papers to be able to accede to more debt reduction or debt swaps.

#### *Additional mechanisms. Global taxes, IFF for the IS*

A third element is to exert constant and sustained pressure to create financial mechanisms for the IS (such as global taxes<sup>27</sup> or a reduced version of the IFF) so as to widen financial options and increase resources allocated to developing countries. Initially there has been opposition from developed countries but there are good arguments, from

---

27 See the original document for an explanation of the feasibility of a global tax for a Universal Access Fund.

a GPG perspective, that encourage investment in the IS. This will result in benefits for the whole world, allowing not only better connectivity but also better support for social and educational programs and trade opportunities, among others. Therefore, it is worthwhile innovating on financial options for a big push in investment in developing countries.

### *Division of labour between North and South*

A fourth element is that countries could take advantage of the implicit division of labour among financial sources. High-income countries could lay greater emphasis on private sources that seek a certain level of profitability in their operations, while countries with lower income levels could lay emphasis on softer financing sources or grants. Likewise, there is a division of labour among components. At higher income levels, emphasis can be placed on activities in the global domain (participation in setting standards, technical assistance to other countries, more investment in research and development to create low cost technologies for developing countries); while at lower income levels finance is most urgently needed to tackle infrastructure and capacity gaps.

### *National/local strategies*

Lastly, the strategy must close gaps in the local/national domain. It is clear that there are gaps not only between countries but also within them. The idea of closing gaps involves identifying these differences within populations and implementing the strategies that are most suitable within the framework of such country's national priorities. In this way, countries with higher capacity to mobilize resources could initiate pilot programs funded by softer financing sources (bilateral and private foundations) on a small scale, so that these could be replicated on a larger scale with domestic resources. Countries with less capacity to mobilize resources could launch programs financed by multilateral loans (and eventually with resources from capital markets through investment funds) for the more profitable layers of connectivity.

## Conclusions and recommendations

The GPG perspective allows to recognize the different elements of the IS (global aspects and regimes, infrastructure and national/local capacities), defined according to a common vision, aims and values. Moreover, this perspective allows to explore a range of possibilities for financing each component, and also to propose financial options for the IS as a whole.

In addition, this approach supports the idea that the international community should collaborate to provide the GPG IS. To declare that something is a GPG is only the first step to deliver it and the negotiations to create a delivery system could be enriched through adopting a systemic vision, such as the one presented in this document.

Each component has its own challenges, and the ongoing negotiation processes focus on each of them, but there are solid arguments to adopt a systemic vision of the IS to avoid partial discussions and solutions. Civil society representatives should put strong pressure on governments and the different actors in the negotiations that are currently under way.

The WSIS and its implementation and follow-up processes provide an opportunity to discuss these points of view and to reach conclusions which, within a reasonable time frame, will enable the greatest possible number of people in the world to belong to the IS and take advantage of the benefits it has to offer. ■

# Proposed Strategies for the Information Society in the South

SUSANA FINQUELIEVICH

PRESIDENT  
LINKS  
WWW.LINKS.ORG.AR

*Upon the guidelines included in the WSIS Declaration of Principles, which are essential to developing the information society, a series of questions are raised: How do we build an inclusive information society to be developed by the different social actors in Southern countries, particularly in Latin America and the Caribbean? What elements should be focusing the efforts of governments, the private sector and civil society? What sources of financing should be encouraged to ensure access and production of technological goods and services? What are the conditions required to assure that multistakeholder participation in building the information society becomes a reality? And essentially, what proposals could be made on these topics in order to contribute to the process of building the information society that will follow the WSIS? This paper addresses these questions and suggests measures to be taken by the different actors in the process.*

This paper is based on a series of investigations coordinated by the author, which conclusions are gathered in the document “Building an Information Society in the South: The role of governments and civil society”, available online at [wsispapers.choike.org/](http://wsispapers.choike.org/)

إستناداً على المبادئ التوجيهية الواردة في إعلان المبادئ للقمة العالمية لمجتمع المعلومات، والتي تُعد أساسية لتنمية مجتمع المعلومات، تطرح سلسلة من الأسئلة: كيف نقيم مجتمع معلومات شامل تقوم بتميمته الأطراف الاجتماعية المختلفة في دول الجنوب، وبشكل خاص في أمريكا اللاتينية والكاريب؟ على أية عناصر يجب أن تتركز جهود الحكومات، القطاع الخاص والمجتمع المدني؟ أية موارد تمويل يجب تشجيعها لضمان إنتاج والنفاذ على السلع والخدمات التكنولوجية؟ ما هي الظروف المطلوبة لكي نضمن أن تصبح مشاركة أصحاب المصلحة المتعددين في بناء مجتمع المعلومات حقيقة؟ وبشكل رئيسي ما هي المقترحات التي يمكن صياغتها حول هذه النقاط للمساهمة في عملية بناء مجتمع المعلومات الذي يستتبع القمة العالمية لمجتمع المعلومات؟ هذه الوثيقة تتناول هذه الأسئلة وتفتح الإجراءات المطلوب إتخاذها من جانب مختلف اللاعبين في هذه العملية.

En los documentos oficiales de la CMSI se plantea una serie de interrogantes en relación al rol de los diferentes actores sociales en la construcción inclusiva de la sociedad de la información en los países del Sur y, en particular, en América Latina y el Caribe. ¿Qué factores deben concentrar los esfuerzos de los gobiernos, el sector privado y la sociedad civil? ¿Qué formas de financiación de acceso y producción de bienes y servicios tecnológicos deben alentarse? Y, esencialmente, ¿qué propuestas pueden efectuarse sobre estos puntos para contribuir al proceso de construcción de la sociedad de la información que sucederá a la CMSI? Este documento presenta estas cuestiones y sugiere medidas a ser tomadas por los diferentes actores del proceso.

*A partir des idées exposées dans les documents officiels du SMSI, apparaissent des questions concernant le rôle de différents acteurs sociaux dans la mise en place de la SI dans les pays du Sud, notamment en Amérique Latine et aux Caraïbes. Sur quels facteurs doivent se concentrer les efforts des gouvernements, du secteur privé et de la société civile? Quelles sont les modes de financement de l'accès et de la production des biens et des services technologiques à encourager? Quelles seraient les propositions à faire sur ces points pour contribuer au processus de construction de la société de l'information après le SMSI? Ce texte analyse ces questions et propose des actions susceptibles d'être reprises par les acteurs du processus.*

## Introduction

The Declaration of Principles of the World Summit on the Information Society (WSIS), in December 2003, expressed that “We are resolute in our quest to ensure that everyone can benefit from the opportunities that information and communication technologies (ICTs) can offer. We agree that to meet these challenges, all stakeholders should work together to: improve access to information and communication infrastructure and technologies as well as to information and knowledge; build capacity; increase confidence and security in the use of ICTs; create an enabling environment at all levels; develop and widen ICT applications; foster and respect cultural diversity; recognize the role of the media; address the ethical dimensions of the Information Society; and encourage international and regional cooperation. We agree that these are the key principles for building an inclusive Information Society.”<sup>1</sup>

Upon these principles that are essential to developing the Information Society (IS), a series of questions are raised: How is the building of an inclusive IS to be developed by the different social actors in Southern countries, particularly in Latin America and the Caribbean (LAC)? What elements should be focusing the efforts of governments, the private sector and civil society? What sources of financing to ensure access and production of technological goods and services should be encouraged? What are the conditions required to assure that multistakeholder participation in building the IS becomes a reality? And essentially, what proposals could be made on these topics in order to contribute to the process of building the IS that will follow the WSIS?

This document, based on research carried out in LAC, puts forward the conclusions drawn in the paper “Building an Information Society in the South: The role of governments and civil society”. Actions to be

---

1 WSIS, “Declaration of Principles. Building the Information Society: a global challenge in the new Millennium”, Document WSIS-03/GENEVA/DOC/4-E, 12 December 2003, [www.itu.int/wsis/docs/geneva/official/dop.html](http://www.itu.int/wsis/docs/geneva/official/dop.html)

taken by those participating in the process are proposed, maintaining that the key role of governments is both to provide telecommunication infrastructures and establish partnerships with other social actors for connectivity purposes, and mainly to focus on the development of the Knowledge Economy (KE). Finally, innovative policies and strategies for Southern countries are proposed.

## Financing mechanisms for the IS

As one of their first steps towards building the IS, societies in Southern countries have implemented actions to fulfil their connectivity needs through initiatives based on different actors (governments, private sector, civil society organizations) and articulations among them. Currently, there are other key areas concentrating the efforts of national governments and civil society, including the implementation of telecommunication infrastructure networks and the promotion of the KE.<sup>2</sup> This involves the need to implement country and macro-region projects whose general guidelines include the definition of the intention of becoming either consumers or producers of technological goods and services, spotting market niches for their products and opening export markets.

The ways in which governments, companies and the organized civil society negotiate the financing sources for building the IS will contribute to define these intentions which, in turn, will determine the medium and long-term future of their societies. As it is shown below, these mechanisms encompass several forms:

---

2 The New Economy is understood as the dynamic system of interactions between the citizens of a country, enterprises and government, which capitalize technology with the object of obtaining a social benefit or financial profit.

### *Public financing of communication infrastructures*<sup>3</sup>

For the development of connectivity and the socioeconomic inclusion in the IS to be made effective in the medium-term, a vision of communication networks as public goods<sup>4</sup> is currently under discussion in LAC countries. The strengthening of communication infrastructures is currently one of the basic development problems: regional communication systems show great deficiencies with regards to those in developed countries. Basic telephone lines, mail services, computer packages and data transfer, territorial coverage of audio-visual and printed mass media lack the necessary efficiency and speed to be adapted to modern world communications. Imbalance among countries and within countries in terms of communication infrastructures are remarkable, given that these are scarce or nonexistent in less populated, remote or low-income areas. The aim of this paper is to emphasize the responsibility of governments in the area of communication infrastructures: connectivity - in terms of access to Internet and ICT use through telecentres, infocentres, etc. - should not represent the main focal point of governments for building the IS, since it can be implemented by other social actors, although they should indeed be accountable for universal access.

According to the Global Knowledge Partnership (GKP),<sup>5</sup> the major role of governments concerning public-private partnerships in developing countries is to create enabling economic and legal frameworks, including protection for innovations. The government also plays a significant role in building and training human capacities, and it is responsible for building the infrastructure and making it affordable. Furthermore, the Association for Progressive Communications (APC) and

---

3 In this item the description of existing experiences in the Common Investment Funds implemented by several LAC countries has been omitted, as it has already been studied in many other works. [www.choike.org/nuevo\\_eng/informes/2804.html](http://www.choike.org/nuevo_eng/informes/2804.html)

4 [www.itu.int/wsis/docs2/pc2/subcommittee/IT4ChangeDAWN.html](http://www.itu.int/wsis/docs2/pc2/subcommittee/IT4ChangeDAWN.html)

5 Global Knowledge Partnership (2005), "Advancing ICT Solutions for Development through Cross-Sector Partnerships with a Special Focus on the Middle East and North Africa", Forum Report, Cairo, May 2005

other organizations<sup>6</sup> state that IS financing should be based on the principle that information and communication are public goods. This is particularly important for the extension of network infrastructure in developing countries and for marginalized populations in any country. Although private sector investments represent extremely significant opportunities for ICTs for development (ICTD), which must be encouraged, these investments cannot replace (or displace) the central role of public financing in a fundamental sector such as telecommunication infrastructure networks. Otherwise, these networks would never be found in regions and social groups that were not to be profitable to private capitals. According to these organizations, the major role of ICTD policies should be to grant universal and affordable access to ICTs by the year 2015, as part of the support to the poverty reduction strategies proposed in the WSIS Plan of Action and the Millennium Declaration.<sup>7</sup>

In LAC, all countries have financial resources obtained from national budgets, agreements made with private telecommunication companies by means of which the latter grant a percentage of billing for these purposes, and external financing, which they manage through a centralized or decentralized coordination. Another alternative is the articulation of public funds with civil society entities, such as the Argentine telecommunications community cooperatives, for the purpose of providing telecommunication infrastructure networks and services to those areas that are not profitable to the private sector.

### *Common solidarity funds*

Another version of financing mechanisms is the North-South and South-South solidarity. Digital Solidarity is an African initiative promoted by Senegal. In parallel to the first phase of the WSIS in Geneva, in December 2003, a committee was set up for the creation of the Digital Solidarity

---

6 APC, Bread for All, CRIS, Instituto del Tercer Mundo, IT for Change and Gender Caucus Statement, PrepCom-2, Geneva, February 2005, [www.choike.org/nuevo\\_eng/informes/2689.html](http://www.choike.org/nuevo_eng/informes/2689.html)

7 [www.un.org/millenniumgoals/](http://www.un.org/millenniumgoals/)

Fund.<sup>8</sup> Its fundamental goal is to transform the digital divide into “digital opportunities for the promotion of peace, sustainable development, democracy, transparency and good governance”. The Fund is based on traditional North-South cooperation, even though it is supplemented through cooperation among the emergent South (India, Brazil, China, among others) and less developed Southern countries (from Africa, Asia, LAC). The initiative is funded by means of voluntary contributions granted by citizens, and finance obtained from local (cities and regions) and national public institutions, as well as from the private sector and civil society.

The Fund is, undoubtedly, an innovative initiative owing to the inclusive commitment of Northern and Southern counterparts and to the promotion of international digital solidarity. However, there are certain aspects which deserve more careful attention:

- The notion of “digital solidarity” can be interpreted with an “assistencialist” approach from rich countries to poor countries, instead of the cooperation between countries with a potential for development.
- It is a delicate situation that the financing of technological goods and services in Southern countries partially depends on donations from Northern countries: the promotion of technology-based industries cannot be based on these principles.
- Without clear explicit policies concerning the investment of donations, it is to be feared that these are invested only in those Southern countries which are more willing to accept the transfer and consumption of technology-based goods and services.
- Without a clear policy on the application of funds agreed upon by stakeholders, these will be mainly used in the one-way transfer of technological goods and services from developed countries to developing countries. Although the goals refer to the promotion of

---

8 [www.dsf-fsn.org/](http://www.dsf-fsn.org/), consulted in July 2005.

articulating projects with an impact on socioeconomic activities and the insolvent demand for the creation of new activities, they do not mention the development of local production of technological goods and services or the spotting of “market niches” for new technology-based products. The emphasis on local production is restricted to the production of local contents, applications and services for administrations and communities, although it is intended to encourage training of human resources and the prevention of intellectual migration.

In other words, the certainly well-meant and innovative digital solidarity, such as it is currently enunciated, poses the risk of increasing the role of developed countries as technology producers and of relegating developing countries to the role of consumers.

#### *Financing of research projects / collective action*

Another frequent course of action is the financing of research and cooperative actions among Southern and Northern countries. A current example is @LIS, Alliance for the Information Society, a cooperation programme created by the European Commission on 6 December 2001 aimed at reinforcing partnership between the European Union (EU) and Latin America in the field of the information society. Its declared aim is to “extend the benefits of the Information Society to all citizens in Latin America and to reduce the digital divide between those who have access to the new information technologies and those who are excluded from the information society.”<sup>9</sup> It has a total budget of EUR 85 million, of which 75% are granted by the EU and the rest comes from contributions made by the programme’s partners. It aims to address the needs of local communities, to foster dialogue in terms of policies and regulations and to increase interconnection capacity between research groups in both regions.

The objectives of @LIS are the following: to encourage cooperation between European and Latin American partners by setting up working groups with members of both regions; to facilitate the integration of

---

9 [europa.eu.int/comm/europeaid/projects/alisis/index\\_en.htm](http://europa.eu.int/comm/europeaid/projects/alisis/index_en.htm)

LAC countries in a global IS; to promote the dialogue among all actors and users of IS; to improve interconnection between research groups of both regions; to address the needs of citizens and local communities; and to implement innovative, easy to reproduce applications, such as computer programmes, installation of materials, network implementation, etc.

@LIS has succeeded in the promotion of innovative initiatives regarding information exchange on ICT use. However, it shares with the Digital Solidarity Fund the aim to foster the transfer of technological goods and services from developed countries into developing ones. Although one of the project's goals is to foster the integration of LAC countries in a global IS, it does neither finance nor encourage the local production of technological goods and services or the export of Latin American goods and products to EU countries. On the contrary, it lays emphasis on the implementation of innovative, easy to reproduce applications, preferably in EU countries. In other words, this project developed within a more traditional framework than the Digital Solidarity Fund, runs the risk of being more in the service of technology transfer from developed into developing countries than in favour of encouraging productive innovation in LAC countries, thus increasing the already existing technological dependence.

## Financing technological production

Financing projects for technological innovations as part of national development come mostly from “science and technology” (S&T) institutions and vary according to the political and economic priorities of each country. S&T systems are of utmost importance in building the IS given the fact that, either alone or in coordination with other sectors (companies, military, governments, etc.), they represent most part of technological innovations which are characteristic of this stage of social evolution. These mechanisms are important since they set policies and strategies about scientific development and technological innovation, to be later applied to productivity areas, e-commerce, connectivity, all levels of education, ICT infrastructure and other sectors.

In spite of not being sufficient to finance technological production and innovation, thus allowing competitiveness at a global level, and lacking economic resources, national financing mechanisms for science and technology seem to be better focused, at least in terms of their goals, on projects which link the production - and not only consumption - of technologies to national development and, in some cases, to macro-regional development.

## Innovative policies and strategies proposed for Southern countries

### *The State's pioneering role in the IS*

In order to benefit from the opportunities provided by the IS, citizens must be prepared for the current economic, social, cultural and technological advances. Citizens' e-readiness describes the degree in which a country's society is qualified to participate as proactive agents in the different sectors and levels of the KE, and the ability to accept the challenges posed by the new economic and technological environment. To this effect, the following elements, among others, are needed:

- Access to ICTs infrastructures: hardware, software, connectivity; fast, free or low-cost access to Internet.
- ICT training (not only technological literacy, but also education in business management and organizations using ICTs); life-long education and training in courses, professions and skills related to the KE.
- Information and creativity to identify the opportunities offered by the KE.
- Information and social organization to demand from governments the ICTs infrastructures, innovative education systems, legislation and public information, which are necessary to make good use of opportunities offered by the KE.

- ICTs effective use: the capacity and opportunity to successfully integrate ICTs into the accomplishment of self or collaboratively identified goals.<sup>10</sup>

State and non-state provision of telecommunication infrastructure and connectivity services contributes to the e-readiness of people. Cybercafes, which are mostly the result of private micro-undertakings, at present represent the access door to cyberspace for a large number of Latin American people. In Argentina, the Telecommunications Community Cooperatives (TCC) - civil society organizations managed as enterprises - not only provide services to 10% of the total population living in areas that are not profitable for private companies, but are also becoming empowering agents within their communities. Community telecentres add to this a wide variety of services to their communities. According to Steven Johnson,<sup>11</sup> it is within societies themselves the capacity to become self-organized in non-hierarchical emerging systems, finding the best solutions to their problems and needs. Microenterprises which have accessed communication through the work carried out by cooperatives and connectivity by means of the setting-up of cybercafes would be an example of decentralized social self-organization, aimed at fulfilling a social need that is insufficiently - or unsatisfactorily - met by the State.

Is the success of community telecentres, TCC and cybercafes in LAC - which fulfills the access needs of part of the population - indicating that the promotion of connectivity and e-readiness must be entirely left in the hands of private investors or the organized civil society? No, and certainly not without regulations. However, these private initiatives have taken the place left - or inefficiently fulfilled - by the lack or deficiencies of State policies aimed at connectivity and at reducing the renowned “digital divide”.

---

10 Gurstein, Michael, *Community Innovation and Community Informatics Building National Innovation Capability from the Bottom Up*, December 2003.

11 Johnson, Steven, *Sistemas emergentes. O qué tienen en común hormigas, neuronas, ciudades y software*, Turner Publicaciones, Fondo de Cultura Económica, Madrid, 2001. According to Johnson, emergence is when simple elements spontaneously self-organize without explicit rules to come up with an intelligent behaviour.

What is the role of the State in the access and integration of the IS, apart from the already mentioned provision of telecommunication infrastructure networks? Although it is not always necessary for the State to provide social equipment for connectivity, such as telecentres, it is essential to regulate and optimize the operation of private places for public use, such as cybercafes. To regulate implies to set regulations in terms of equipment, comfort of users, times of use, and to facilitate the setting-up of cybercafes in low-populated areas through tax allowances or others, etc. To optimize implies, in this case, to enhance the roles of cybercafes, including training courses in ICT use, their use for social purposes, etc. In this way, the State is relieved from the need to implement expensive infrastructure, and at the same time, ensures access to Internet and to related services to all people.

On the other hand, once the population is acquainted with the daily use of cybercafes for all kinds of communication purposes, and knows and uses community telecentres and TCC on a regular basis, they will be more willing to progress towards other uses of these technologies, beyond mere access and consumption, thus contributing to the empowerment and human, economic and social development of communities.

As posed by Gómez, Martínez and Reilly,<sup>12</sup> “The ‘digital divide’, which usually refers to inequities in the access to new ICTs, particularly Internet, is not the cause but the expression of the existing social, economic and political gaps, at global, national and local levels. Focusing only on the digital divide will not help communities to improve their living conditions, overcome poverty or have a more equitable access to goods and services”. In LAC countries it is necessary to build a new economy - the economy of the IS - and adapt it to the needs, advantages, challenges, obstacles and potentialities of the region.

In a previous paper<sup>13</sup> we stated that “the role of the State is to anticipate the needs and interests of the different social actors and be prepared for their legislation and control, as well to establish operative

---

12. Gómez, Ricardo et al, “*Internet... ¿para qué?: Pensando las TIC para el desarrollo en América Latina y Caribe*”, IDRC & Fundación Acceso, 2001.

articulations among them”. For this reason, the activity of LAC governments should be aimed at turning countries into pioneers in terms of technological, social and economic management. In order to achieve this, it is necessary to focus on technological and scientific production, specialized training, knowledge management and the use of existing brains, avoiding “brain drain” and promoting “brain gain”, through coordination with S&T centres abroad. And above all, it lies on the ability to predict the trends towards technology needs and consumption of the population as well as the private sector offer for the purpose of acting promptly, not in response to these trends, but anticipating them in what refers to legal framework, regulations, strategies and actions. In short, it is necessary and urgent for governments of the region to implement integral policies in the sectors of telecommunications, informatics and ICTs in general, aimed at coordinating the technological, economic and scientific development strategies with initiatives for social, cultural and communication development.

### *The new role of civil society*

Civil society organizations (CSOs) play a key role in building the IS. In order to encourage an appropriate use of ICTs aimed at achieving poverty reduction and foster sustainable development, CSOs should consider the following goals: to raise awareness with regards to the importance of the KE in terms of development, and to spread this knowledge among citizens and CSOs; to understand that the KE implies new opportunities for citizens and CSOs; and above all, for a sustainable development, to participate in the making of national, macro-regional and global policies, to build technological capacities in developing countries; to intervene for the purpose of reducing the negative impacts the KE may have on fragile economies and vulnerable social groups; to work in favour of increasing e-readiness among citizens; to impose a new vision: to go beyond the common issues of connectivity, access and

---

13 Finquelievich, Susana and Daniel Finquelievich, “Puertas alternativas a la Sociedad de la Información: Accesos no gubernamentales para las poblaciones de bajos recursos o remotas”, in: *Revista Ríadel, Ángulos emergentes en Internet*, 2005, [www.riadel.cl/revista.asp](http://www.riadel.cl/revista.asp)

open or “free” source software, and to start focusing on having, at least partially, control over Internet infrastructures, considering that in order to develop and redistribute the wealth of the KE it is necessary to have control over them.

Civil society needs to establish constructive alliances among the different social actors, in order to fulfil these development goals, encourage entrepreneurial capacities and people’s initiatives, thus helping them to seek information on business management and microenterprises and get soft loans to finance technology-based initiatives. It is also necessary to develop actions aimed at ensuring that economic growth benefits are redistributed rationally among the population.

Finally, it is essential to relaunch and hold a long-term debate on the interactions between CSOs and the KE, in particular with regards to the process following the Summit, which will lead to the fulfilment of stipulated objectives and goals.

## What should be done?

The mandate of the United Nations promoting the WSIS<sup>14</sup> encourages governments to implement multistakeholder consultation mechanisms (governments, private sector and civil society)<sup>15</sup> in each country to define the corresponding national strategies towards the IS. As it was stated by civil society representatives at the Regional Conference held in Rio de Janeiro,<sup>16</sup> it is a process that has opened the possibility to innovate and experience with multistakeholder participation schemes. Multistakeholder cooperation and South-South exchange are essential to achieve fully integrated development towards the IS, on an equitable and well-balanced basis. For the building of this society to be really profitable for all stakeholders, the following measures are suggested:

---

14 [www.itu.int/wsis/](http://www.itu.int/wsis/)

15 [www.itu.int/wsis/basic/multistakeholders.html](http://www.itu.int/wsis/basic/multistakeholders.html)

16 [www.redistic.org/docs/ENSI-RIO20051.pdf](http://www.redistic.org/docs/ENSI-RIO20051.pdf)

### *Governments' actions*

States must be the promoters and main users of ICTs, through e-government, education, S&T, public health, and social and economic plans. However, they should not act on their own but coordinate efforts with civil society, private enterprises and the academic sector. In this context, they should:

- Achieve multisectorial agreements between Southern countries and blocs of countries.
- Focus state priorities on laying down and maintaining telecommunication infrastructures to ensure universal access to information and communication to the entire population, even in low-populated and non-profitable areas. To this effect, it is worth taking into account the outcomes of the WSIS process.<sup>17</sup>
- Achieve multisectorial agreements and negotiations with telecommunication companies aimed at laying down and maintaining all kinds of infrastructure, to ensure universal access to information and communications.
- Provide information regarding agreements to be dealt with by governments to civil society, economic sectors involved (entrepreneurs, chambers, etc.) and S&T sectors that are related to the IS activities.
- Encourage the active participation of the above-mentioned sectors in discussions prior to the proposal of agreements, their implementation, regulation and control. This includes the exhaustive legal study of the agreements, including those aspects concerned with international legislation matters, economy and foreign trade, taxes, civil matters, labour laws and copyright, as well as strengthening the discipline and transparency in the implementation of agreements and their fulfilment.

---

17 See, for instance, WSIS-03/GENEVA/DOC/5-S: "Infrastructure is central in achieving the goal of digital inclusion, enabling universal, sustainable, ubiquitous, and affordable access to ICTs by all, taking into account relevant solutions already in place in developing countries and in countries with transition economies to provide connectivity and access to remote and marginalized areas both at regional and national levels."

- Negotiate the role of private companies in building, laying down and expanding infrastructures for the IS, through the creation of Mutual Funds aimed at the social use of ICTs, whose financing will come from a percentage of the revenues obtained by privatized companies.
- Negotiate with Telecommunication Chambers cost reduction - including flat rates - to encourage connectivity among the population.
- Maintain state regulation on the telecommunication market and open it to a larger number of investors and actors, thus avoiding private monopolies.
- Promote campaigns for the ongoing training in ICTs aimed at civil officers, SMEs, micro enterprises and community organizations.
- Create and manage public centres for Internet access, particularly in low-income or low-populated areas.
- Implement agreements with community organizations for the management and use of spaces for public Internet access.
- Implement agreements between national and/or local governments and telecommunication companies to obtain preferential costs in order to promote Internet use.
- Implement agreements between national and/or local governments and cybercafes or private access centres to purchase “connectivity hours” for students and low income population.

With regards to S&T activities related to the Information Economy:

- Carry out prospective studies related to the KE, including the evolution of the international situation, and the different possible scenarios for the diverse articulations between countries and blocs of nations
- Increase the national budget for S&T, particularly those areas related to the IS; to develop labour integration strategies for scientists, in order to discourage their emigration or brain drain.
- Spot and define “research and development” (R&D) priority areas for S&T related to the IS.

- Encourage productive partnerships among universities, R&D centres and institutions, enterprises and regional and/or local governments.

### *Civil society actions*

- Participate in negotiations between national governments and telecommunication enterprises for the purpose of monitoring the regulation of telephone services, wireless communication and access costs for citizens, as well as the equitable distribution of infrastructure within countries, and to promote multistakeholder synergies, essential for the implementation of actions aimed at the socioeconomic development through ICTs.
- Participate in initiatives and negotiations regarding financing mechanisms aimed at building the IS for development in the different countries and regions.
- Participate together with other social actors in designing and implementing policies and strategies aimed at ensuring that technological innovations are used as tools in favour of sustainable development and poverty reduction.
- Participate in the generation of new educational means or in the transformation of the existing ones to provide citizens the training needed to act proactively in the KE; negotiate and participate in the design and/or renovation of higher education, in policies and strategies to encourage the production of contents and strengthen the relationship between the education system and the S&T sector, among others.
- Propose and create affordable and easy-to-use technologies for ordinary citizens. These technologies could ideally be linked to technological literacy projects and/or self-employment programmes. If they turned out to be successful, they could be exported to other nations.
- Develop multidisciplinary research on the social and economic effects of technological exchange and cooperation among macro-regions (e.g.: Latin America, India, China, South Africa), focusing on the implementation of ICTs for development, full integration into the IS and poverty reduction.

- Identify partners in countries of developing macro-regions in order to build networks, aimed at developing cooperation networks.
- Seek and negotiate financing and technological assistance to contribute to the production of local contents.
- Claim access to ICT services through equitable and widespread development of national information infrastructures, integrated to international information and communication structures, aimed at ensuring universal and affordable access to all people.
- Identify and disseminate new ICT applications to solve the most important problems related to development: education, health care, urban and rural development, job creation, preservation of natural resources, etc.
- Encourage increased motivation for economic development through the inclusion of information media at all levels of public administration
- Demand improved access to public sector information.
- Encourage the increased participation of women in activities related to the KE. To promote before governments the equitable participation of women in decision-making activities related to access and use of IS infrastructure and equipment
- Promote the capacity to generate economic initiatives among the population, helping individuals and groups to find information about management of micro-enterprises and soft-loans to finance technology-based undertakings.
- Develop actions aimed at ensuring the re-distribution of economic growth benefits among people.
- Hold a long-term debate on the interactions between CSOs and the KE, as part of the WSIS process and its follow-up.

#### *For social actors*

Finally, it is necessary to consider the proposals of the WSIS Plan of Action with regards to the need for follow-up and evaluation of the measures taken and to be implemented. In particular: “a realistic international

performance evaluation and benchmarking (both qualitative and quantitative) through comparable statistical indicators and research results, should be developed to follow-up the implementation of goals and targets of the current Plan of Action, taking into account different national circumstances.”<sup>18</sup>

Such proposals can be summarized as:

- The definition and adoption of a composite ICT development index (Digital Opportunity Index), to be published annually or every two years.
- Implementation of indicators and benchmarking, showing the magnitude of the digital divide and keeping it under regular assessment in order to track global progress in the use of ICTs to achieve internationally agreed development goals, including those of the Millennium Declaration.
- International and regional organizations should assess and report regularly on universal accessibility of nations to ICTs.
- Gender-specific indicators on ICT use and needs should be developed, and measurable performance indicators should be identified.
- Develop and launch a web site on best practices and satisfactory-result projects, based on the compilation of contribution from all stakeholders.
- All countries and regions should develop tools aimed at providing statistical information on the IS, with basic indicators and analysis of its key dimensions.

The above represent an ideal area for multistakeholder cooperation as the development of indicators and task evaluations are extremely complex activities, which call for the coexistence of multiple perspectives, covering a wide and heterogeneous range of activities with diverse

---

18 WSIS Plan of Action, Geneva, December 2003, [www.itu.int/wsis/docs/geneva/official/poa.html](http://www.itu.int/wsis/docs/geneva/official/poa.html)

results and demands, including multiple actors and international, regional and national institutions, as well as public, private and mixed enterprises. Clearly, none of these tasks ends at the threshold of the WSIS: this is the ideal triggering point to make progress in building an equitable, well-balanced, multistakeholder and essentially productive Information Society. ■

# Community Ownership of ICTs: New Possibilities for Poor Communities

SEÁN Ó SIOCHRÚ

FOUNDER DIRECTOR AND SENIOR RESEARCHER  
NEXUS RESEARCH  
[WWW.IOL.IE/NEXUS](http://WWW.IOL.IE/NEXUS)

*It is now widely acknowledged that a liberalised market fully in compliance with their own rigid prescriptions can fail in certain circumstances, one of which is delivering network access to low-income rural areas. Despite significant growth in infrastructure and access to telephony, and to a lesser extent the Internet, poor communities in the South remain well beyond reach. This is one of the main sub-themes of the WSIS, integrally linked to intense debates about financing mechanisms and the Digital Solidarity Agenda. This paper examines a solution that combines a century old institutional form with the latest technological innovations. A combination of community-owned ICT enterprises and the new wave of wireless and related technologies together may offer significant potential to extend networks and offer new services to poor communities in rural areas.*

من المعترف به حالياً على نطاق واسع أن سوق محرر على أساس الإلتزام الكامل بقواعده الجامدة يمكن أن يفشل في بعض الحالات، ومن نذك الفشل في توفير النفاذ على الشبكات في المناطق الريفية الفقيرة. بالرغم مما تحقق من نمو في البنية التحتية والنفاذ على التليفونات، وبدرجة أقل على الإنترنت، فإن المجتمعات الفقيرة في الجنوب ما زالت بعيدة المنال. وهذا أحد الموضوعات الفرعية الرئيسية للقممة العالمية لمجتمع المعلومات، والمرتبطة بشكل جذري بالحوار المكثف حول آليات التمويل وبرنامج التضامن الرقمي. هذه الوثيقة تدرس وضع حل يمزج بين النموذج المؤسسي الممتد لنحو قرن من الزمن وبين آخر الابتكارات التكنولوجية. مزيج بين شركات تكنولوجيا معلومات وإتصالات مملوكة مجتمعياً والموجة الجديدة من التكنولوجيا اللاسلكية وغيرها، معاً يمكنهما توفير إمكانيات كبيرة للتوسع في الشبكات وتقييم خدمات جديدة للمجتمعات الفقيرة في المناطق الريفية.

El mercado liberalizado no ha logrado satisfacer las necesidades de acceso a las tecnologías de la información y comunicación en áreas pobres. A pesar del crecimiento significativo en infraestructura y acceso a la telefonía y a Internet, las comunidades pobres del Sur se mantienen fuera de alcance. Este fue uno de los temas principales de la CMSI, asociado con intensos debates sobre los mecanismos de financiamiento adecuados para poner fin a esa dualidad. Este documento analiza una solución que combina una forma institucional centenaria con las últimas innovaciones tecnológicas. El autor afirma que las empresas comunitarias y las últimas tecnologías inalámbricas podrían ofrecer un potencial considerable para extender redes y brindar nuevos servicios a comunidades pobres en áreas rurales.

*Les mécanismes du marché libre n'ont pas permis de combler les besoins d'accès aux technologies de l'information et de la communication dans les zones démunies. Malgré la croissance significative de la téléphonie (infrastructure et accès) et de l'Internet, les communautés pauvres du Sud sont encore non desservies. Il s'agit de l'un des sujets principaux du SMSI, lié aux débats sur les mécanismes de financement susceptibles d'en finir avec cette situation. Ce texte analyse une solution qui combine une forme institutionnelle centenaire avec les dernières innovations technologiques. L'auteur affirme que les entreprises communautaires comptant sur les nouvelles technologies sans fil peuvent offrir un potentiel considérable pour étendre les réseaux et fournir de nouveaux services aux communautés démunies dans les zones rurales.*

## The challenge of rural access

It is now widely acknowledged even by the World Bank<sup>1</sup> that a liberalised market fully in compliance with their own rigid prescriptions can fail in certain circumstances, one of which is in delivering network access to low-income rural areas. Despite significant growth in infrastructure and access to telephony, and to a lesser extent the Internet, poor communities in the South - a majority of the people in sub-Saharan Africa - remain well beyond reach. This is one of the main sub-themes of the WSIS, one linked integrally to intense debates about financing mechanisms and the Digital Solidarity Agenda.

There is general agreement on the main obstacle: dispersed populations and low levels of income translate into higher costs and reduced per-customer returns, rendering conventional approaches economically unattractive, whether for market-driven or incumbent providers. Pooling users in the form of telecentres and cybercafés can enhance usage levels, but extending the reach of the network remains the key challenge.

This paper examines a different solution, one that combines a centuries old institutional form with the latest technological innovations. A combination of community-owned ICT enterprises and the new wave of wireless and related technologies together may offer significant potential to extend networks and offer new services to poor communities in rural areas. This approach can greatly reduce costs and maximise the value-added of community resources, enabling the emergence of a new business model that is both more economically sustainable and more empowering than anything else available. Furthermore, recent regulatory trends and ideas suggest that a major obstacle to such innovation - regulatory paralysis - may be easing.

---

1 World Bank (2005), *Connecting Sub-Saharan Africa: A World Bank Group Strategy for ICT Sector Development*, Global Information and Communication Technologies Department.

Applying the same principles of community participation and control can also significantly enhance the viability and development impact of ‘hybrid’ public/private/community networks and service solutions.

## Why community-owned enterprises?

Certain advantages of a community-ownership model have long been demonstrated in infrastructure projects, in both developed and developing countries. From irrigation systems and water supply to local electricity plants and bridge construction, community ownership, democratic control and participation means that local needs are addressed more effectively and at lower cost. In more recent decades the benefits of community-ownership and participation, in terms of empowerment, have also been recognised and exploited to good effect.

A community-driven approach has a number of advantages:

- Community resources, such as manpower and public commons, are mobilised to support the development and reduce costs.
- High returns on investment usually demanded by private investor are avoided, and profits reinvested to reduce costs and improve service.
- As a non-profit development-focused initiative, new forms of financing may in principle become available, and even relatively poor communities can provide some initial investment on the promise of services that will address their development needs.
- Ownership means that communities highly value the service, and have a stake in its maintenance and sustainability.
- Services provided arise directly from, and are tailored to, user needs and affordability. ‘Cherry picking’ - offering only the most profitable services to maximise profits - is avoided.
- A successful community-enterprise can have a significant empowerment impact and a catalytic effect on community development.

Few realise that there already exists a rich and ongoing history in rural telephony cooperatives, now moving into ISPs, broadband and wireless access, in the US (where over several hundred cooperatives exist and benefit from public grants), more recently in Poland and in Argentina.<sup>2</sup> Local authorities have also taken up a similar role. These have a successful track record in terms of price and service quality and, most important, have been shown to contribute and often stimulate other development activities locally.

In poorer countries, local community control and participation is widely recognised as being critical to the success of ICT projects such as telecentres and application development.<sup>3</sup> And rapidly expanding programmes for local access in India in recent years combine both network provision and community-controlled applications development and supply provision. The Akshaya initiative, in Kerala state, now extends to over 60 information kiosks, and is an interesting amalgam of public, private and community collaboration largely under local community control.

But are these merely niche areas or historical accidents?

## The role of technologies

In fact, variations of the community-owned model appear to have widespread relevance and applicability, but it has been to some extent hindered by the absence of champions among the main drivers of ICTs nationally and internationally. Recently, however, technological innovations considerably reinforce its potential to help solve the rural access issue. New and emerging technologies, especially wireless, are particularly suited to the deployment of community-owned network infrastructures because of their low level of initial investment and scalability, their relatively

- 
- 2 See the case studies in Seán Ó Siochrú and Bruce Girard “Innovative Technologies and Community Ownership: A New Model of ICT Access for the Rural Poor”, produced for UNDP by Seán Ó Siochrú and Bruce Girard (2005); and for the US see [www.ntca.org](http://www.ntca.org)
  - 3 See Ballantyne, Peter (2003), *Ownership and Partnership: Keys to Sustaining ICT-enabled Development Activities*, IICD, Netherlands, [www.iicd.org/iicd/articles/IICDnews.import2286](http://www.iicd.org/iicd/articles/IICDnews.import2286)

simple technical deployment, their low-cost and open standards, and their adaptability to voice and data requirements. Open sources software is now developed for full-scale networks management and wireless implementation.

Wireless technologies of different types are beginning to demonstrate their value in those regulatory pockets that allows them (and in some that do not). Not only pilot projects, but a few full scale roll-out programmes are deploying low-cost radio to reach low-income rural communities, where beneficial applications are being developed from the ground up.

## Regulatory openings

Of course, regulatory obstacles have long been the major barrier to progress in many areas of ICT development. Reluctance to innovate in regulation is sometimes attributable to genuine concern to ensure that the most broadly beneficial policy is applied; but may also be motivated by the defence sets of vested interests. Recently the limitations of 'one-size-fits-all' liberalisation, and the failure of 'one-operator-does-all' vested interests, is leading debate beyond binary oppositions and into new and less dogmatic territory.

It is now recognised that the reality of ICT environments and needs vary hugely. Underpinned by a 'global public good' rationale for certain ICT network components,<sup>4</sup> principles such as technology neutrality, transparency and open access to backbone infrastructure are beginning to be raised in the context of the WSIS, among donors and lenders, and in a number of developing countries. A layered approach to network development, each with potentially a different set of regulatory and ownership possibilities, is emerging.<sup>5</sup> Alongside private or

---

4 Accuosto, Pablo and Niki Johnson (2004), "Financing the Information Society in the South - A Global Public Goods Perspective", prepared for APC by the Instituto del Tercer Mundo (Uruguay), <http://rights.apc.org/documents/financing.pdf>

5 See for instance InfoDev (2005), "Open Access Models: Options for Improving Backbone Access in Developing Countries (with a Focus on Sub-Saharan Africa)", an infoDev Technical Report by Spintrack AB, August, [www.infodev.org/content/highlights/detail/2568](http://www.infodev.org/content/highlights/detail/2568)

public ownership, partnerships, local authorities, small and medium enterprises and indeed communities are seen as having a role to play.<sup>6</sup>

It is early days yet, and the trend towards regulatory innovation has a long way to go. But there is little doubt that paradigms in ICTs are becoming more varied and complex, each recognised as suited to certain possibilities.

## A local level dynamic

These technology innovations, and at least glimmerings of regulatory openings, could open the door to a powerful local level dynamic that could go in a couple of directions.

One is towards the private sector taking the entrepreneurial role, perhaps backed by external capital or as subsidiaries. The second is towards the community-owned model. Both models will probably find their place. Each is oriented towards different circumstances, but there is also a significant area of overlap where variations of either model, and hybrids, are possible.

The private investment approach is likely to be welcomed by business sectors, and can readily take advantage of conventional supports for private investment including from international lenders and donors. Where it reinforces local economic activity and ownership, by for instance encouraging local small and medium enterprises to become involved, it is to be applauded, and deserves support for the benefits it may offer beyond mere service provision.

But empirical evidence strongly suggests that the community-owned model offers potentially much greater benefits especially in a development context. The community-owned model and hybrids based on the same principles have the potential to viably extend networks further out into poor rural communities, to provide more affordable services,

---

6 All the above feature in the Task Force on Financing Mechanisms' report (2004), *Financing ICTD for Development: A Review of trends and an analysis of gaps and Priming Practices*, December, [www.itu.int/wsis/tffm/final-report.doc](http://www.itu.int/wsis/tffm/final-report.doc)

and to ensure that these services have a greater development impact through linking directly with the needs of these communities. They also have the potential to act as a community catalyst and as a support for a range of other development activities.

Yet for all that, this approach may attract few champions among major international and national players, given their general orientation and dominant national and corporate interests. For this reason, the community-owned model deserves, and requires, special attention from the international and national development community and from those governments that are interested in the impact of ICT on development.

## ¿What should be done?

There is general agreement that no single model of local ICT network and service development is suitable everywhere, and efforts at transplantation have had mixed results. Three identified variations of a community driven approach are the user/community-owned cooperative, the local government owned network, and the hybrid entrepreneurial/community-driven model. Each might suit different circumstances.

However, they all share two pressing needs: access to finance and an enabling environment at national and local level. While a community-owned approach enhances the viability and sustainability of ICT access and use, the reality of poor communities is that such networks will still require some form of preferential treatment and dedicated support. The goal, with the support of such investment, is to ensure long-term sustainability from the community itself.

### *Investment and financing*

While everyone agree that more finance is needed to realise the Digital Solidarity Agenda, the debate continues at the WSIS on whether a new financing mechanism is needed, raising funds from new sources, or whether existing mechanisms are sufficient.

A compelling case can be made that the idea of community-owned networks would fall within the terms of any new financing mechanism, and that it should qualify for funding focused on development needs and pro-poor actions in the context of the Millennium Declaration.

Community-owned networks target areas that have virtually no hope of gaining ICT access from private sector or public funding, in current circumstances. Yet the potential benefits to poor communities in terms of reinforcing wider development efforts are at this point well documented.

Furthermore, the non-profit status and ethos of community-owned networks, one of capacity building and empowerment, fits well within the accepted principles of development. Though the provision of affordable service is the immediate goal of the community-owned enterprise, it is also part of a bigger picture of development.

Aside from the possibility of a new mechanism emerging, some existing international financing instruments currently focused on private-sector infrastructure investment in poor communities could also be relatively easily adapted to community-ownership. For instance, a number of donors have collaborated to form a Private Infrastructure Development Group, aiming to mobilise private sector investment in infrastructure and basic services in poor areas. It operates several programmes focusing on assisting private investment in infrastructure in Africa and Asia, including pre-feasibility and pilot projects.<sup>7</sup>

Any significant level of take up of community-owned networks, however, might require a national institutional level of support. And whether national or international, a number financing modalities would be useful.

First, a once-off subvention to cover part of initial construction costs - a logical source, if it exists, is a Universal Access Fund. Second, a facility for low-cost long-term loans, preferably including loan guarantees.

---

7 DFID (2004), *Public Private Partnerships in Infrastructure: A Brief Overview of DFID Programmes of Support*, October, [www.dfid.gov.uk/pubs/files/makingconnections.pdf](http://www.dfid.gov.uk/pubs/files/makingconnections.pdf)

Third, assistance in devising workable schemes to raise investment funds locally, from users, local development organisations, local government, or others. Legal and institutional issues may come into play here.

### *An enabling environment*

Apart from financing, the promotion of community-ownership (like the promotion of competition or any other approach) requires an enabling environment that will eliminate unnecessary obstacles and offer incentives for growth.

A key decision might be to set up a National Promotion Unit for Community-Owned ICTs. This would advise, conceive, design and implement a coherent set of policies and actions focusing on the ICT needs of activities poor rural communities.

A National Policy would: identify areas where current approaches are failing and where special attention is needed; establish a suitable legal structure flexible enough to support different partnership and ownership structures; and spearhead policies for tax exemption for non-profit status, and a means to ensure that surpluses are reinvested.

A regulatory climate favourable towards local and community network deployment would be applied in the areas identified. In such a climate:

- Licenses should be technology-neutral, so that services may use the most suitable;
- Flexibility should be allowed in license award and conditions;
- License-exempt spectrum for wireless use should be free of costs and administrative burdens;
- Interconnection pricing should be favourably set, including 'asymmetric' pricing;
- An 'open access' policy for connections to the national backbone could be promoted.

Starting and running community-owned network also requires training and capacity building. Business, organisational and technical skills are likely to be in short supply at local level. This could be addressed through direct technical support, through training and capacity building, through international exchanges internationally, through building support networks and exchanges of experience.

Such a menu of supports may seem like a lot. Yet the effort could rapidly yield development returns in some of the most marginalised communities. Furthermore since the incumbent operators and market forces currently show little interest in these areas, innovation will encounter less of the ‘inertia’ that obstructs progress elsewhere and rapid progress may be possible. ■

# Political Economy of the Information Society: A Southern View

ANITA GURUMURTHY  
PARMINDER JEET SINGH

DIRECTORS  
IT FOR CHANGE  
[WWW.ITFORCHANGE.NET](http://WWW.ITFORCHANGE.NET)

*This paper argues that the real issues involved in a systemic approach to ICT for development (ICTD) lie in the realm of political economy. Current ICTD practice in the local contexts in Southern countries has not delivered much more than piecemeal results. ICTD has taken a typical applications-based, quick-fix approach, without a blueprint for systemic change. It is necessary to see the emerging information society in a political economy framework, from the point of view of development. The starting point for this exercise is to create a new theory of ICT for development, or an “information society for the South”, that gives the historical, social and political issues sufficient space alongside the economy. It is important that powerful South-South alliances are built with participation from across sub-national and local governments as well as traditional civil society and grassroots organizations for evolving a new paradigm of a development-oriented information society for the South.*

المسائل الحقيقية المرتبطة بالتناول المنهجي لتكنولوجيا المعلومات والاتصالات من أجل التنمية تتركز في عالم الاقتصاد السياسي. التجارب الحالية فيما يخص تكنولوجيا المعلومات والاتصالات من أجل التنمية في الأطر المحلية لم تحقق أكثر من نتائج محدودة. تكنولوجيا المعلومات والاتصالات من أجل التنمية اتخذت المنهج المعتاد القائم على التطبيقات، والحوط السريعة، مع عدم توافر خطة عمل من أجل إحداث تغيير منهجي. من الضروري النظر إلى مجتمع المعلومات الصاعد في إطار الاقتصاد السياسي، من منظور التنمية. نقطة البداية لهذه التجربة هي وضع نظرية جديدة لتكنولوجيا المعلومات والاتصالات من أجل التنمية، أو "مجتمع معلومات للجنوب"، يعطي المساحة التاريخية، الاجتماعية والسياسية الكافية إلى جانب الاقتصادية. من المهم بناء تحالفات جنوب - جنوب قوية، بمشاركة من الحكومات تحت - الوطنية والمحلية إضافة إلى المنظمات التقليدية للمجتمع المدني والقواعد الشعبية، لتطوير نموذج جديد لمجتمع معلومات للجنوب موجهاً نحو التنمية.

Las experiencias actuales de utilización local de tecnologías de información y comunicación para el desarrollo (TICD) en el contexto de los países del Sur han logrado apenas resultados fragmentarios. Las TICD han adoptado una aproximación típica basada en aplicaciones y soluciones rápidas, carentes de planificación para un cambio sistémico. Es necesario considerar la sociedad de la información emergente en un marco de economía política desde la perspectiva de los países en desarrollo. El punto de partida de este ejercicio es el desarrollo de una nueva teoría de TICD, o una "sociedad de la información para el Sur", que de espacio suficiente tanto a los aspectos históricos, sociales y políticos como a los económicos.

*Les expériences actuelles de l'utilisation locale des technologies de l'information et de la communication pour le développement (TICD) n'ont pu montrer que des résultats fragmentaires. Le discours dominant dans les TICD a adopté des approches de type applicatif pour résoudre à la va vite des problèmes sans un projet qui vise le changement systémique. Il est indispensable de concevoir l'émergente société de l'information à partir d'un cadre d'économie politique, depuis la perspective des pays en développement. Le point de départ de cet exercice est de créer une nouvelle théorie des TICD, ou bien une "société de l'information pour le Sud", qui accorde autant d'importance aux aspects historiques, sociaux et politiques qu'aux aspects économiques.*

*“Neo-liberalism is principally a political project of embedding market values and structures not just within economic, but also within social and political life. Its objective is a reshaping of power relations.”*<sup>1</sup>

## Introduction

Throughout the 1990s the neo-liberal project has successfully pushed the traditional development agenda away from global policies and, increasingly, for many countries, from national policies as well. At the turn of the century it achieved a major strategic advantage by grasping the theoretical space of information society (IS) developments in the South, constructing it to its own advantage. In this respect, the neo-liberal agenda was helped enormously by three factors: first, the Southern governments took the new information and communication technologies (ICTs) primarily as an economic opportunity - for exports and job creation; second, the private sector - mainly multinational corporations (MNCs) - was taken as the natural leader not only in providing technology solutions but also in interpreting the new technology paradigms to public policy makers, which gave them enormous clout in public policy making; and third, the traditional development sector,<sup>2</sup> long suspicious of globalization designs inherent in global communication technologies, took a somewhat adversarial - or at least a non-engaging - attitude to the new possibilities opened by ICTs for development.

---

1 Rodan, Garry (2004), *Neoliberalism and Transparency: Political Versus Economic Liberalism*, Working Paper No. 112, September 2004, Murdoch University, [www.arc.murdoch.edu.au/wp/wp112.pdf](http://www.arc.murdoch.edu.au/wp/wp112.pdf)

2 Used here to refer to actors involved in diverse development sectors - health, education, food security and sustainable development. The term is used to distinguish these actors from the new community of 'ICTD' actors.

## The origins of ICTD theory

At the global level, the early techno-centralism of “global information infrastructure” (GII) - a concept put forward by the United States (US) in 1993 - was moderated towards greater social acceptability in the notion of an “information society” - a notion proposed by the European Union (EU) in 1995. The North also sought to occupy the theoretical space with regard to the implications of the emerging IS for the global South. Such a theory began taking shape in OECD and G-8 meetings, and in quick succession the DOT Force<sup>3</sup> initiative and then the DOI<sup>4</sup> report, authored by a private consulting firm, along with a North-based Foundation and the United Nations Development Programme (UNDP), laid the framework of what was to be uncritically accepted as the mainstream “ICT for development” (ICTD) theory. This policy framework valorized the concept of business model in the development arena while providing conceptual categories quite alien to traditional development practice (some of these categories are analyzed later in this paper). It also sat well with the IT and telecom ministries in developing countries, who were also in charge of ICTD. These ministries or departments were preoccupied mainly with promoting the IT industry and hence also quite comfortable with the lingua of the IT and telecom MNCs, with whom they had to transact intensively. Even in developing policies for ICTD, the private sector, mostly dominated by MNCs from the North, remained the principal advisor of these governmental agencies.

Therefore, in the given context of extraneously developed theory, ICTD practice in the local contexts of Southern countries has not delivered much more than piecemeal results. ICTD has taken a typical applications-based, quick-fix approach, without a blueprint for systemic change. As more actors in developing countries have begun to understand the extent and significance of IS changes, and its implications for

---

3 Digital Opportunity Task Force (DOT Force), created by the G8 Heads of State at the Kyushu-Okinawa Summit in July 2000.

4 Digital Opportunity Initiative, [www.opt-init.org/](http://www.opt-init.org/)

re-shaping development, there is a growing dissatisfaction with the neo-liberal ICTD frameworks. While multi-lateral agencies have made some progressive adjustments in their ICTD vision, incorporating some new paradigms that have become too forceful to ignore - open source and open telecom access being two principal examples - an essentially reactive orientation of ICTD to the dominant neo-liberal paradigm has meant that the unprecedented opportunity for development in using the new ICTs continues to be wasted.

The real issues involved in a systemic approach to ICTD lie in the realm of political economy: of ICT infrastructure as crucial social and development infrastructure, which needs to be a public provision; of ensuring rapid diffusion of technology innovation in an equitable manner; and of making needed investments in transformation of institutions and organizations engaged in development activities. These issues may not be amenable to the simple logic of economics by which neo-liberals like to run the world. It is necessary to see the emerging IS in a political economy framework from the point of view of developing countries. And the starting point for this exercise is to develop a new theory of ICTD, or an IS for the South,<sup>5</sup> that gives the historical, the social and the political sufficient space alongside the economic.

A recent report from the UN ICT Task Force identifies a failure of current frameworks, flagging the depoliticized context of ICTD: “However, rather than taking the approach to systematically ‘problematize’ ICT in development policy and programs, there has been a tendency among practitioners to depict ICT almost as a ‘black-box’ solution, and a solution situated within a ‘win-win’ world of common interests between developed and developing countries.”<sup>6</sup>

---

5 The concept for an “IS for the South” captures systemic issues of institutional and societal changes better than ICTD.

6 Gilhooly, Denis, “Innovation and Investment: Information and Communication Technologies and the Millennium Development Goals”, report prepared for the UN ICT Task Force in support of the Science, Technology & Innovation Task Force of the UN Millennium Project, [www.unmillenniumproject.org/documents/Innovation%20and%20Investment%20Master.pdf](http://www.unmillenniumproject.org/documents/Innovation%20and%20Investment%20Master.pdf)

In fact, the closing phase of the World Summit on the Information Society (WSIS) has represented a complete breakdown of the engagement of the South and civil society (CS) with the dominant discourse of the IS, determined largely by the governments and the MNCs of the North. The extreme posturing by the North, especially the US, in the WSIS, with respect to all substantive issues that matter to the South, is tantamount to questioning the very rationale of the WSIS itself. The emerging context is one where development actors from the South need to make a clean break from the existing paradigms of the IS largely determined by the North, and begin a process of articulating a new paradigm of the IS that serves the development interests of the South best. This exercise needs to begin with problematizing the existing concepts of ICTD, and their re-articulation in the WSIS process, through an analysis of their political economy.

## The political economy of WSIS

The WSIS opened with a very political mandate to “build a people-centred, inclusive and development-oriented Information Society”.<sup>7</sup> However any possibility of achieving these egalitarian socio-political objectives has been completely defeated by a strong assertion by Northern governments of neo-liberal ideology that is averse to public policy interventions required to achieve them. This political stance shows strongly in all the three main issues taken up in the Tunis phase of the Summit.

### *Financing ICTD*

Infrastructural and other financing needs for ICTD have been undermined at the WSIS by the refusal on the part of developed countries to commit any additional resources. Any new financial assistance is to be in the form of volunteerism, a neo-liberal formulation often used to plug issues of ethical consideration. The underlying belief is that ICTs

---

7 WSIS Declaration of Principles: *Building the Information Society: a global challenge in the new Millennium*, Geneva, December 2005, [www.itu.int/wsis/docs/geneva/official/dop.html](http://www.itu.int/wsis/docs/geneva/official/dop.html)

and IS are foremost an economic arena, best served if left to market and private sector leadership. The social and development aspects of IS, which obviously are important areas for public policy intervention, and crucial on the South's agenda, have been jettisoned.

### *Internet governance*

On Internet governance, the US government's show of power and unilateralism is quite brazen. The operating principle in the US stance is the neo-liberal formulation of TINA, the Thatcherite acronym for 'there is no alternative'. How US objections stopped the designation of .xxx domain, for instance, while similar objections by other governments were not of any avail, has serious implications for a fair and equitable global governance of the Internet. The issues at the core of the emerging IS urgently need clear and specific global policy responses that cannot be addressed with protracted stand-offs that have characterized global policy engagements in the pre-IS era.

### *WSIS follow-up*

It is quite obvious that an important imperative of a global IS is greater global policy dialogue and stronger global governance mechanisms. However, Northern governments, chiefly the US, have taken a clear stance that there need be no continued policy dialogue or engagement on IS issues beyond WSIS. The message from the North is clear: the IS does not require strong policy intervention and markets can be trusted to deliver an inclusive IS. Unfortunately, most developing countries have not been able to anchor a strong response against this, and have by default submitted to the neo-liberal paradigm of the IS.

## Unpacking ICTD

It is useful to re-visit the main concepts of the dominant paradigm of ICTD and analyze them under a political economy lens. This reconceptualization must then be tied into a viable theory of a development-oriented IS for the South.

### *ICTD policy*

ICTD policy in most developing countries is the domain of IT and telecom departments. These departments focus more on business and technology issues related to ICTs and in many countries carry a strong pro-market bias.<sup>8</sup> As a result, ICTD policies are excessively pro-market, and not sufficiently development oriented. The development departments in these countries do not have a good ICTD orientation, and even if they do have it, they are handicapped by the lack of important ICTD policy instruments in their hands. ICTD implicates important issues of convergence, both in the areas of policy and practice, from infrastructure to common service outlets, and these are still often in the domain of IT departments. However, the situation is changing as the ICTD opportunity is getting more widely understood, and the core development departments are coming up with more development-oriented models.

### *Capacity building*

Capacity building, another important concept in ICTD, has also taken specific political economy hues. The dominant paradigm interprets institutional capacity building as training regulators for a pro-market telecom policy, and individual capacity building as training “knowledge workers” to fit into global ICT value chains. There are much greater, and often more crucial, capacity requirements both at institutional/organizational and individual/community levels for shaping the IS opportunity for development, but these are greatly under-theorized.

### *Multi-stakeholder partnerships (MSPs)*

MSPs have figured centrally in the ICTD discourse. While it is true that actors outside of governments have received some toehold in policy spaces owing to such an approach, the context of MSPs in ICTD needs

---

8 This assertion comes from the experience in South Asian countries, where the IT industry focus of governments is especially strong. It may or may not be as true to the same extent for all developing countries.

to be examined more closely. The background of the MSP approach in ICTD is that the private sector (usually MNCs) was seen as having the necessary expertise - in ICT applications and paradigms, and therefore their advice was considered important in making ICTD policy. Civil society has mostly been co-opted into such structures, to keep the presence of fair representation and has had little influence on shaping ICTD models. Such MSPs have only helped propagate the dominant ICTD model, seldom engaging with them critically. With the emergence of many more idea leaders in local governments and civil society, especially in the traditional development sector, the situation is certainly better poised today to build MSPs where the locus of control lies with public bodies, representative of public interest, and not with the private sector partners.<sup>9</sup>

### *ICT infrastructure*

The fact that mobile telephony has seen an exponential growth over the last few years in practically every country and this has followed telecom privatization in most countries has been used as an illustration of the triumph of neo-liberalism in the ICT arena. An article by *The Economist*<sup>10</sup> has used the argument of private sector led mobile telephony revolution to question donor supported ICTD initiatives employing computers and telecentres in villages. The essence of the article is that telephones, especially mobile telephones, are useful for the poor, judging from their huge demand, and that computers and the Internet are of no use. The article thus implies that the South should be content with mobile phones and also be reassured that the market would not fail to respond to demand, if at all there was any real need for computers and the Internet. The World Bank has also repeatedly celebrated

---

9 For issues related to the 'locus of control' in MSPs in ICTD, see "Pro-Poor Access to ICTs - Exploring Appropriate Ownership Models for ICTD initiatives". Three case studies carried out by IT for Change for UNDP, interventions, [www.itforchange.net/projects/#pro-poor](http://www.itforchange.net/projects/#pro-poor)

10 "The real digital divide", *The Economist*, 10 March 2005, [www.economist.com/printedition/displaystory.cfm?Story\\_ID=3742817](http://www.economist.com/printedition/displaystory.cfm?Story_ID=3742817)

the mobile telephony phenomenon in a similar manner, using it as the proof that markets will mostly be able to lead the IS transformations in the South.<sup>11</sup>

From a development view point, it is important to understand that the IS is not about telephony but, by its very definition, about the far reaching transformation in societal institutions that the Internet and its associated technologies make possible. In the North, ICTs themselves grew out of a dialectic between institutions and the market. And therefore, a certain maturity of markets to respond to the needs of institutional developments that constitute an emerging IS can be expected. However, in most developing countries, the new technologies represent new institutional and organizational opportunities that have to be realized mostly by conscious design. ICT infrastructure, ICT hardware and software and ICT capacities are the starting point for such institutional/organizational transformation that contains the promise of a paradigm shift in achieving development goals. It cannot be expected that markets by themselves will fulfil any of these crucial needs. Strong policy interventions and substantial public investments are certainly needed for this purpose.

The ICT architecture needed for making the transition to a comprehensive ICT based development strategy requires a countrywide ICT infrastructure - which includes connectivity, access, hardware and software as well as capacities at individual, community and institutional/organizational levels. As a starting point, it is important that the policy imperative of providing connectivity as a public provision is explored, as the very basic platform on which other requirements may be provided. A good example of such provisioning is the rural broadband model taken up by the Government of Andhra Pradesh in India,<sup>12</sup> where the government has fixed the price of 2 MBPS connectivity to be provided in every village in the state at USD 2.3 per month per connection, and has invited tenders for

---

11 "Financing Information and Communication Infrastructure Needs in the Developing World: Public and Private Roles", draft for discussion.

[lnweb18.worldbank.org/ict/resources.nsf/a693f575e01ba5f385256b500062af05/04c3ce1b933921a585256fb60051b8f5/\\$FILE/financingICT\\_Draft.pdf](http://web18.worldbank.org/ict/resources.nsf/a693f575e01ba5f385256b500062af05/04c3ce1b933921a585256fb60051b8f5/$FILE/financingICT_Draft.pdf)

12 [www.freepress.net/news/6124](http://www.freepress.net/news/6124) and <http://apts.gov.in/apbroadbandnetwork.html>

such provisioning. The Government has promised to buy connectivity for its 40,000 offices in the state as well as for citizen service centres in each village (22,000 of them). A private sector led consortium has taken the contract and one district has already been wired completely.

The lead by the public sector in developing conditions for capitalizing on the ICTD opportunity is almost always necessary. Apart from connectivity, access infrastructure - as well as availability of cheap and appropriate hardware and software - is also often linked to policy and investment interventions by public bodies.

*Global public goods argument - the last bastion of engagement with the dominant ICTD paradigm*

Frustrated with Northern governments for doing little to address the new development needs of the South in the face of the IS opportunities, civil society at the WSIS employed the “global public goods” argument in justification of a global tax for financing ICTs in the least developed countries. Northern countries however have paid no heed. While useful as a tactical argument to obtain financial commitments from richer nations, the GPG proposition has obvious limitations. At one level, arguing from within the economic paradigm, the problem with conceptualizing ICTs even as an “impure GPG” is that this implies an *a priori* acceptance of knowledge as a GPG. However, the new economy is based on the principle of pricing knowledge, as the most valuable resource, and therefore, in the present circumstances, the North is unlikely to be persuaded by the argument that knowledge is a GPG. The argument for financing ICTD built on externalities of ICTs is also self defeating since in any case government and MNC actors in the ICT arena always seek to internalize these externalities by “targeted” initiatives. Examples of this are the Digital Freedom Initiative<sup>13</sup> of the US government, which is directly linked to expanding market opportunities for US companies, and MNC projects of building ICT capacities of school teachers in developing countries on proprietary platforms.

---

13 Digital Freedom Initiative, [www.dfi.gov/](http://www.dfi.gov/)

The GPG argument engages the neo-liberals in their own language, that of self-interest. However, such re-interpretations of development imperatives can be taken to illogical limits, whereby the Millennium Development Goals and even equity and social justice among the people of the world are considered GPGs. Such interpretations of development issues by placing them in an “obvious win-win” situation de-politicize the issue of development itself. They weaken and distract the required policy orientation for planning and making systemic development interventions, which, as argued earlier here, are especially required in the ICTD arena.

It will serve the interests of developing countries better to conceptualize ICTD and IS for development outside economics in socio-political frameworks. As argued above, basic ICT infrastructure, spoken of here in its broadest meaning, must be seen as a social responsibility of the State and provided as a public service, in the same way as basic education is seen today. While education is mostly about building knowledge and capacities, the new ICT infrastructure is geared to providing not only these but also institutional and organizational linkages and frameworks to maximize “opportunity” for every individual and every community.

## Towards a new theory and practice of IS for the South

At the level of the broadest plan, investing in and evolving an ICT based development strategy will involve simultaneous work at two levels. One level is the “ICT based development grid” - which will include connectivity, access, capacity and new institutional/organizational arrangements. At the other end is an organic engagement of communities with ICTs in a localized and contextualized manner, whereby they plug into the “grid” for and in pursuance of their self-determined ends.

At the community end, effort and investment need to go into enabling people to “own” the technology and its processes and thereby to make the best through linkages to the “grid”. And in developing this “grid”, a lot of planning and investment has to go into the use of ICTs for transformation of institutions and organizations involved with development activity.

Two broad policy imperatives for achieving the above at national and global levels are as follows:

*At national and sub-national levels*

A clear distinction needs to be made between the economic growth aspect of ICTs and its use to build a new development infrastructure. Many requirements of a policy and enabling environment to achieve best results on the two fronts are common. However, there can often be a policy trade-off and this needs to be negotiated politically. In India, for example, the interests of the domestic IT sector and the urban middle class - which have high stakes in India's position in the global value chain in the IT and ITES industry - may often be in conflict with subsidized telephony for rural areas, policy support for open source software, more open regimes for knowledge and content sharing on digital platforms, etc. The most important imperative at national and sub-national levels is to see the core ICTD opportunity and activity-space as distinct from that of ICT for markets and economic growth. The locus of development of policy and action for ICTD needs to go out of the IT and telecom ministries into core development sectors. A new focal point within governments is an important and urgent requirement for most developing countries. This focal point must be oriented exclusively to the development aspects of ICTs and geared to developing an ICT based development infrastructure in collaboration with other departments.

*At the global level*

In engagement with the donor community and International Financial Institutions, a good case needs to be articulated for investing in such an ICT based development infrastructure, which is conceptualized as distinct from economic infrastructure. On development aid, the donor and lending community seems to operate from a dilemma of whether more resources need to be pumped into developing countries' existing development activities or to invest in institutional mechanisms that make for more efficient use of existing resources. Advocates of neo-

liberalism have used the latter line of argument to cut down direct investments into development, and instead divert it to supporting market based structures with minimum public intervention, with an implied assertion that markets ensure the best utilization of resources, even in the scenario of development needs. Infrastructural and institutional investments in ICT based development gives a *via media* between these two donor approaches. Investments in ICTD are not direct development investments, but they go into making development activity much more effective and efficient. Developing countries need to develop a good case for such “efficiency-inducing” investments that are not necessarily linked to the supremacy of a certain set of institutions - the markets, and concomitant institutions that prop up the markets - in inducing efficiencies. Efficiencies of development investment today are best achieved by developing an ICT based development infrastructure as described earlier.

However, agreements about efficiencies are premised upon agreements about the objectives of development. And here, the neo-liberal agenda may differ in significant ways from traditional development thought built on the canons of equity and social justice. It is important therefore that powerful South-South alliances are built, with participation from across sub-national and local governments as well as traditional civil society and grassroots organizations, for evolving a new paradigm of a development-oriented IS for the South. ■

# Financing Universal Access

JOËLLE CARRON

RESEARCHER

ALLIANCE SUD (SWISS ALLIANCE OF DEVELOPMENT ORGANISATIONS)

[WWW.ALLIANCESUD.CH](http://WWW.ALLIANCESUD.CH)

*Central elements of the debate on financing ICTs are the definition of the actors and the most appropriate solutions to achieve the objectives proclaimed in Geneva in 2003. Is it to be the private sector, public-private partnerships or local stakeholders (microfinance, local communities)? This search for new solutions, no doubt a positive one, has forgotten one essential player: the State. Traditionally a leader actor in telecommunications, the State now plays a very secondary role due to the changes that have taken place over the past 20 years. The author states that, in the struggle against the digital divide, it is necessary to reassign a more important role to the State and to return to true international solidarity. This paper argues that the path to achieve these two objectives is, in particular - but not exclusively - through Universal Access Funds.*

تحديد اللاعبين والحلول الأكثر ملائمة لتحقيق الأهداف المعلنة في جنيف 2003، تعد العناصر المركزية للحوار الدائر حول تمويل تكنولوجيا المعلومات والاتصالات. هل هو القطاع الخاص، هل هي شراكة بين القطاع العام والقطاع الخاص أو أصحاب المصلحة المحليين (التمويل الصغير، المجتمعات المحلية)؟ هذا البحث عن الحلول الجديدة، وهو إيجابي بلا شك، تناسى أحد اللاعبين الأساسيين: الدولة. وهذه الأخيرة، والتي تعد تقليدياً اللاعب الرائد في الاتصالات، تلعب حالياً دوراً ثانوياً نظراً لما حدث من تغيرات خلال الأعوام العشرين الماضية. يذكر الكاتب أنه في إطار الصراع ضد الفجوة الرقمية يصبح من اللازم إعادة منح دور أكثر أهمية للدولة والعودة إلى التضامن الدولي الحقيقي. ترى هذه الوثيقة أن الطريق إلى تحقيق هذين الهدفين هو وبشكل خاص - وليس حصرياً - من خلال صناديق النفاذ الشامل.

En el debate sobre el financiamiento de las tecnologías de información y comunicación (TIC) es imprescindible definir los protagonistas y las soluciones más adecuadas para el logro de los objetivos proclamados en Ginebra en 2003: ¿Serán el sector privado, las asociaciones público-privadas, o los actores locales? La búsqueda de nuevas soluciones, sin duda positiva, ha olvidado a un actor esencial: el Estado que, actualmente, se ve relegado a un papel muy secundario. La autora sostiene que, para lograr un desarrollo equitativo de las TIC, es necesario reasignar un rol más importante al Estado y volver a una solidaridad internacional genuina. Afirma además que el camino para alcanzar estos dos objetivos se encuentra en el desarrollo de Fondos de Acceso Universal.

*Les éléments centraux du débat sur les mécanismes de financement de développement de technologies de l'information et de la communication (TIC) dans le Sud, sont dans la définition des acteurs impliqués et dans les solutions les mieux à même d'atteindre les objectifs du SMSI. La recherche de nouvelles solutions venant du secteur privé, des associations publiques-privées, ou des acteurs locaux, est bien sûr positive, mais elle néglige un acteur primordial: l'Etat qui, à l'heure actuelle, joue un rôle secondaire. L'auteur affirme que pour le développement équitable des TIC, il est indispensable de réassigner un rôle plus important à l'Etat, ainsi que de récupérer une véritable solidarité internationale. Elle argumente que le chemin pour atteindre ces deux objectifs est dans les fonds d'accès universel.*

## The funding of the information society: and what about the State?

The issue of funding is at the hub of the preparations for the second phase of the World Summit on the Information Society (WSIS) that will take place in Tunis in November 2005. The central elements of this debate are the definition of the actors and the most appropriate solutions to achieve the objectives proclaimed in Geneva in 2003. Is it to be the private sector, seen as a miraculous solution to the digital divide? Or public-private partnerships - the new obsession of decision-makers? Or local stakeholders (microfinance, local communities) whose importance has been confirmed by the reports of the Task Force on Financial Mechanisms (TFFM)? This search for new solutions, no doubt a positive one, has the disadvantage of forgetting one essential stakeholder: the State. Traditionally a leader actor in telecommunications, the State now plays a very secondary role due to the changes that have taken place over the past 20 years.

## From the omnipotent State to the market model

Technological progress has developed a new commercial vision of goods linked to information and communication, leading up to the privatization of the telecommunication sector in the United States in the 1980s. The giants arising from this development have seen international markets open up before them, benefiting from their governments' pressure in this respect. An assessment of the 1990s shows a generalized privatization of the old state monopolies as well as the liberalization of the sector on a world scale.

The International Monetary Fund (IMF) and the World Bank have played a decisive role in this process, given that in many developing countries both institutions have strictly conditioned their support in communication affairs to the reforms undertaken in this sector. The incorporation of telecommunications to the rules of the World Trade Organization (WTO) has both accompanied and precipitated the process.

Thus, the first liberalization commitments undertaken by some countries came into force in 1995 with the General Agreement on Trade in Services (GATS). In February 1997, the Agreement on Basic Telecommunications Services (IV GATS Protocol) was signed by 69 governments and a Reference Document<sup>1</sup> was prepared, establishing the definitions and principles to be applied in regulation on a national level (safeguarding of competition, interconnection rules, the right to impose obligations for universal access, transparency requisites, independence of the sector's regulation). Currently telecommunications are still on the WTO's agenda, in the framework of negotiations on services, opened in January 2000.

## Scant swing margin for the State

Over the past 20 years, the telecommunication sector has been radically transformed. From a monopolistic scheme in state hands supplying a public service, it has taken on a commercial rationale in which numerous operators wage ferocious competition. The rules that applied to the sector which was of exclusive state responsibility, are now established in the framework of an international organization, the WTO! From being an all-powerful decision-maker, the State has seen its scope increasingly reduced. Cees Hamelink puts it well: "The international governance system for communication operated during the past hundred years mainly to coordinate national policies that were independently shaped by sovereign governments. Today's global governance system to a large extent determines supra-nationally the space that national governments have for independent policymaking."<sup>2</sup>

The new rules established on an international level have signed the death warrant of instruments traditionally used by the State to finance

---

1 [www.wto.org/spanish/tratop\\_s/serv\\_s/telecom\\_s/telecom\\_history\\_s.htm](http://www.wto.org/spanish/tratop_s/serv_s/telecom_s/telecom_history_s.htm)

2 Hamelink, Cees J. (2003), "The global information society: visions, people and power" in *Annuaire Suisse de Politique de Développement 2003, Société de l'information et coopération internationale: development.com*, Vol. 22, Institut Universitaire d'Etudes du Développement (iuéd), Geneva, November.

universal access, based on, for example, tax redistribution. However, in spite of the limitations pointed out, it would be false to affirm that the State no longer has any available swing margin. New mechanisms have appeared: universal service obligations included in the concessions and licenses granted to operators, taxes on asymmetric interconnections favouring rural operators and, particularly, universal access funds. They all have in common the fact of being neutral from the standpoint of competition and therefore, compatible with WTO rules.

Two elements of this evolution should be highlighted. In the first place, the disappearance of international solidarity on which the system of tax redistribution was based, in favour of the reassignment of resources on a national level by these new mechanisms. Secondly, the radical transformation suffered by the idea of public service. Public service is only considered as a part of the final delivery, regardless of the status of the actor providing it. This new perception certainly has implications for financing. It is no longer public telecommunication companies that are financing the extension of their networks thanks to the benefits obtained from international communications, but rather - and what a paradox! - state subsidies to private companies that commit themselves to guarantee these deliveries.

## Steps forward

Turning back would seem to be impossible in the present context. It would also be false to ignore the significant progress made over the past few years in the struggle against the digital divide, thanks at least partially to the implementation of some new solutions (private investment, public-private partnerships, etc.). However in this economic climate it is necessary to:

### *Reassign a more important role to the State*

Private investment is not enough to ensure universal access, particularly in rural and isolated areas. The same applies to the creation of local contents or appropriate applications to promote development, to promote open

and democratic media, etc. There is nothing new in this affirmation; in fact, this situation has been amply recognized, even at official level.

What is now needed is the demonstration of a real political will to remedy the situation. Thus the State's right (even its duty) to intervene to cover these divides must be clearly reaffirmed by those participating in the Summit.

The new mechanisms that enable the State to fulfil its mission must be carefully followed-up and assessed at international level. Their implementation must be promoted and supported by the international community through, in particular, capacity-building regarding regulation mechanisms in developing countries.

#### *Return to true international solidarity*

The reduction of the digital divide is in itself a global public good and consequently, its funding must be ensured supportively by the entire international community. The participants in the Summit must thus strongly reaffirm the importance of international solidarity for the construction of the information society. In order to go beyond simple declarations of intent and to put into effect this solidarity, complementary mechanisms to those already installed at local and national level must be implemented.

The path to achieve these two objectives is, in particular (but not exclusively), through an especially promising mechanism: that of universal access funds. For the international community, this involves encouraging States to establish such funds on the one hand, and on the other, studying the possibility of establishing a universal access fund on a world scale.

## National universal access funds

Appearing in 1994 in Latin America, universal access funds have seen a rapid expansion as a consequence of the success they achieved in Chile, Peru and Colombia. Presently, these funds exist or are being planned in close on 60 developing countries or countries in transition. Their objective is to enable communication services in the hands of private companies to be established in rural and/or isolated regions, by granting a subvention to cover the high initial investment and costs.

Although the very recent nature of these mechanisms and the variability of the results do not enable an in-depth assessment to be made, some aspects have proven to be very promising. In particular:

- The innovative and original method of granting subventions placing companies in competition through a system of inverse bids. This allows considerable savings as the bidder requiring the lowest subvention is the winner. The mechanism appears on the whole to be very effective, and in general the projects have been assigned for less than half the amount available.
- The great potential of the model, which has been applied not only to infrastructure projects but also to e-health projects, distant learning (e-learning), creation of contents, initiation to information technologies, etc.
- The definition of projects by a single entity, making it possible to have a vision of the whole and coherence at national level. Indeed, initially a needs assessment is carried out, often in collaboration with local authorities and civil society. On this basis the projects are put up for bids (for example the installation of 10 telecentres in 10 medium-sized cities in the country).

## What should be done?

Recorded successes prove that this model can operate. Thus it is the international community's duty to:

### *Proceed to make an assessment of existing experience*

This assessment is necessary in order to establish guidelines of best practices in this matter and make recommendations to remedy the weaknesses detected in existing funds.

### *Promote the adoption of these mechanisms*

For this purpose, technical assistance for installation and management must be provided by creating and strengthening the capacity of the responsible national authorities. Efforts made in this respect, particularly by the International Telecommunications Union (ITU), should be continued and stepped up.

These recommendations must be based on the following elements:

- *Funding.* Collection of fees on the sector's income should be encouraged (for example, a percentage of the benefits of all the telecommunication operators) and not the use of funds from government budgets. The recent contributions made by bilateral and multilateral donors and by international financing institutions could be multiplied in the future. In particular, a change in IMF and World Bank policies is necessary. As set out in the TFFM report, their assistance is presently aimed at supporting the private sector and at establishing appropriate legislative reforms to attract investment. This support must be redirected towards infrastructure and universal access projects.
- *Mission.* Beyond the coordination role assigned to them in the TFFM report, it is important that universal access funds remain faithful to their primary mission: to provide additional financial resources to fund universal access and not be limited to a better channelling of existing funds.

- *Capacity-building and transparency.* In some cases, problems have arisen relating to bureaucracy or to the dynamics of implementing these funds. These problems can be solved by the international community making available the necessary technical assistance. Both the ITU and the international financing institutions should play a central role in this matter. South-South collaboration must be developed in order to replicate the knowledge acquired in Chile, Peru or Colombia. In order to ensure transparency, national civil society must be involved in fund management and strict criteria for technological neutrality must be established.
- *Broadening subventions.* Some of the funds, as in the case of South Africa, encountered major difficulties related to the scant durability of the financed projects. Even though in this case poor management would also seem to be part of the failure, there are indeed some projects that do not offer any prospect of profitability, even in the long term. Although it has pushed back further the frontier to access, the model as currently practiced does not provide solutions for the most marginalized zones. Therefore, the possibility of a subvention that is not limited to the initial phase of the projects warrants serious study. It would also be advisable to favour projects proposed by local communities and civil society, which show a lower rate of failure (with a rate of profitability required by the stakeholders being lower than that demanded by private companies).

## A universal access fund on a world scale?

We have already mentioned it: it is the international community as a whole that must contribute to funding a fair and equitable information and communication society. There is no doubt that a means to achieve this international solidarity in deeds would be the implementation of a universal access fund on a world scale.

A global fund of this type would be complementary to national universal access funds. It could be used to contribute with the financing of certain large scale projects at national level which costs would be too

high to be entirely covered by the local fund. It could also be used to improve regional and even continental infrastructure.

This body would take on the establishment of national regulation authorities and the development of their own capabilities for the creation and management of national universal access funds and other mechanisms aimed at promoting universal access and the use of information and communication technologies at the service of development. Follow-up and assessment by the international community of these new tools would also be entrusted to this global fund. Finally, in those countries that have not established universal access funds, it could be called to launch and directly finance these projects.

The possibility of financing a fund of this type exists and has been set out in various papers.<sup>3</sup> To follow this path is basically a matter of political will: beyond the speeches - is access by all to the information society what we really want to ensure? ■

---

3 Accuosto, P. and N. Johnson (2004), "Financing the Information Society in the South - A Global Public Goods Perspective", prepared for APC by the Instituto del Tercer Mundo (Uruguay). [rights.apc.org/documents/financing.pdf](http://rights.apc.org/documents/financing.pdf)

2

The information Society  
Global Governance Processes

# A Global Internet Governance Forum

## The View from Brazil

CARLOS A. AFONSO

PLANNING DIRECTOR  
REDE DE INFORMAÇÕES PARA O TERCEIRO SETOR (RITS)  
WWW.RITS.ORG.BR

*The process leading to the second phase of the WSIS has established as one of its top priorities to advance on the formulation of a global Internet governance mechanism. Among developing countries, Brazil has been one of the first countries in the WSIS process to insist on the importance of considering a number of themes well beyond the mandate of the ICANN in a future global Internet governance arrangement. The Brazilian vision involves the need to create an international and multi-institutional structure to encompass advice, conflict resolution and oversight on a broad set of governance themes, with “adequate” representation of all concerned groups. This text presents - unofficially - the consensus that has been achieved in Brazil on this topic, as a reference for the current discussions on Internet governance transition processes.*

For a detailed description of the Internet governance transition processes and a review of the final report of the WGIG, please refer to the research document by the author, “Internet Governance - A Review in the Context of the WSIS Process”.

عملية الإعداد للمرحلة الثانية للقيمة العالمية لمجتمع المعلومات حددت ضمن أهم أولوياتها التقدم نحو وضع آلية دولية لإدارة الإنترنت. في إطار الدول النامية، كانت البرازيل من أعلى الأصوات فيما يتعلق بالحاجة لحوار عريض حول مستقبل الإدارة العالمية للإنترنت، كما كانت أيضاً من الدول الرائدة في أنشطة القيمة العالمية لمجتمع للمعلومات التي أدت إلى كانت البرازيل أيضاً من أوائل الدول في القيمة تشكيل الفريق العامل المعنى بإدارة الإنترنت العالمية لمجتمع للمعلومات التي أصرت على أهمية النظر إلى عدد من الموضوعات التي تتعدى تفويض "هيئة الإنترنت المعنية بالأسماء والأرقام المخصصة" في أي ترتيبات عالمية مستقبلية حول إدارة الإنترنت. الرؤية البرازيلية تتضمن الحاجة إلى إنشاء هيكل عالمي ومتعدد - المؤسسات يغطي المشورة، حل النزاعات والإشراف على سلسلة عريضة من موضوعات الإدارة، مع تمثيل "مناسب" لكل المجموعات المعنية. هذه الورقة تسعى إلى أن تعرض - بشكل غير رسمي - التوافق الذي تحقق حتى الآن في البرازيل حول هذا الموضوع، لكي يمكن أن تكون مرجعاً للنقاش الحالي حول المرحلة الإنتقالية لإدارة الإنترنت.

En la segunda fase de la CMSI se ha establecido como prioridad el avance en la formulación de un nuevo mecanismo para la gobernanza global de Internet. Entre los países en desarrollo, Brasil ha sido uno de los primeros países en subrayar la importancia de considerar, en la definición del nuevo sistema, un conjunto de temas que exceden el mandato de la Corporación de Internet para la Asignación de Nombres y Números. Este documento repasa la visión brasileña, que sostiene la necesidad de una estructura internacional y multi-institucional, con una representación "adecuada" de todos los grupos de interés y cuyas tareas abarquen el asesoramiento, la resolución de conflictos y la supervisión de un grupo amplio de temas de gobernanza.

*Dans la deuxième phase du SMSI il a été établi une priorité : l'avancée dans la formulation d'un nouveau mécanisme de gouvernance mondiale de l'Internet. Parmi les pays en développement, le Brésil a été l'un des premiers à souligner l'importance de considérer - pour la définition du nouveau système - un ensemble de thèmes plus large que celui prévu dans le mandat de la Corporation de l'Internet pour l'Assignation des Noms et des Nombres. Ce document analyse l'approche du Brésil qui considère le besoin de créer une structure internationale et multi sectorielle comprenant le conseil, la résolution des conflits et la supervision d'un vaste groupe de sujets relatifs à la gouvernance, avec une juste représentation de tous les groupes d'intérêt.*

## Introduction

The process leading to the second phase of the World Summit on the Information Society (WSIS) has established as one of its top priorities to advance on the formulation of a global Internet governance mechanism. Among developing countries, Brazil has been one of the most outspoken regarding the need for a broad debate on the future of global Internet governance and was one of the leading nations in the WSIS process which resulted in the formation of the Working Group on Internet Governance (WGIG).<sup>1</sup>

The Brazilian government continues to seek a national consensus proposal regarding the future of global Internet governance. This is part of a broader multistakeholder initiative to establish consensus positions for the main themes of the WSIS. As expected, Brazil tries to derive its global proposal from national policy which originated a governance structure around the Internet Steering Committee in Brazil (CGIbr).<sup>2</sup>

An Interministerial Group on Information Society (“Grupo Interministerial da Sociedade da Informação”, GISI) has been established for this purpose, with representatives of several federal government ministries, private business, civil society organizations, and academic entities, under the coordination of the Ministry of Foreign Relations.

GISI carries out periodic open meetings in Brasilia to provide an opportunity for broad participation in policy formation discussions. A GISI subgroup on Internet governance, working together with the CGIbr’s Internet Governance Subcommittee has produced what is now being accepted as the Brazilian government’s official position on the issue.

- 
- 1 For a detailed description of the Internet governance transition processes and a review of the final report of the WGIG, please refer to the research document by the author, “Internet Governance - A Review in the Context of the WSIS Process”, available at [wsispapers.choike.org](http://wsispapers.choike.org)
  - 2 For a short description of the Brazilian governance model see the appendix at the end of this briefing.

This text attempts to present - unofficially - what consensus has already been achieved to date, so it may serve as a reference for discussion on the future of Internet governance.

The three basic texts for this review are:

- The WGIG Report;<sup>3</sup>
- GSI's "Documento-base para a posição brasileira" (not published);
- Civil Society Internet Governance Caucus' (CSIGC) Response to the WGIG Report.<sup>4</sup>

## The premises for the Brazilian proposal

Brazil has been one of the first countries in the WSIS process to insist on the importance of considering a number of themes well beyond the mandate of the Internet Corporation for Names and Numbers (ICANN) in a future global Internet governance arrangement. The Brazilian vision involves the need to create an international and multi-institutional structure to encompass advice, conflict resolution and oversight on a broad set of governance themes, with "adequate" representation of all interest groups. Such a structure would be pluralist (multistakeholder), transparent, democratic and multilateral.

Based on the experience of its own internal arrangement for Internet governance, Brazil envisions four interest groups participating in a global mechanism:

- National Governments;
- Business associations;
- Non-profit, non-business organizations;
- Academic/technical community.

---

3 [www.wgig.org](http://www.wgig.org)

4 [wsispapers.choike.org/wsis\\_igcaucus\\_wgig\\_final.pdf](http://wsispapers.choike.org/wsis_igcaucus_wgig_final.pdf)

The last two sectors should be represented by civil society organizations or associations. The reason to keep these two sectors separate is to make sure there will always be representatives from the academic/technical community<sup>5</sup> as well as from non-profit, non-business organizations in the forum whatever the election/selection mechanism to choose representatives.

So far, the CSIGC has not been able to establish a consensus view on this representation structure. While most agree - like Brazil - that academic associations are part of civil society, there is disagreement regarding their specific representation in the global forum.

Brazil also agrees with the WGIG in proposing a global forum for Internet governance. However, while in the four models proposed by the WGIG for a global mechanism the establishment of a pluralist forum is contemplated, it is relegated to an advisory role only. The Brazilian proposal extends the scope of the forum to include coordination/oversight functions within it, thus proposing a single pluralist body for all governance functions.

In Brazil's scenario, ICANN - reorganized as a true global organism, independent from any country and retaining its logical infrastructure governance functions - as well as any other future global Internet governance mechanism, would be under the coordination/oversight of the global forum.

The CSIGC tends to favour an advisory forum as a starting point, derived from the WGIG Report's model 2. The forum would progress to become a global, authoritative reference on Internet governance. In this way, the CSIGC proposal can be considered a subset of Brazil's proposal, as will be described below.

Brazil has detailed several aspects of its version of the global forum (called Global Internet Governance Coordination Forum - GIGCF).

---

5 Even though they may be viewed as part of the non-profit civil society organizations' realm.

The GIGCF should be autonomous and independent as regards any national government or intergovernmental organization. Brazil agrees that a formal link to the UN needs to be established in such a way that does not impair the four principles for process and participation: multilateralism, democracy, transparency and pluralism.

Some of the basic assumptions for the creation of the global forum, according to Brazil, are:

- Existing institutions which are involved in Internet governance must adapt to the above four principles.
- The forum's working agenda should be broad and include all aspects of Internet governance.
- The forum's structure should include an intergovernmental decision-making instance dealing with Internet governance aspects that impact on national policies.
- The forum's implementation must be carried out in such a way to ensure stability and continuous development of the Internet.
- The governance model adopted in Brazil could serve as a reference to build the global forum, as well as to establish cooperation and exchange of experiences in structuring national governance models, in such a way as to facilitate participation of the national communities in the global forum.

The last assumption refers to paragraph 73(b) of the WGIG Report, which textually recommends “that coordination be established among all stakeholders at the national level and a multi-stakeholder national Internet governance steering committee or similar body be set up.” The WGIG does not go as far as recommending explicitly the governance mechanism adopted in Brazil, which would conflict with national policies adopted in several countries,<sup>6</sup> but suggests steps be taken in a similar direction.

---

6 Some of which have simply contracted a commercial incumbent to sell their country code top-level domains (ccTLDs) in the world market.

## A review of the Brazilian proposal

Contrary to the models presented in the WGIG Report, Brazil suggests the creation of a single body with multiple functions, which should, as a whole, be pluralist (multistakeholder), democratic, transparent, and multilateral - the meaning of these features basically coincides with the WGIG's vision. Although details of the Brazilian position are still being discussed, consensus is being reached around a 14-point proposal regarding a global forum. Each of these are presented below.

*1. The forum should be a global space for coordination and discussion of all governance issues, as well to support development of global policies for the Internet.*

The forum here is seen as a policy formulator operating, depending on the issue, in advisory, authoritative, coordination, oversight, and/or arbitration roles. It gets input from already existing technical, regulatory and advisory agencies and organizations and is regarded by these entities as authoritative on Internet-related matters pertaining to their fields of activity.

This point shows there is a lot of work to be done in establishing precise roles and specific mechanisms - including delegation of roles to organizations either existing or to be created - at different levels and instances of oversight, regulation, arbitration and so on.

*2. The forum should coordinate a broad spectrum of governance themes.*

This point is singled out to emphasize the importance of an overall mechanism in response to the non-existence of a governance instance consolidating all Internet-related issues.

*3. The forum should be pluralist (multistakeholder).*

The Brazilian vision here is similar to the one adopted for its national governance body (see appendix). The way it envisions national governments' participation is described in the next point.

4. *The forum should include an intergovernmental mechanism through which governments exert their responsibilities regarding Internet-related aspects of public policy.*

This is one of the most relevant topics in the Brazilian proposal, and depending on the way it is presented it raises some controversy - particularly from the camp which wants to extend the ICANN model to all aspects of global governance.

Brazil wants a forum with full participation of all sectors in the building of recommendations and definitions of policies and international agreements. However, recommendations or regulations which are seen by governments to have implications in national public policy should be considered by the forum's intergovernmental instance before any approval, following a clearly established procedure. Contrary to certain declarations or interpretations, there is no mention of the International Telecommunication Union (ITU) or any other existing body as a replacement for ICANN in the governance of the logical infrastructure.

Of practical relevance is the fact that Brazil does not see the intergovernmental instance of the forum discussing and deliberating on all issues as a separate body. Rather it envisions representatives of the intergovernmental instance participating in the overall processes of the forum, which will remit to that instance the national policy-related issues only.

5. *The forum, and any global governance instance, should not be under the jurisdiction of any specific country.*

This is the expression of the WGIG Report's paragraph 48, which states: "The WGIG recognized that any organizational form for the governance function/oversight function should adhere to the following principles: No single Government should have a pre-eminent role in relation to international Internet governance. The organizational form for the governance function will be multilateral, transparent and democratic, with the full involvement of Governments, the private sector, civil society and international organizations. The organizational form for the governance function will involve all stakeholders and relevant intergovernmental and international organizations within their respective roles."

In addition, Brazil sees the global forum as an international organism, formally recognized by the United Nations, and legitimized by a specific international treaty. The CSIGC also agrees to a formal relationship with the UN (preferably directly with the Secretariat General), the terms of which need to be defined.

*6. The forum should work for the global public interest.*

This raises in particular arbitration issues (how to prevent or circumvent impasses resulting from national conflicts of interest which might block processes) and balanced participation issues (how to ensure developed and developing countries, private and public interests, commercial and non-commercial interests are equally represented).

*7. The forum should abide by the criteria of transparency, democracy and multilateralism.*

These are aspects already expressed in the WSIS Geneva resolutions.<sup>7</sup>

*8. Each one of the representatives of the four interest groups (governments, business associations, non-profit non-business organizations, and academic/technical associations) ought to establish clear accountability rules regarding their constituencies.*

Brazil emphasizes two particular issues in this regard: how to select and ensure global accountability of the non-governmental representatives; how to ensure qualified participation of the non-governmental sectors from developing countries. This is an explicit concern of the CSIGC, as well.

*9. Regarding existing global organizations dealing with specific, Internet-related issues, the forum function should be of coordinating these organizations instead of replacing them.*

This is a significant proposition - the approach is to build on existing expertise and organizations, not on starting from scratch, and to consolidate global governance in a coordinated fashion around existing

---

7 [www.itu.int/wsis/documents/doc\\_multi.asp?lang=en&id=11611160](http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=11611160)

organizations for the functions these are able to carry out, as well as help build new mechanisms when needed for components not yet properly covered. This means relying not only on the capabilities of ICANN, but also on several of the existing UN agencies and other technical bodies.

*10. The forum should operate with efficacy and practicality to ensure rapid decision-making processes, in keeping with the dynamics of Internet expansion and evolution.*

Brazil suggests mechanisms of representation in which the global forum is constituted by a relatively small number of representatives legitimately expressing the interests of all sectors. This requires adequate global procedures and mechanisms to ensure transparent and democratic election and selection processes on a country and regional basis.

*11. The forum should be flexible and adaptable to adjust its agenda and processes to the rapid evolution of the Internet.*

This emphasizes new issues evolving from deployment of advanced technologies, the consequences of rapid convergence of different media and communications systems to the Internet, and so on. These developments in their turn might require a corresponding evolution in certain forum functions, rules, standards and recommendations.

*12. The forum should be able to act as an efficient clearing house collecting needs from the several interest groups and dispatching them (or the resulting resolutions) to the relevant organizations.*

Brazil stresses that in this respect the forum should rely heavily on the latest Internet-based knowledge management technologies, expediting transparency, democratic procedures and the clearinghouse functions, as well as relying on open online and face-to-face meetings as much as possible.

*13. The forum should be authoritative in its capacity to resolve conflicts and coordinate the work of different organizations.*

Brazil sees this authoritative capacity defined by one or more international treaties or conventions, as well as specific contracts and memoranda of understanding.

14. *The forum should be self-sustained.*

The forum should be supported by an efficient, lightweight technical/administrative infrastructure. Meetings should as much as possible be online using the best Internet multimedia resources. Many activities would be carried out through specialized working groups, usually constituted of volunteers compensated for travel and per diem expenses when needed. These methods should help reduce the operational budget.

Funding for the global forum should come from all participating sectors according to their capacities. Ceilings for specific contributions should be established in order to avoid both barriers to entry and hegemonic positions. ICANN is the anti-example for this proposal, as its income comes basically from the major global top-level domain (gTLD) registries. ■

## APPENDIX

### The Brazilian Internet governance structure<sup>8</sup>

Brazil has pioneered a particular approach to Internet governance, as a result of intense lobbying from the academic community and civil society organizations in 1994-1995. In May, 1995, the ministries of Communications and of Science and Technology agreed to form the Internet Steering Committee in Brazil (known by its acronym CGIbr) - a group of about 12 volunteers from the government, user community, service providers, business and academic communities, and telecommunications companies.

Since its beginning CGIbr has established a clear policy which defines the .br ccTLD as an asset of the community and as the identity of Brazil on the Internet. In consequence, the domain registry function is a non-profit service in which all domain names cost the same (currently about USD 10 per year) - domains are charged just to cover the annual operating and development costs of the .br domain governance system. Thus, a registrant must submit proof of legal status in the country (as identified by a national income tax registration number and documentation demonstrating the applicant has a physical address in Brazil).

Between 2003 and 2004 a significant new development has taken place. The number of council members increased to 21, eleven of which from civil society organizations (four), business associations (four), and academic associations (three), all elected for three-year mandates by their own constituencies. The federal government has eight representatives, states' governments choose one representative, and a council member is also chosen by consensus among the top networking scientists in the country.

In 2004, a non-government organization (called NIC.br) under CGIbr's oversight was formed to take over administrative functions, including registration, IP number distribution, operation of Brazil's network of

---

8 For a more detailed review, see Afonso, Carlos A. (2004), ".br: ccTLD as Asset of the Commons" in Don MacLean (ed.), *Internet Governance: A Grand Collaboration*, United Nations ICT Task Force, New York, [www.unicttaskforce.org/perl/documents.pl?id=1313](http://www.unicttaskforce.org/perl/documents.pl?id=1313)

Internet Exchange Points and maintenance of CERT.br<sup>9</sup> - a highly-regarded Internet security response team. The main functions of the governance system include:

- to establish strategic directives related to the use and development of the Internet in Brazil;
- to establish directives for the organization of the relationship between government and society in the execution of domain names' registration, distribution of IP numbers, and administration of the “.br” ccTLD in the best interests of Internet development in the country;
- to propose Internet-related research and development programs in keeping with high technical standards and innovation, as well as to stimulate Internet dissemination throughout Brazil, seeking opportunities to add value to the goods and services related to the network;
- to promote studies and recommend procedures, norms, and technical/operational standards related to adequate security for networks and services;
- to coordinate actions related to the formulation of norms and procedures related to regulation of Internet-related activities;
- to be represented in national and international Internet-related technical forums;
- to adopt the necessary administrative and operational procedures so that Internet governance in Brazil is carried out according to international standards accepted by global governance bodies, for which it may sign agreements, contracts, and similar instruments.

Brazil's registry has gained international reputation as a very well managed and technically sophisticated operation, and today is the technical headquarters of LACNIC, the Regional Internet Registry covering Latin America and the Caribbean,<sup>10</sup> as well as the secondary domain name service (DNS) host to several other ccTLDs. ■

---

9 Computer Emergency Response Team Brazil, [www.cert.br/index-en.html](http://www.cert.br/index-en.html)

10 [lacnic.net/en/](http://lacnic.net/en/)

# The Cultural Diversity Debate in Current Multilateral Processes

GUSTAVO GÓMEZ

DIRECTOR

LEGISLATION AND COMMUNICATION RIGHTS PROGRAMME  
WORLD ASSOCIATION OF COMMUNITY RADIO BROADCASTERS  
(AMARC)

[WWW.AMARC.ORG](http://WWW.AMARC.ORG)

*As Plans of Action have become defined within the process of the WSIS, commitments to respect and foster cultural diversity have faded. Therefore, the future of cultural diversity depends on other multilateral processes that may turn both the general principles agreed at the WSIS - as well as the debates and definitions within countries - pointless or unfeasible. This paper argues that negotiations within the World Trade Organization and the Free Trade Agreements are a new threat to cultural diversity, while UNESCO's Convention on Cultural Diversity represents a major opportunity for developing countries. One of the main conclusions of this paper is that it is not enough to acknowledge cultural diversity for it to exist. Cultural diversity must be defended, promoted and ensured through active public policies and appropriate regulatory frameworks.*

This document is based on the research paper "Threats and Opportunities for Cultural Diversity: WSIS between WTO and UNESCO", available on line at [wsispapers.choike.org/](http://wsispapers.choike.org/)

مع التقدم نحو وضع خطط العمل - على المستوى العالمي والإقليمي - في إطار القمة العالمية لمجتمع المعلومات، تراجعت الإلتزامات باحترام وتشجيع التنوع الثقافي. وعلى ذلك فإن مستقبل التنوع الثقافي يعتمد على جهود أخرى متعددة الأطراف يمكن أن تتحول معها سواءً المبادئ العامة المتفق عليها في القمة العالمية لمجتمع المعلومات - أو الحوار والتعريفات داخل الدول، إلى جهود بغير مغذى وغير قابلة للتطبيق. وتري هذه الوثيقة في هذا الصدد أن المفاوضات سواءً في إطار منظمة التجارة العالمية أو إتفاقيات التجارة الحرة تشكل خطراً جديداً على التنوع الثقافي، في حين تعد "معاهدة اليونسكو حول التنوع الثقافي" فرصة رئيسية للدول النامية. من أهم نتائج هذه الوثيقة أنه لا يكفي الإقرار بالتنوع الثقافي لكي يتواجد هذا التنوع. لا بد من الدفاع عن التنوع الثقافي، وتعزيزه وضمانه من خلال سياسات عامة نشطة وأطر تنظيمية مناسبة. لهذا الغرض، فإن المؤلف يوصي بسياسات لأششطة محددة على المستوى الإقليمي، دون الإقليمي، والوطني.

A medida que se definen los Planes de Acción en el proceso de la CMSI los compromisos para proteger y promover la diversidad cultural se han diluido, haciendo que el futuro de la diversidad cultural dependa básicamente de otros procesos multilaterales que pueden volver inútiles o inviables los principios generales acordados en la CMSI. Este documento argumenta que las negociaciones en el marco de la OMC y los tratados de libre comercio representan la principal amenaza para los países del Sur, mientras que la Convención sobre Diversidad Cultural de la UNESCO es su mayor oportunidad. La promoción de la diversidad cultural, se sostiene, no debe sólo enunciarse, sino llevarse a cabo a través de políticas públicas activas y marcos regulatorios adecuados.

*Alors que les plans d'action ont été définis au cours du processus du SMSI, les engagements concrets pour protéger et promouvoir la diversité culturelle sont restés vagues. L'avenir de la diversité culturelle dépend maintenant d'autres processus multilatéraux qui pourraient rendre inutiles voire irréalisables les principes généraux convenus lors du SMSI. Ce document argumente que les négociations dans le cadre de l'OMC et les Traités de Libre Commerce représentent la principale menace pour les pays du Sud, tandis que la Convention sur la Diversité Culturelle de l'UNESCO est leur meilleure chance. Il faut que la promotion de la diversité culturelle ne soit pas seulement un discours mais qu'elle soit mise en place par le biais de politiques publiques actives et de cadres normatifs efficaces.*

## Introduction

As Plans of Action - both global and regional - began to be defined within the process of the World Summit on the Information Society (WSIS), commitments to respect and foster cultural diversity have faded. Therefore, the future of cultural diversity depends on other multilateral processes that may turn both the general principles agreed at the WSIS - as well as the debates and definitions within countries - pointless or unfeasible. Negotiations within the framework of the World Trade Organization (WTO) and Free Trade Agreements (FTA) pose a threat in this sense, while UNESCO's Convention on Cultural Diversity (CCD) represents a major opportunity for Southern countries.

In a global context where the prevailing economic and social trends are resulting in an increased focus on production and dissemination of cultural goods and services - thus placing cultural diversity at global, regional and national level at risk - the mere declaration and acknowledgement of cultural diversity is not enough provided regulatory frameworks and active state policies aimed at defending and ensuring it are not defined.

In view of the processes of globalization, convergence and concentration being analyzed in this paper, it seems necessary to regulate market trends in terms of public interests if national possibilities are not to be left to the mercy of the threats encompassed in such processes.

## WSIS: Cultural diversity left out

By analyzing the WSIS process - starting point of this research - it may be noticed how definitions and actions on cultural diversity were gradually left aside. Texts aimed at the promotion of cultural diversity included in the WSIS Declaration of Principles<sup>1</sup> were lost amidst the fulfilment process of these general goals, both at global level - Geneva Plan of Action<sup>2</sup> - as in Regional Action Plans.<sup>3</sup>

---

1 [www.itu.int/wsis/docs/geneva/official/dop.html](http://www.itu.int/wsis/docs/geneva/official/dop.html)

2 [www.itu.int/wsis/docs/geneva/official/poa.html](http://www.itu.int/wsis/docs/geneva/official/poa.html)

3 [www.itu.int/wsis/documents/listing.asp?c\\_event=sl2&c\\_type=colret](http://www.itu.int/wsis/documents/listing.asp?c_event=sl2&c_type=colret)

There has been neither real interest nor conviction within the WSIS process of the importance of considering cultural diversity as an essential focal point for building an equitable information and knowledge society. While some countries never agreed to and systematically opposed this perspective, others have been neglectful in defending their citizens' rights.

Beyond discourse, a technology/market-based approach has prevailed in practice with governments and private companies as main protagonists and citizens as consumers of contents and technologies. In many papers on the WSIS process there is no reference to cultural diversity and triumphs the reductionist idea that the solution to the digital divide lies in increasing connectivity. At the same time, it is stressed that the only important thing is the development of infrastructure and the need of "enabling environments" which may eliminate barriers to investment in the communications sector.<sup>4</sup>

The WSIS Declaration of Principles includes proposals and language promoted by civil society within the WSIS process. It says, for example, that States are "resolute in our quest to ensure that everyone can benefit from the opportunities that ICTs can offer", and agree that in order to meet those challenges, all stakeholders should work together to "foster and respect cultural diversity". It also states that not only is consumption or access to contents a "high priority" but also their creation and dissemination. It is "essential", according to the Declaration, "to promote the production of and accessibility to all content - educational, scientific, cultural or recreational - in diverse languages and formats."<sup>5</sup>

The Declaration also highlights the role played by traditional media - based both on analogical and digital technology. In view of their current and future role in Southern information societies, this reference is of

---

4 See, for example, the following text of the Plan of Action of the first phase of the WSIS: "Governments should take action in order to support an enabling and competitive environment for the necessary investment in ICT infrastructure and for the development of new services" (article 9 of C2 action line - "Information and communication infrastructure: an essential foundation for the Information Society"). See also the text corresponding to action line C6 - "Enabling environment".

5 Item 53, Declaration of Principles, Geneva, December 2003.

utmost importance. Apart from reaffirming the principles of freedom of opinion and expression and making reference to Article 19 of the Universal Declaration of Human Rights<sup>6</sup> - not included in the first drafts - there is mention to the need of having a diversity of media available, while at the same time “diversity of media ownership should be encouraged”,<sup>7</sup> thus reducing international imbalances as regards to infrastructure, technical resources and the development of human skills.

These good principles, however, have been gradually lost within those texts that refer to actions and policies aimed at implementing this Declaration: the Plan of Action focuses on other priorities, where “to connect” and “access” for “delivery of services” are the key focal points of all the strategy aimed at building the information society. This perspective turns the Plan of Action into a document where the importance given to access and passive reception of information is contrasted to the weak presence of goals aimed at the creation, production and dissemination of contents and cultural goods and services. Among the 10 targets included to “be taken into account in the establishment of national targets”, six talk about “connecting”.<sup>8</sup> Other two points set the target that all people should have access to “television and radio services” and that “more than half of the world’s inhabitants” should have access to ICTs. Therefore, all the other issues included in the Declaration of Principles are limited to two weak targets in the Plan of Action (“to adapt all primary and secondary school curricula to meet the challenges of the Information Society, taking into account national circumstances” and “to encourage the development of content and to put in place technical conditions in order to facilitate the presence and use of all world languages on the Internet”).

---

6 Which reads: “Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.”

7 Item 55 of Chapter 9 - Media, Declaration of Principles, December 2003.

8 Villages, universities, colleges, secondary and primary schools, scientific and research centres, hospitals and other health centres as well as local government departments.

Besides, the Plan of Action shows a reduced idea with regards to the concept of culture and cultural expressions: unlike the promising and broad definition set forth in the Declaration of Principles, the action line on cultural diversity is limited to the “dialogue among cultures” and the “regional and international cooperation”.<sup>9</sup> The concept of “cultural diversity” starts to be dealt with as exclusively referred to indigenous peoples, religions, documenting historical heritage, traditional knowledge or issues related to languages and dialects. None of the measures proposed addresses the “encouragement of diversity” in terms of media ownership nor establishes the limits to concentration - a growing trend at national and international level that goes directly against the diversity of information and opinions.

In the Regional Plans of Action and Commitments, which followed the first phase of the WSIS in Geneva, the same fading process regarding issues related to cultural diversity can be noticed. Except for a few cases - marked by specific regional needs such as the demand for inclusion of African languages and the development of the Arab culture on the Internet - there is still a tendency to identify the following as priority issues: access and connectivity, setting up of infrastructure, creation of adequate environments for investment and capacity building for the use of new technologies.

## WTO and UNESCO Convention: Threats and opportunities

In order to analyze the possibility of defending and fostering cultural diversity, it is therefore essential to look at other multilateral processes that are taking place in parallel with the WSIS. On the one hand, the negotiations within the framework of the World Intellectual Property Organization (WIPO), the WTO and the FTAs and, on the other hand, UNESCO’s CCD.

---

9 Point 23 of line C8 of the Plan of Action - “Cultural diversity and identity, linguistic diversity and local content”

Unlike the WSIS, decisions are binding upon national States within these spheres and, in some of them, the sanctions provided for in case of default could have ominous consequences on underdeveloped economies. Furthermore, many of these negotiations are carried out by means of closed-door processes, without neither transparency nor citizen participation.<sup>10</sup>

### *Free trade agreements*

Upon analyzing the WTO and FTA processes it becomes clear how they are being increasingly imposed on country decisions and weaken the capacity for implementing cultural policies guided by public interest. By considering broadcasting services, audiovisual productions and other cultural expressions as goods that should remain subject to trade liberalization processes, the same as other commodities, these agreements have become a real threat against cultural diversity.

The major media, entertainment industry and telecommunication corporations, supported by developed governments - mostly the United States (US) - seek to liberalize the cultural, information and communication services in order to allow for the unrestricted introduction of large transnational capitals in other markets, as it has been done with other goods and services. These impositions are further aggravated by the fact that they are attached to a strong coercive system to ensure their application: fines, economic, diplomatic and military pressure, disputes solved through mechanisms that fall outside the scope of the public state and international law system.

Until now, cultural and media policies, such as the public policies for the support and promotion of non-profit media, setting of minimum local content production and support to national audiovisual production, as well as the limits to media ownership, fall outside the scope of WTO agreements, under the so-called “cultural exception”.<sup>11</sup>

---

10 Khor, Martin (2003), “Cancun Ministerial starts in shadow of protests and an untransparent process”, [www.twinside.org.sg/title/update2.htm](http://www.twinside.org.sg/title/update2.htm)

11 In the 1993 General Agreement on Trade in Services (GATS), a position adopted by France and supported by the EU prevailed, regarding the non incorporation of the cultural and audiovisual sector among those commitments concerning market access and national treatment.

Nevertheless, the demand for liberalization continues to be one of the flagships of the US, the biggest producer of cultural goods and services - particularly audiovisual ones - which, supported by media corporations, keeps exerting pressure, both within and outside the WTO, to achieve the liberalization of the sector. In recent years, the US has developed a strong offensive to establish bilateral or sub-regional agreements and covenants of different kinds. Its aim has been to impose “an aggressive agenda for market opening in services” all over the world, “including audiovisual and telecommunication services”. The US political agenda on this issue is based on specific interests, as stated by the government: “Since the United States is the world’s leader in services for the 21<sup>st</sup> century economy, and services account for 80% of US employment, our efforts in this area continue to be significant. Market opening in services is essential to the long-term growth of the US economy”.<sup>12</sup>

The US believes that cultural production should be considered as any other area of the economy and therefore it is “aggressively seeking to conclude agreements in which its trading partners accede to demands that the sector be liberalized, meaning they forego the right to have culture policies designed to ensure a space for domestic production, including measures to support the development of national cultural industries.”<sup>13</sup> The reason: cultural industries represent the second most important export sector of its economy. In 2004 these industries invoiced over USD 400 billion<sup>14</sup> and their growth at world level in US dollars amounted to 300% between 1980 and 1998 only. “The European Union, the United States and Japan

---

12 Office of the US Trade Representative (2005), *The President's Trade Policy Agenda for 2005*, [www.ustr.gov/Document\\_Library/Reports\\_Publications/2005/2005\\_Trade\\_Policy\\_Agenda/Section\\_Index.html](http://www.ustr.gov/Document_Library/Reports_Publications/2005/2005_Trade_Policy_Agenda/Section_Index.html)

13 Coalition for Cultural Diversity (CCD 2003), As UNESCO starts work on the Cultural Diversity Convention, the challenge will be to hold the line on culture in trade talks, Vol. 1, No. 5, December 2003, [www.cdc-ccd.org/coalition\\_currents/Dec03/coalition\\_currents\\_sp.html](http://www.cdc-ccd.org/coalition_currents/Dec03/coalition_currents_sp.html)

14 Colussi, Marcelo (2005), Del Informe MacBride a Telesur, Rebelión, August 2005, [www.rebelion.org/noticia.php?id=19232](http://www.rebelion.org/noticia.php?id=19232)

gather 87% of profits earned in terms of cultural goods and communications, the remaining 13% being left to all other countries in the world.”<sup>15</sup>

According to the Coalition for Cultural Diversity, it can be stated, then, that “the aim of this battle is to prevent countries from mortgaging their future by giving up the right to introduce new cultural policies or adjust existing ones in response to changing circumstances. Protecting this capacity to introduce new policies in the future is a critical issue for all countries, but in particular for developing countries which in many cases do not yet have a comprehensive set of cultural policies in place but aspire to do so.”<sup>16</sup>

### *Convention on Cultural Diversity*

In view of trade liberalization processes, UNESCO’s Convention on the Protection of Diversity of Cultural Contents and Artistic Expressions (CCD),<sup>17</sup> aims at promoting cultural diversity, protecting it against the specific threats posed by globalization processes. It intends to prevent culture from being treated as an ordinary merchandise and therefore seeks to avoid the consolidation of monopolies of cultural and media industries in the hands of a few multinational companies. The text of an international treaty has been prepared which gives States the opportunity of deciding the extent to which they want to protect their national cultural sectors.

In October 2003, UNESCO’s General Assembly approved a proposal for launching the CCD process with instructions to finish negotiations in 2005. This proposal was supported by almost all member States except for the US, which after 19 years of not taking part in the organization, has now returned to active participation and has tried to block the CCD process, subordinating it to WTO agreements.

---

15 Octavio Getino quoting García Canclini at Culture Industries in Argentina, Observatory of Culture Industries of the City of Buenos Aires.

16 CCD (2003), *op cit*.

17 [portal.unesco.org/culture/en/ev.php-URL\\_ID=11281&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/culture/en/ev.php-URL_ID=11281&URL_DO=DO_TOPIC&URL_SECTION=201.html)

Pursuant to UNESCO's procedures, Director-General Matsuura appointed an international pluridisciplinary group made up of 15 independent experts in charge of gathering suggestions and opinions for the development of a preliminary draft. After three meetings held between December 2003 and May 2004, the group submitted the General Director a preliminary draft.<sup>18</sup> Based on this draft and after being approved by the Executive Board, several intergovernmental meetings have been held to discuss the final text of the Convention. This text is presented for consideration of the General Conference in October 2005, being recommended as draft for the CCD. The final outcome of negotiations on the content of the CCD is not clear at the time of writing this document, and the Convention's future depends on whether it will be subordinated to trade agreements or not. Another issue under discussion is the possibility of defending those principles both at national and international level.

Although the CCD may facilitate the promotion of cultural diversity, the reason why many countries supported the Convention is not because they want to turn their national communication systems into diversity spaces, but because of the aim to prevent massive concentration in transnational companies, while keeping control and concentration of media and cultural industries at national level. Therefore, the international civil society has the responsibility of supporting the CCD process, but also of exerting pressure on national governments so that the text reflects a true diversity and not just a series of homogenized national cultural industries, following the market logic but with a "local touch".

The Communication Rights in the Information Society (CRIS) campaign, for example, points out the need of achieving a balance between the references to the protection of intellectual property rights and the protection of community culture. It also highlights that the Convention should be designed not only to protect the diversity of national and regional cultural industries but also to protect the cultural diversity and communication rights of humankind as a whole.<sup>19</sup>

---

18 [portal.unesco.org/culture/en/ev.php-URL\\_ID=21907&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/culture/en/ev.php-URL_ID=21907&URL_DO=DO_TOPIC&URL_SECTION=201.html)

19 CRIS, UNESCO's CCD campaign, 2004, [www.crisinfo.org/](http://www.crisinfo.org/)

## Threats posed to cultural diversity

### *Media concentration*

The growth and consolidation of concentration in terms of the production and distribution of cultural goods and services - particularly those related to the media - is a fact and represents one of the major threats against cultural diversity.<sup>20</sup>

This process is the expression - at a cultural level - of a global dynamic of economic and political power concentration that is evidenced, among other things, through ownership control and accumulation, the growing participation of foreign capital in the national media, the centralization and homogenization of contents, the convergence among different technology sources (between telecommunications and media, between new and traditional technologies), the weakening and privatization of public services and the globalization of media markets and industries. These elements hinder the attempts to set national cultural policies focused on public interest. The combination of these processes has resulted in the consolidation of large multimedia conglomerates which control both the complete production and distribution chains (vertical integration) and the different markets within the sector (horizontal integration).

Control and concentration of media ownership<sup>21</sup> has grown considerably in recent decades, encouraged by benefits provided by scale economies aimed at the reduction of production and distribution costs, the possibility of cross-subsidies and broader profit margins. This process has taken place both at national and international level as well as in rich and poor countries.

---

20 According to the Special Rapporteur for Freedom of Expression of the Interamerican Commission on Human Rights “the concentration in the ownership of communication media conspires against plurality and diversity of expression in different sectors of society. This is a practice which seems to be growing in the hemisphere given the number of reports received by the Rapporteur in this regard.”

21 Strictly, broadcasting media ownership does not exist, since the radioelectric spectrum belongs to the Heritage of Humanity, and therefore they are only users who were granted an authorization or license by national States.

A concentration analysis cannot be reduced to gathering information about the number of media in the hands of a certain group. The capacity to produce and control the distribution of contents through other dependent or subordinated means should also be taken into account. Therefore, ownership accumulation goes alongside with a process of centralization and control of contents - information, meanings, opinions and values.

The diminished production capacities of most local radiobroadcasters and the weakness of public media concerning the release of quality productions add to a situation in which large capitals have greater competitive advantages. This problem goes beyond traditional media and affects all cultural expressions from film production to Internet contents.

In terms of linguistic diversity, for example, research carried out has proved that the Internet strengthens the global trends towards linguistic standardization<sup>22</sup> and that the US, followed by the United Kingdom, Canada, Germany and Australia are also the central countries with regards to Internet information flow.<sup>23</sup>

Regarding the audiovisual aspect, there is also a strong concentration and homogenization of contents. In the first 19 weeks of 2005, film market indicators in Argentina<sup>24</sup> showed that only 2.3% of viewers watched nationally produced films and 0.5% watched films produced in other Latin American countries; 89.2% accounted for films produced in the US and the remaining 4.8% to European films.<sup>25</sup>

---

22 *Multilingualism on the Internet*, Vol.6, N° 1, February 2004, research coordinated by Sue Wright, [www.unesco.org/shs/ijms/vol6/issue1](http://www.unesco.org/shs/ijms/vol6/issue1)

23 Barnett, George ; Bum-Soo Chon y Devan Rosen (2001), *The Structure of the Internet Flows in Cyberspace*, Networks and Communication Studies, NETCOM, Vol. 15, No. 1-2, 2001.

24 Which has an important film industry, compared to most Southern countries. In the first semester of 2005, 26 new national productions were released, compared to only 3 or 4 in Uruguay, for example.

25 Cinema Advisory Board.

The same happens all over the world: the Minister of Culture and Communication of France, Renaud Donnedieu de Vabres, has informed that “85% of cinema tickets sold around the world are connected with Hollywood films.”<sup>26</sup>

With regards to music production and distribution, the situation is similar. Seventy-five per cent of the world music market is controlled by four multimedia corporations: Vivendi concentrates 25.9%, Sony-BMG 25.2 %, EMI 12%, and AOL-Warner 11.9%.<sup>27</sup>

On the other hand, only five powerful US-based multimedia companies (AOL-Time-Warner-CNN, Viacom-CBS-MTV, Disney-ABC-ESPN, News Corp-Fox TV-DirectTV and General Electric-NBC-Vivendi-Universal)<sup>28</sup> together with Bertelsmann, in Europe, and Sony, in Japan, hold the power of the media on a global scale.<sup>29</sup>

This concentration poses a serious threat on cultural diversity and has been denounced both in Europe and Latin America. In 2004, the European Parliament requested the European Commission to prevent the growing concentration in the communication media “from leading to the creation of an oligopoly which may endanger pluralism, cultural diversity and consumers’ freedom of choice.”<sup>30</sup> In March 2005, the European Ministerial Conference on Media Policies informed on the growing concentration trend in the region and decided to take steps to protect and promote cultural and linguistic diversity in the media and to adopt specific regulations for the sector in order to “avoid their potential harmful impact on pluralism and preserve diversity in the media.”<sup>31</sup>

---

26 UNESCO Third Intergovernmental Meeting for the CCD, Paris, June 2005.

27 Observatory of Culture Industries (OIC), Undersecretary of Management and Cultural Industries of the City of Buenos Aires, 2004.

28 Some authors claim that there is a “second division” with large regional groups located in the US, but also in Japan and Europe such as Comcast and Hearst, Mc Graw Hill, Pearson, Kirch, Hachette, Prisa and others (the latter quoted by McChesney, 2004).

29 Columbia Journalism Review, *Who Owns What*, [www.cjr.org/tools/owners/](http://www.cjr.org/tools/owners/)

30 European Parliament resolution of 1 April 2004.

31 The problem is particularly serious in Eastern European countries. See an investigation of the Media Division of Council of Europe and the South East European Network for Professionalization of the Media. (SEENPM)

The concentration of cultural goods and services, including telecommunications, is also very important in Latin America and the Caribbean, where a process of consolidation and growth is currently undergoing. Levels of ownership concentration are important in the whole sector, including the press, radio, free-to-air television, paid television, basic and mobile telephony, and Internet providers. According to Guillermo Mastrini, “the control over sales/audience/subscribers, as well as the total revenues of the four largest companies of each sector range from 40% (average) in the case of the radio to more than 95% in basic and mobile telephony and paid television (average).” Excepting the radio, these groups or companies have more than 60% of the market share. The same happens globally with transnational companies based in the US, Europe and Japan, and there are groups in Latin America, such as Cisneros (Venezuela), Globo (Brazil), Televisa (Mexico) and Clarín (Argentina), which have strong control within their countries and corner a great portion of the regional market.<sup>32</sup>

Technological development and convergence have facilitated the process of multimedia expansion and have allowed the consolidation of concentration and control over the media. But while technology is the structural basis that made this globalization possible, a exclusively “free market-based” approach was in charge of providing the political and intellectual framework for putting it into practice. Latin America, for example, went through a strong privatization process in the 1990s, which with the purpose of opening the market to competition and ensuring access to better and more affordable services for the population, dismantled state-run telecommunication monopolies. In most cases, results were not those stated, and the goal of making the market competitive was not achieved: state-run monopolies were turned into private monopolies or oligopolies and throughout the process the capacity for setting social public policies was strongly eroded.

---

32 According to Mastrini’s opinion, Latin America has a subordinated role to “the global commercial system of information and communication activities”, but with “speculative trends regarding the development of these processes in central countries.” [legislaciones.amarc.org/CD/cd/1.4\\_concentracion.htm](http://legislaciones.amarc.org/CD/cd/1.4_concentracion.htm)

## What should be done?

At the different multilateral levels, it is possible to define basic actions - affirmative and defensive - which should be encouraged for the promotion and protection of cultural diversity:

- *Within the WSIS*: Maintain what has been achieved so far, avoiding regressions and at the same time re-direct efforts towards national and regional processes where specific strategies are defined.
- *At the WTO and FTAs*: Defend and maintain the cultural exception in the WTO and exclude cultural goods and services from negotiations on free trade and investment agreements.
- *At UNESCO*: Re-direct efforts in order to achieve the rapid approval of the CCD, not allowing its subordination to trade agreements.

It is of the utmost importance for civil society to support actions being taken in most Southern countries, Canada and the European Union aimed at the approval of an international instrument such as the one proposed in the Convention draft at the time this document was written, particularly if the non-subordination to other international agreements is to be sustained. Now, what should be done while the CCD is in the process of approval? The main recommendation, in this sense, is to support all efforts aimed at maintaining the “cultural exception” in agreements within the context of the WTO. Together with maintaining this exception, the idea of a “moratorium” to avoid the inclusion of cultural aspects in the negotiations of bilateral and regional free trade and investment agreements has also been suggested.<sup>33</sup>

### *Culture as a right*

Other alternatives put forward are based on resorting to existing international and regional instruments on human rights. In the Americas as well as in Europe and Africa there are mechanisms and tools to

---

33 Canada, for example has incorporated an absolute exception of culture in its bilateral negotiations with Chile, Costa Rica and Israel. Australia and Singapore followed these steps in the bilateral Free Trade Agreement signed in 2003.

denounce situations that may violate international human rights agreements, particularly those regarding freedom of information and expression.<sup>34</sup> The use of these tools could revert facts, policies and regulatory frameworks that may be incompatible with these agreements, by means of political pressure, reports and recommendations or by compulsory judicial decisions for the countries party to the treaty.

Should the prevailing perspective in the WSIS process be maintained, it would become an - at least - inefficient answer, both in terms of progress towards the development goals set by the United Nations - such as the Millennium Development goals<sup>35</sup> - as well as in what refers to ensuring cultural diversity. The challenge that remains open for Southern countries, lies then in the definition of national and regional strategies. In the spaces for dialogue that may arise from these processes there will be a need for the promotion of a new approach to the information society focused on human rights in general and on expression and communication rights, in particular.

It is essential for the WSIS to approach in a different way both the problems to be studied and the solutions proposed, which should include some of the aspects explained below.

### *Technological inevitability*

“Technological inevitability” is questioned unless accompanied by regulations and incentives designed to change current trends.

In effect, ICT allows great access to information and its dissemination, but this potentiality can be promoted or hindered by political and regulatory decisions. Some hindrances - and solutions - are the result of technological development and others of economic and political interests. As a

---

34 American Convention on Human Rights or Pact of San José, Costa Rica (entered into force in July 1978); European Convention on Human Rights (entered into force in September 1953); African Charter on Human and People's Rights (entered into force in October 1986).

35 [www.un.org/millenniumgoals/](http://www.un.org/millenniumgoals/)

matter of fact, one of the tasks to be carried out in the future is determining which hindrances - and solutions - are the result of technological development and which are the result of “human development”.<sup>36</sup>

### *Connectivity as a false paradigm*

It is essential to give the problem of digital divide and the alternatives to overcome it<sup>37</sup> a new approach. Digital inclusion strategies should be encouraged in order to promote “not only access to, but also use and social appropriation of digital technologies: for meeting the needs of the communities, and fostering public policy development, knowledge creation, appropriate content creation and capacity strengthening.”<sup>38</sup>

With regards to new ICTs, especially Internet, cost barriers, poor availability of content in local languages - or adapted to local realities - and the low stakes on capacity building, beyond the basic use of equipment and *software*, evidence the limitations of *hardware* and cable-based policies.<sup>39</sup>

The fixing of prices, rates and taxes on software and equipment “should function in favour of a real access for all economic groups”. Moreover, “the existence of different needs” should be acknowledged “and a gender perspective should be incorporated so as to ensure equal access to all men and women.”<sup>40</sup> It is essential to ensure minimum access to infrastructures and services, but it would also be necessary to implement integral measures for those to be used effectively - cost reductions for priority sectors, promotion of national technological solutions and education since childhood, among others.

---

36 Gómez, Gustavo (2004), *Study and recommendations on Radio, NITCs and rural development in Latin America*, International Workshop La Onda Rural, 20- 22 April 2004.

37 The idea of digital inclusion for social inclusion, definition proposed by civil society to mark its difference from the proposal of universal access and connectivity as a paradigm, is another example of language that has been incorporated but actually promotes a different approach.

38 *Telecentros... ¿Para qué? Lecciones sobre telecentros comunitarios en América Latina y El Caribe*, [www.tele-centros.org/tcparaque/](http://www.tele-centros.org/tcparaque/)

39 Gómez, Gustavo (2004), *op cit*.

40 APC and CRIS (September 2003), *Involving Civil Society in ICT Policy: the World Summit on the Information Society*, [www.apc.org/books/policy\\_wsis\\_EN.pdf](http://www.apc.org/books/policy_wsis_EN.pdf)

Together with infrastructure needs in Southern countries,<sup>41</sup> an active public policy is vital to enable and promote the contents being produced and transmitted by means of those technologies, just as it is essential to build the human skills necessary for their appropriation.

### *Not just consumers*

A strategy which does not limit itself to turning people into consumers of technologies and contents developed by others should be encouraged. Emphasis should be made on pursuing public policies with a view to building and strengthening capacities for the production of content and creative appropriation of ICTs, making them suitable to local needs and realities.

In this approach, capacity building should include the support to local small and medium-sized enterprises for the development of technological solutions - such as software components - more suitable than those offered by Northern country-based enterprises. This would also favour the use of local labour force as well as regional and national technological development. This approach extends to policies supporting local companies and research centres - both state and private - which create ICT-based solutions, as well as to decisions to increase state investment amounts allocated to research.<sup>42</sup>

### *New importance to broadcasting*

Information and communication policies cannot be limited to the Internet. It is necessary to include and give greater emphasis to broadcasting, which will continue to be a key component of the information society for many years to come.

---

41 Including not only communication technologies but also base infrastructure, such as electrical deployment

42 Gómez, Gustavo (2004), *Políticas Públicas de Comunicación: El ausente imprescindible - Democracia, Sociedad de la Información y Gobierno Progresista*, Montevideo, January 2004.

While 5% to 8% of Latin American population had access to Internet in 2002, 44% had access to radio and 29% to television,<sup>43</sup> according to the International Telecommunication Union (ITU).

The optimization in the use of the spectrum could open democratizing options owing to digitalization or increase money accumulation capacity, thus consolidating the power of current oligopolistic and monopolistic operators. Wherever it may still be possible, the definition of the digital patterns and standards to be used should take these possibilities into consideration. Policies, action and resources, among others, will be necessary to allow digitalization of public, community, educational and other non-commercial TV and radio.

#### *The analogical divide* <sup>44</sup>

The modernization and democratization of regulatory frameworks are essential in order to achieve an enabling environment for the access of all social sectors to radioelectrical frequencies on an equal footing, and also to limit media concentration.<sup>45</sup>

In Europe, with all the development of digital technologies in the region, the “analogical blackout” will arrive in 2015. How much longer will it take in Southern countries, where millions of people still have great difficulties to have access to electricity? It is urgent, therefore, to face and reduce the analogical divide, since the information society,

---

43 Traditional media offer an infrastructure that is already installed and which the population is familiar with. The idea of taking advantage of radio synergy with other technologies, with the Internet specifically, is becoming increasingly popular. Policy of shared access such as telecentres in relation to rural and community radios seems to be one of the effective ways to increase the possibilities of rural communities to access information.

44 “Before worrying about closing the digital divide which is just opening for some of us, we should solve the pending questions of the analogical divide”, Mexican Senator Javier Corral said, wondering if we can speak of a democratic and plural information society given the existing difficulties to face “the current legal frameworks which regulate traditional media technologies and which show the more closed-in and monopolistic economy frameworks, such as broadcasting”.

45 Which is also important for digitalization, since current successful bidders might be the only ones to benefit from its advantages, according to the digital pattern options selected.

for the majority of the population worldwide, will continue to be possible only through radio or TV for many years to come.

### *Acknowledging, defending and ensuring cultural diversity*

The processes and trends identified during the research on which this paper is based strongly question the idea that the market can solve the problems of development or ensure cultural diversity on its own. On the contrary, in the areas surveyed - telecommunication, broadcasting and cultural services in general - the market shows a natural tendency towards a growing oligopolization and monopolization, thus limiting and reducing cultural diversity.

Therefore, one of the main conclusions of this paper is that it is not enough to acknowledge cultural diversity for it to exist. It is necessary to defend, promote and ensure it through active public policies and appropriate regulatory frameworks, and that is why governments should count on political will as well as on sufficient financial and human resources for this. If action is not taken for the development of these policies and tools to oppose, or at least restrict it, Southern countries will be parties to the tendencies described and sooner or later will be forced to accept their “cultural suicide”.

The principle of the “sovereign right of Nations to adopt appropriate measures and policies in order to protect and promote the diversity of cultural expression within their territories”, stated in the CCD draft, should guide national strategies. This right is in agreement with the obligation of nations to pursue active policies and to enable the exercise of fundamental human rights, thus granting “a significant space for local cultural content, and the adoption of measures which encourage the existence of national cultural industries capable of producing and distributing said content.”

Some of the actions recommended at a regional, subregional and national level for the acknowledgement and promotion of cultural diversity should include policies for:

- Setting quotas and policies to encourage the production of national and local content, aiming at a plurality of voices and information.
- Strengthening public media by offering sufficient resources and infrastructures for the development of their work.
- Establishing effective limits to property concentration and to media content centralization.
- Establishing limitations to crossing in media ownership in different technological resources so as to control the spreading of multimedia.
- Granting sufficient powers and resources to the bodies in charge of the regulation of telecommunications and broadcasting for an effective supervision of these aspects.
- Acknowledging and promoting community media and other non-commercial forms, both in broadcasting and other ICTs.
- Modifying regulatory frameworks concerning (both analogical and digital) radio and TV for the creation of enabling environments which ensure equal access of all social sectors, particularly the more vulnerable ones, to ICTs.
- Making provisions in management plans of the radioelectrical spectrum (for analogical as well as digital use) for public, community, educational and other non-commercial means.
- Selecting the digital broadcasting pattern to be used at a national level, taking into account its contribution to democratization and to the promotion of option diversity, and avoiding greater concentration.
- Enabling civil society participation in the development, definition and implementation of information and communication policies.
- Encourage social control of cultural industries and means by civil society.

# Intellectual Property and the WIPO “Development Agenda”

SANGEETA SHASHIKANT

RESEARCHER  
THIRD WORLD NETWORK  
WWW.TWNSIDE.ORG.SG

*The intellectual property (IP) regime provides the legal means to appropriate knowledge. These are rights granted by society to individuals or organizations for their creative works, preventing others from making unauthorized use for a limited period of time. However with the recent advances in biotechnology and information and communication technology, multinational companies in developed countries are seeking to control the global knowledge economy through the use of strong IP protection and enforcement. A review of the international IP framework needs to be undertaken to understand the development implications, costs and benefits of existing policies to identify their imbalances. Future standard setting and harmonization exercises should only be undertaken after sufficient evaluation and understanding of the implications of such an exercise. The “Development Agenda” proposed at the World Intellectual Property Organization (WIPO) provides an opportunity to begin a reform process. This paper examines this initiative and argues that the “Development Agenda” should be pursued tenaciously by developing countries.*

يوفر نظام الملكية الفكرية السبل القانونية للملكية المعرفة. هذه الحقوق تمنح من قبل المجتمع لأفراد أو منظمات مقابل إنتاجهم الخلاق، مع منع الآخرين من الإستخدام غير المصرح به لفترة محددة من الزمن. ولكن مع ما حدث من تقدم موحراً في التكنولوجيا الحيوية وتكنولوجيا المعلومات والاتصالات، فإن الشركات متعددة الجنسيات في الدول المتقدمة تسعى الى السيطرة على الإقتصاد العالمي للمعرفة من خلال إستخدام متشدد لقواعد الملكية الفكرية الخاصة بالحماية والعقوبات. هناك حاجة لمراجعة الأطر الدولية للملكية الفكرية من أجل تفهم إبعكاسات ما سبق على التنمية، تكلفة وعائد السياسات القائمة للتعرف على ما تشكله من خلل في التوازن. عمليات وضع المعايير والموائمة يجب إتمامها فقط بعد التقييم الكاف وفهم ما يترتب على هذه العمليات من آثار وإبعكاسات. 'برنامج التنمية' المقترح في المنظمة العالمية للملكية الفكرية يشكل فرصة لبدأ عملية إصلاح. تدرس هذه الوثيقة هذه المبادرة وترى أن 'برنامج التنمية' يجب متابعته بكل الإصرار من جانب الدول النامية.

El régimen de la propiedad intelectual (PI) proporciona los medios legales para la apropiación del conocimiento. La PI es un conjunto de derechos concedidos por la sociedad a individuos u organizaciones por sus trabajos de creación, que previenen el uso no autorizado de su trabajo por un período limitado de tiempo. Es necesario realizar una revisión del marco internacional de la PI para comprender sus implicancias sobre los marcos regulatorios existentes y así identificar los desequilibrios. El futuro establecimiento y armonización de estándares sólo debería llevarse a cabo luego de una exhaustiva evaluación y comprensión de sus impactos. La iniciativa para una "Agenda para el Desarrollo" en la OMPI es una oportunidad ideal para los países en desarrollo para comenzar el proceso de reforma.

*Le régime de la propriété intellectuelle (PI) offre les moyens juridiques pour l'appropriation du savoir. Il s'agit des droits que la société confère à des personnes ou à des organisations sur leurs travaux créatifs, interdisant l'usage non autorisé de ceux-ci pendant une période précise de temps. Il faut entreprendre une analyse du cadre international de la PI, pour comprendre les conséquences sur le développement des cadres normatifs existants, et ainsi identifier les déséquilibres générés. Les futurs exercices de détermination et d'harmonisation des normes ne devraient se faire qu'après une évaluation minutieuse et une compréhension totale de leurs implications. L'initiative à propos d'un "Agenda de développement" de l'OMPI est l'occasion idéale pour permettre aux pays en développement d'entreprendre un processus de réforme.*

## Introduction

Knowledge has an important role in development. Today economies of the technologically advanced countries are knowledge based, affirming the conclusion that knowledge is a major engine of economic growth and thus critical for development. Knowledge is such that the use of a piece of knowledge does not diminish another person's use of that piece of knowledge.<sup>1</sup> As Thomas Jefferson put it, "he who receives an idea from me, receives instruction himself without lessening mine". Another characteristic is that, once in the public domain, no one is restricted from using that knowledge.

The intellectual property (IP) regime provides the legal means to appropriate knowledge. IP are rights granted by society to individuals or organizations for their creative works, preventing others from making unauthorized use of their work for a limited period of time. It is based on the rationale that IP protection will create incentives for the generation of knowledge. That is, allow the innovator an opportunity to recoup its costs and make a fair return. These rights take many forms *i.e.* patents, copyrights, industrial designs, trademarks, geographical indications and trade secrets. The grant of IP rights is premised on the belief that this right must be balanced with the need to protect public interests, especially where the social costs exceed private returns.

However as companies - especially multinationals in developed countries - realize the potential returns of appropriating knowledge, particularly with the recent advances in biotechnology and information and communication technology (ICT), many are seeking to control the Knowledge Economy through the use of strong IP protection and enforcement.

This was the primary motivation of the industry sector in the United States (US), the European Union (EU) and Japan (which dominate the world's software, pharmaceutical, chemical, entertainment and many other industries) when it aggressively lobbied for the inclusion of minimum IP

---

1 World Bank (1998), *World Development Report 1998/1999. Knowledge for Development*.

standards as part of the single undertaking during the General Agreement on Tariffs and Trade (GATT) Uruguay Round and masterminded the crafting of the Trade Related Aspects of Intellectual Property Rights Agreement (TRIPS): they are the major beneficiaries of the TRIPS system. Developing countries, on the other side, are its victims, as they primarily are net importers or users of technology mainly supplied by the developed countries.

## Impact of IP systems on developing countries

Recent studies show the high extent of costs incurred by developing countries following obligations under the TRIPS Agreement. The former chief of trade policy research in the World Bank, Michael Finger, found that through the TRIPS Agreement, developing countries took on as legal obligation a cost of USD 60 billion per year, but there is no legal obligation in the agreement on any member to provide anything in exchange.<sup>2</sup> Another World Bank report estimates that the net annual increase in patent rents resulting from TRIPS for the top six developed countries in this field will be USD 40 billion (with the top beneficiaries being the United States with USD 19 billion, Germany USD 6.8 billion, Japan USD 5.7 billion, France USD 3.3 billion, United Kingdom USD 3 billion and Switzerland USD 2 billion). Developing countries that will incur major annual net losses include South Korea (USD 15.3 billion), China (USD 5.1 billion), Mexico (USD 2.6 billion), India (USD 903 million) and Brazil (USD 530 million).<sup>3</sup> In addition, there are financial and human resource costs for administering and enforcing IP laws and policies, requiring law reform, enforcement agencies and legal expertise that have to be borne by the developing country.

Besides the redistributive impact, extension of IP rights can have negative impacts on the domestic research and development as it restricts

---

2 Finger, J.M. (2002), *The Doha Agenda and Development: a view from the Uruguay Round*, Asian Development Bank, Manila.

3 World Bank (2002), *Global Economic Prospects and the Developing Countries*, Washington DC.

the route of reverse engineering, imitation or the making of minor improvements that had been crucial in the development of technological capabilities in the now advanced countries. Developed countries in their early stages of development were resistant to applying strong IP standards as it hindered their domestic innovation and development.<sup>4</sup> An option that is no longer available to developing countries following the TRIPS Agreement. A study conducted by the Commission on Intellectual Property Rights set up by the British government concluded that “those developing countries that have acquired significant technological and innovative capabilities, there has generally been an association with *weak* rather than *strong* forms of IP protection in the formative period of their economic development.”

The monopoly rights granted to the IP holder also leads to widespread monopoly pricing and other restrictive behaviours by IP holders, particularly the multinational companies. This, in turn, leads to problems such as high prices and limited access to essential goods such as medicines and educational materials, limited access to information and technology and inputs that are necessary for production. All these are tools which developing countries must possess to expedite their development process.

These are but some of the challenges facing developing countries today. While they are still managing with the implementation of the TRIPS Agreement, TRIPS-plus standards are being imposed on them through World Intellectual Property Organization’s standard setting and harmonizing exercises.

## World Intellectual Property Organization (WIPO)

Prior to the TRIPS Agreement, WIPO was the primary specialized agency dealing with IP issues. In 1970, WIPO replaced the Bureaux Internationaux Reunis pour la Protection de la Propriété Intellectuelle (BIRPI), the secretariat to the Paris Convention for the Protection of

---

4 Chang, H.J. (2001), *Intellectual Property Rights and Economic Development. Historical Lessons and Emerging Issues*, Third World Network, Malaysia.

Industrial Property and the Berne Convention for the Protection of Literary and Artistic Works at that time. In 1974, it became a “specialised agency of the UN”.

The lack of an enforcement mechanism propelled key industry players, particularly from the US, to shift the IP regulatory framework from WIPO to GATT, which had an enforcement mechanism and would permit the use of trade remedies to enforce IP standards.<sup>5</sup>

The advent of TRIPS created a dilemma for WIPO as it diminished its importance as the principal organization dealing with IP regulation. To preserve its relevance, in 1995 WIPO entered into a cooperation agreement with the World Trade Organization (WTO) to provide technical assistance to developing country members of the WTO on TRIPS related issues. WIPO also had to show the developed countries, particularly the US and its industry, that it still was the IP standard setting organization and could deliver results. This became particularly more important as about 90% of its funding comes from the private sector by way of fees paid by patent applicants (most of which are from developed countries) under the Patent Cooperation Treaty (PCT).<sup>6</sup>

A WIPO publication titled *Intellectual Property - A Power Tool for Economic Growth*, by Director-General Dr. Kamil Idris, gives an insight into the perspective prevailing at WIPO. The organisation believes that “the absence of an IP culture results in a stagnant or receding economy [and] a reduction in creativity and inventiveness”. It also states that “IP can only thrive in a culture in which its importance is fully understood and accepted and in which it is protected by laws that are vigorously enforced. WIPO’s mission will continue to be to work for robust IP protection and enforcement to ensure its continuing vitality.”<sup>7</sup>

---

5 See Drahos, P. and J. Braithwaite (2004), *Who owns the Knowledge Economy? Political Organizing Behind TRIPS*, [www.thecornerhouse.org.uk/item.shtml?x=85821](http://www.thecornerhouse.org.uk/item.shtml?x=85821)

6 Shashikant, S., “WIPO has failed in its development mission” in *Third World Resurgence, Humanizing Intellectual Property: Developing Countries Launch New Initiative*, Third World Network, Issue No. 171-172, 2004, p. 41.

7 Idris, K. (2003), *Intellectual Property. A Power Tool for Economic Growth*, [www.wipo.int/freepublications/en/intproperty/888/wipo\\_pub\\_888\\_1.pdf](http://www.wipo.int/freepublications/en/intproperty/888/wipo_pub_888_1.pdf)

Today WIPO administers diverse IP rules and is the principal organization actively involved in the development of intellectual property standards and rules. In pursuing what it sees its mandate to be, *i.e.* strong IP protection, WIPO has set specific TRIPS-plus agendas,<sup>8</sup> such as the “WIPO Patent Agenda” and “WIPO Digital Agenda”, to bring the standards closer to IP systems already in place in developed countries.

## TRIPS-plus Agendas at WIPO

The “WIPO Patent Agenda”,<sup>9</sup> an initiative begun by WIPO’s Director General in 2001, aimed to create an international patent system geared towards the upward development and harmonization of patent laws. It is designed to benefit the users of the patent system, *i.e.* the patentees, which are mostly from developed countries - the US, Japan and Europe. This “Patent Agenda” is expected to disseminate patent systems modelled on developed countries to developing countries.<sup>10</sup>

There are also many activities taking place in WIPO related to the “Information Society”. Among the most important are the “WIPO Copyright Treaty” (WCT)<sup>11</sup> and the “WIPO Performances and Phonograms Treaty” (WPPT),<sup>12</sup> known together as the “WIPO Internet Treaties”, which are part of the “WIPO Digital Agenda”<sup>13</sup> announced

---

8 TRIPS set minimum IP standards for WTO members, which means that subsequent IP agreements negotiated among and/or involving WTO members can only create higher standards - commonly known as “TRIPS-plus”. The TRIPS-plus concept covers both those activities aimed at increasing the level of protection for right holders beyond that which is given in the TRIPS Agreement and those measures aimed at reducing the scope or effectiveness of limitations on rights and exceptions. Such intellectual property rules and practices may be adopted at the multilateral (*e.g.* WIPO), plurilateral, regional or at the national level.

9 [www.wipo.int/patent/agenda/en/](http://www.wipo.int/patent/agenda/en/)

10 The US model, in particular, has been criticized as “dysfunctional” and in need of reform by many prominent groups and individuals. See *Third World Resurgence, op cit.* See also Jaffe, A. and J. Lerner (2004), *Innovation and its discontents*, Princeton University Press.

11 [www.wipo.int/treaties/en/ip/wct/index.html](http://www.wipo.int/treaties/en/ip/wct/index.html)

12 [www.wipo.int/treaties/en/ip/wppt/index.html](http://www.wipo.int/treaties/en/ip/wppt/index.html)

13 [www.wipo.int/copyright/en/digital\\_agenda.htm](http://www.wipo.int/copyright/en/digital_agenda.htm)

in September 1999 by the Director General at the *WIPO International Conference on Electronic Commerce and Intellectual Property*. The text of these treaties draws upon studies submitted by national governments, in particular the US, EU and Japan.<sup>14</sup>

The WCT is the most controversial and has been very strongly criticised as it goes beyond what is required under TRIPS Agreement. Some critics have suggested that this treaty is a way of ensuring that US copyright standards, which face strong opposition even in the US itself, become international standards which would thus have to be implemented worldwide. For example, the WCT requires countries to provide for effective legal remedies against circumvention of technological protection measures which are promoted by copyright industries in response to the digital technology which allows for the creation of unlimited, perfect and costless copies and their instant distribution worldwide. Critics argue this will reduce the ability of teachers, students, researchers and consumers, particularly from developing countries, to access information.

Studies have shown that *weak* copyright enforcement has a major impact on diffusion of knowledge and knowledge-based products throughout the developing world. For example, in many poor countries, only through unauthorized copying have they been able to access copyrighted works at a fraction of the price. The US in the 19<sup>th</sup> century, during its early stages of development, justified its persistent refusal to grant copyright protection to foreign authors on the grounds that this was a necessity to meet the nation's needs for knowledge and enlightenment.

It is often argued by developed countries that favour TRIPS-plus models that ratification or accession to WIPO treaties is voluntary. However, the terms of recent bilateral free trade agreements require developing countries to become a party to many WIPO treaties.<sup>15</sup>

---

14 Ficsor, M. (2002), *The Law of Copyright and the Internet: The 1996 WIPO Treaties, their interpretations and Implementation*, Oxford University Press.

15 For example, see the IP Chapter in US-Singapore Free Trade Agreement, US-Morocco FTA, US-Chile FTA available at [www.ustr.gov/Trade\\_Agreements/Bilateral/Section\\_Index.html](http://www.ustr.gov/Trade_Agreements/Bilateral/Section_Index.html)

WIPO is also engaged in providing technical and legal assistance to developing countries to implement the TRIPS agreement. In delivering technical assistance its focus is increased protection and enforcement of IP rights. This is evidenced by WIPO's website, which stresses that its technical assistance programmes "concentrate on the building up of the legal and administrative infrastructure required to protect IP rights."<sup>16</sup> This includes establishing and modernizing intellectual property systems.

WIPO's pro-*strong* IP protection position has led many to criticise its technical assistance programmes as emphasizing more on the benefits of the intellectual property and little on the costs.<sup>17</sup> It is also accused of failing on some occasions to inform developing countries of the flexibilities that are available while implementing the TRIPS Agreement. For example, according to a report by Médecins Sans Frontières (MSF), WIPO failed to inform Cambodia of the flexibilities that are available (*e.g.* that it was not required to grant patent protection to pharmaceutical products until 2016) under the TRIPS Agreement and the Doha Declaration on Public Health.<sup>18</sup>

The WIPO Secretariat's role and activism in promoting strong IP rights in favour of some developed countries, such as the US, and certain industry groups is particularly problematic. The prevailing perception is that the Secretariat is acting as "an institution with its own agenda".

The Secretariat often seeks to influence negotiation outcomes to its benefit or to the benefit of its financial sponsors. Recently, the Secretariat organized what the WIPO statement described as "informal consultations on the future work of WIPO's Standing Committee on Patents (SCP)", which is "working to build consensus on a treaty that seeks to harmonize patent laws around the world". Only selected officials from specific countries were invited to the consultation. A final statement coming out of this meeting supported a proposal submitted

---

16 [www.wipo.int/eds/en/](http://www.wipo.int/eds/en/)

17 See *Third World Resurgence*, *op cit.*

18 MSF Briefing Paper (2003), *Doha Derailed: A Progress Report on TRIPS and Access to Medicines*, [www.accessmed-msf.org/documents/cancunbriefing.pdf](http://www.accessmed-msf.org/documents/cancunbriefing.pdf)

by US and Japan on the future work programme of the SCP, although this proposal had been rejected several times before by many WIPO members. The Secretariat, in actual fact, was only supposed to conduct informal consultations to decide on the dates of the SCP meeting. Many developing country officials rejected the outcome of the consultations and charged privately that WIPO had overstepped its mandate by working on substantive issues and that the meeting was arranged in a way that sidelined those countries opposed to the US-Japan-Europe harmonization proposals.<sup>19</sup>

All these developments have given rise to many calls from member States, public interest non governmental organizations (NGOs) and prominent individuals for the reform of global intellectual property systems, generally, and WIPO, specifically.

In November 2004, 500 renowned economists, Nobel laureates, legal experts, academics, scientists and public citizen groups adopted a “Geneva Declaration on the Future of the World Intellectual Property Organization” and urged WIPO to embrace a more balanced agenda for promoting creativity and technology transfer in line with public interest.<sup>20</sup>

The Declaration called for moratorium on new treaties and harmonization of standards that expand and strengthen monopolies, strangle policy space and further restrict access to knowledge. It asked WIPO to consider the creation of bodies to systematically address the control of anticompetitive practices. It endorsed the creation of Working Groups on technology transfer and development, indicated support for a Treaty on Access to Knowledge and called for a fundamental reform of WIPO’s technical assistance programmes and amendment of the WIPO Convention to include explicit language on the development dimension.

---

19 See [www.wipo.int/meetings/en/details.jsp?meeting\\_id=7128](http://www.wipo.int/meetings/en/details.jsp?meeting_id=7128) for relevant documents on the SCP meeting.

20 [www.cptech.org](http://www.cptech.org)

## The WIPO “Development Agenda”

At the 2004 WIPO General Assembly (27 September - 5 October) a group of 14 developing countries, namely Argentina, Bolivia, Brazil, Cuba, the Dominican Republic, Ecuador, Egypt, Iran, Kenya, Peru, Sierra Leone, South Africa, Tanzania and Venezuela - known as the Group of Friends of Development (FOD) - co-sponsored a proposal for the “Establishment of a Development Agenda for WIPO”.<sup>21</sup>

The proposal received overwhelming support from the floor during the General Assembly (GA) from a large number of developing countries including Egypt (on behalf of the African Group) and Sri Lanka (on behalf of the Asia Group), India, Pakistan, the Philippines, China, Oman, Senegal, Ethiopia, Benin, Peru, Colombia, El Salvador, Nicaragua, Uruguay, Trinidad and Tobago and Jamaica.<sup>22</sup>

The major developed countries were not as supportive of action on a Development Agenda (DA) in WIPO. Group B (comprising industrialized countries) indicated during the GA that WIPO had been doing enough for the developing countries. The US, in particular, argued that the DA proposal appeared to be premised on the misconception that strong IP protection might be detrimental to global development goals and that WIPO had disregarded development concerns.<sup>23</sup>

Following the GA, three Inter-sessional Inter-governmental meetings (IIM) were to discuss proposals submitted by member States.<sup>24</sup>

At the first IIM the FOD Group presented a detailed reform plan to ensure that “WIPO activities and IP discussions are driven towards development-oriented results” and to ultimately mainstream the “development dimension” in all WIPO’s activities.<sup>25</sup> The proposal is also

---

21 WIPO Document WO/GA/31/11.

22 Khor, M., “United Nations: Strong support from South for WIPO ‘development agenda’,” South North Development Monitor (SUNS) #5658, 5 October 2004.

23 *Ibid.*

24 First IIM: April 11-13; Second IIM: 20-22 June; Third (also final) IIM: 20-22 July, 2005.

25 WIPO Document IIM/1/4.

based on the premise that, being a UN agency, development concerns should be given emphasis in WIPO's activities.

The proposal emphasizes the relevance of the United Nations Millennium Development Goals (MDGs) which established a firm commitment by the international community to address the significant problems that affect developing and least developed countries. The Plan of Implementation agreed at the World Summit on Sustainable Development (WSSD), the Declaration of Principles of the first phase of the World Summit on the Information Society (WSIS), the Programme of Action for the Least Developed Countries (LDCs) for the Decade 2001-2010, the Monterey Consensus, the Johannesburg Declaration on Sustainable Development, the Sao Paulo Consensus adopted at UNCTAD XI and the WTO Doha Development Round have all also placed development at the heart of their concerns and actions.

The FOD proposal is critical of the way WIPO has focused on the diffusion of standardized approaches to IP policies that uncritically assume that development follows suit as intellectual property rights (IPRs) protection is strengthened, although the current worldwide debate is questioning the appropriateness of such an approach. WIPO discussions have overlooked the implications of increased and standardized IPR protection in terms of access to and diffusion of science, technology and related knowledge and know-how to developing countries, states the proposal.

The FOD Group further states in its proposal that the DA initiative promotes a "critical examination of the implications for developing countries of the adoption of increased IPR protection, rather than approach this highly controversial issue as if it were governed by absolute truths solely under the one dimensional perspective of the private rights holders, ignoring the broader public interest."

While recognizing that IP is relevant, the FOD Group stresses that IP is not an end in itself, but a means for promoting public interest, innovation, access to science and technology and the promotion of diverse national creative industries - in order to ensure material progress and

welfare in the long run. It is incumbent upon WIPO, therefore, to effectively incorporate development promotion as one of its main goals, as already foreseen by the UN-WIPO Agreement 1974.

To establish a “Development Agenda” for WIPO, the FOD submission contains four concrete proposals:

- A review of the mandate and governance of WIPO;
- Promotion of pro-development norm-setting in WIPO;
- Establishing principles and guidelines for WIPO’s technical assistance work and evaluation;
- Establishing guidelines for future work on technology transfer and related competition policies.

Several regional groupings of developing countries, including Africa, Asia and Latin America and the Caribbean, welcomed the initiative for a Development Agenda in WIPO and expressed support for parts of the FOD proposals.

The Group of 77 developing countries (G77), at the Second South Summit, also called for “WIPO, as a UN Agency, to include in all its future plans and activities the development dimension”.<sup>26</sup>

The FOD proposals have also enjoyed immense support from the public interest NGOs. When the DA proposal was originally presented, an NGO statement signed by over 25 organizations described the DA initiative as an unparalleled opportunity for all developing countries and development oriented NGOs to put on WIPO’s agenda the issue of development and urged developing countries to support it.<sup>27</sup>

Prior to the third IIM, about 132 public interest NGOs from the North and South released a statement endorsing many principles in the FOD proposal.<sup>28</sup>

---

26 Second South Summit, Doha, Qatar, 12-16 June 2005, *Doha Plan of Action*.  
[www.faologe.ch/Doha%20Plan%20of%20Action%20\(English\).pdf](http://www.faologe.ch/Doha%20Plan%20of%20Action%20(English).pdf)

27 [www.cptech.org](http://www.cptech.org)

28 [www.ipjustice.org](http://www.ipjustice.org)

## North - South differences

In contrast to the wide ranging reform plan submitted by the FOD Group, the developed countries view the “Development Agenda” in the limited context of technical assistance.<sup>29</sup> Generally, the position of “Group B” at the first IIM was that WIPO already had a development dimension, participation of developing countries in all activities of WIPO was ensured, and WIPO was providing a lot of technical assistance, which could however be improved. They also seemed to favour the use of the existing Permanent Committee on Cooperation for Development Related to Intellectual Property (PCIPD) to take up technical assistance and development issues.

Differences along mainly North-South lines continued at the second IIM. The main DA proponents and several other developing countries were in favour of organizing discussions at the IIM in a more structured manner so that clear recommendations can be presented to the WIPO 2005 GA. However, other member states, particularly from the developed countries, were of the view that the PCIPD would be a more appropriate forum for discussions.

The FOD Group fear that their initiative would be marginalized if the DA discussion is shunted off to a body which has traditionally dealt only with technical assistance matters and has a low profile. They and several other developing countries would like the DA initiative to have high priority in WIPO and influence over all its activities and committees. This would

---

<sup>29</sup> The US submitted a proposal that WIPO continue to “promote intellectual property round the world” as its way of fostering development. Its suggestion is the creation of a “WIPO Partnership Program”, an Internet-based database to bring together “donors and recipients of IP development assistance”. The US proposal advocates that WIPO should concentrate on promoting intellectual property and should leave development concerns to other UN agencies. See WIPO Document IIM/1/2. The UK’s first proposal, submitted during the first IIM, is more on how WIPO’s technical assistance can be managed. In its second proposal, UK suggested that WIPO’s Permanent Committee on Cooperation for Development Related to Intellectual Property (PCIPD) be reinvigorated. The proposal stressed its belief that “the effects of this proposal will significantly improve the way that WIPO looks at IP and development”. See WIPO Document IIM/1/5 and WIPO Document IIM/2/3.

not be possible if the initiative is placed in the PCIPD. They prefer the initiative to come under the direct oversight of the GA, which would give it a higher visibility and priority. The dispute over “forum” became *the* focal issue at the third IIM and led to the collapse of discussions on the future work plan of the DA.

The US and UK were the only two proposals submitted by the developed countries and received strong support from “Group B”. While development experts may not view these proposals as being constructive for the DA initiative, the process is seen to be “significant in its engagement of developed countries in the IP and development debate”.<sup>30</sup>

In this watershed event more proposals were received from developing countries - Mexico, Bahrain, African Group<sup>31</sup> - taking the opportunity to present their views on the role of IP in development in the WIPO context as well. The proposals by Mexico and Bahrain (co-sponsored by Jordan, Kuwait, Lebanon, Libyan Arab Jamahiriya, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates and Yemen) have been criticized as being limited in scope and perspective.<sup>32</sup> Both proposals follow the tone set by the US proposal.

The African Group’s DA plan for WIPO recognizes IP as one mechanism among many for bringing about development, which should be complementary, and not detrimental, to individual national development efforts. Towards this objective, the existing international IP architecture should be made more democratic and responsive to the needs and aspirations of developing and least developed countries, especially in matters that are vital to the needs and welfare of their citizenry. The right to qualitative life, access to vital requirements such as medicines, food, knowledge and prospects for their intellectual and cultural development, should neither be unduly compromised nor hampered by rigid

---

30 South Centre and CIEL IP Quarterly Update: “Second Quarter 2005 Intellectual Property and Development: Overview of Developments in Multilateral, Plurilateral and Bilateral Fora”.

31 WIPO Doc. IIM/1/3, WIPO Doc. IIM/2/2, and WIPO Doc. IIM/3/2 respectively.

32 South Centre and CIEL IP Quarterly Update, *op cit*.

and indiscriminate enforcement of IP rights. The African Group proposal further elaborates on seven specific areas for consideration at the IIM, that is, technical assistance, transfer of technology, reforming the African informal sector, small and medium enterprise, information and communication technology, human resources development and the brain drain, use of flexibilities in international instruments and norm setting.

As discussion on FOD proposals intensified, major developed countries either opposed or cautiously showed limited and qualified support for the FOD proposals. In particular, the US appeared generally opposed to any FOD proposal put forward. The US disagreed with the proposal to add a “Standing Committee on Transfer of Technology” as this issue could be addressed within the existing framework. It also gave examples of various initiatives as evidence that WIPO is addressing its responsibility pertaining to development. It did not even support a “Treaty on Access to Knowledge” as it disagreed with its premise and strongly believed that IP has been the strongest driver of technology and so such a treaty is not necessary.<sup>33</sup>

The cool response by developed countries to the “Development Agenda” in general, and the FOD proposals in particular, was seen by several developing countries as an attempt to undermine the initiative. Developing countries wanted the third IIM (which had been tasked with preparing the final report for consideration at the 2005 GA) to make a recommendation for the continuation of the IIM process, which shall report to the 2006 GA. Since at the GA many issues are covered, a report with concrete recommendations on the future work plan of the DA would have provided the momentum needed to take this matter

---

33 This led Brazil to express its frustration that “the US seems to reject anything that can bring changes to this Organization”. It emphasized that “Access to Knowledge is the power tool for development” and noted that once information becomes the property of private corporations it will no longer be accessible to people worldwide and this is of particular concern to developing countries which will not have access to the information. See Shashikant, S. “Development: WIPO ‘development’ meet ends without deciding future work”. South-North Development Monitor (SUNS) #5850, 26 July 2005.

forward effectively. However the dispute over “forum” continued to be *the* sticky point at the third (also the final) IIM and hampered discussions on other substantive proposals.

A day before the end of the final IIM session, the EU made a turnaround in its position in support of the renewal of the IIM process.<sup>34</sup> Up until then, the EU had joined in with the US and other developed countries to push PCIPD as the venue for following up on the DA debate. The EU’s position isolated the US, Japan and Canada which were still in favour of PCIPD. The EU’s agreement was, however, qualified by requiring that the IIM process be financed essentially by any funding set aside in the 2006-2007 Programme and Budget for the PCIPD. It also proposed that a subset of proposals should be considered during the IIM process and this subset should be kept to a limited number, comprising those issues that are “ripe for harvest”. The proposals it considered to be “ripe for harvest” were mostly related to technical assistance submitted by WIPO members. Its qualified agreement effectively attempts to convert the IIM process into a forum for discussion about technical assistance matters. It is not clear what the fate of PCIPD would be once the funding is used to finance the IIM process and what would be the fate of other DA proposals that have been submitted if discussions on technical assistance proposals continue for a long time.

Informal, closed-door, small-group meetings were held to resolve these differences and to agree on the content of the report to be submitted to the GA. It was however difficult to consider other substantive proposals and its submission to the GA if the issue of “forum” (proposal supported by developed countries) could not be resolved.

Several developed country delegations, such as Canada, in the closed-door meetings were not in favour of renewing the IIM process but during the plenary session were cautious about rejecting a recommendation to the GA to renew the IIM process and so tactfully stated that the GA should make the decision about the forum.

---

34 For details on EU position see WIPO Doc. IIM/3/3 Prov.

Strong statements and appeals were made by many developing countries in favour of recommending that the GA renew the IIM process. These include China, Chile, Sri Lanka, South Africa, Algeria, Iran, Nigeria, Bolivia, Colombia and Jordan. Morocco, on behalf of the African Group, supported the proposal to renew the mandate of IIM, saying that their proposals had not yet been discussed at the IIM, and that it should be dealt by IIM as with other proposals. Senegal stressed the need for all proposals to be treated on equal footing. Almost all Arab countries supported the renewal of mandate.

India, in support of the renewal, said that as the meeting had not seriously discussed any single proposal, it was logical to continue with the IIM. This was the “customary thing to do”. To leave open the question of the “forum” for the future was baffling as it was not customary to change horses midstream. “We were asked to change from a horse [referring to the IIM process] to a mule [referring to the PCIPD] and so we remain at a loss why these suggestions were made.”

The final IIM ended late without agreement on recommendations to transmit to the WIPO GA on how to proceed with the initiative of establishing a “Development Agenda” for WIPO. As a result of the inability to reach substantive agreement, the meeting only agreed that the factual reports of the three IIMs, including the statements of all delegates, would be submitted to the GA.

The breakdown in discussions has led to speculations that it was deliberate.<sup>35</sup> A few developed countries decided to block consensus, as their intention was to use the developing countries’ desire to extend the IIM’s mandate as a trade-off for developed countries’ desire to move ahead with negotiations of their proposals, which have been rejected on several occasions and are currently at a standstill at the Standing Committee on Patents.

---

35 Shashikant, S. (2005), *op cit*.

According to this scenario, this attempt at “trading off” would be made at the GA meeting. It was thus important for no concrete decision on future work to be made at the IIM and to pass on the unresolved matter to the GA (beginning 26 September 2005) for it to decide.

## WSIS and the WIPO Development Agenda

In December 2003, governmental representatives gathered in Geneva for the World Summit on the Information Society (WSIS) and adopted a Declaration of Principles<sup>36</sup> where they declared their “common desire and commitment to build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights.”

Due to pressure by major developed countries, the WSIS documents do not address the widely recognized problem - that intellectual property rights can be a barrier to achieving the general goals set out in the Declaration of Principles. The only explicit reference to intellectual property in WSIS Declaration of Principles is in paragraph 42, in the “Enabling environment” section: “Intellectual Property protection is important to encourage innovation and creativity in the Information Society; similarly, the wide dissemination, diffusion, and sharing of knowledge is important to encourage innovation and creativity. Facilitating meaningful participation by all in intellectual property issues and knowledge sharing through full awareness and capacity building is a fundamental part of an inclusive Information Society.”

---

36 [www.itu.int/wsisis/docs/geneva/official/dop.html](http://www.itu.int/wsisis/docs/geneva/official/dop.html)

In the “Access to information and knowledge” section of the WSIS Plan of Action<sup>37</sup> it is stated that “Information Communication Technologies allows people, anywhere in the world, to access information and knowledge almost instantaneously. Individuals, organizations and communities should benefit from access to knowledge and information”. But it also states that access to information and knowledge should be done while “respecting intellectual property rights (IPRs) and encouraging the use of information and sharing of knowledge”.

While the WSIS governmental documents do not question existing IP regimes, a declaration issued by civil society organizations<sup>38</sup> at the first phase of the WSIS rejecting the Summit’s official outcomes, expressed that “limited intellectual monopolies, also known as intellectual property rights, are granted only for the benefit of society, most notably to encourage creativity and innovation” and recommended that the UN “carry out a fundamental review of the impact on poverty and human rights of current arrangements for recognition and governance of monopolised knowledge and information, including the work of WIPO and the functioning of the TRIPS agreement”. The declaration also stresses that “efforts should be made to ensure that limited intellectual monopolies stimulate innovation and reward initiative, rather than keeping knowledge in private hands until it is of little use to society.”

The first phase of the WSIS requested the UN Secretary-General to establish a Working Group on Internet Governance (WGIG). The WGIG was asked to present the result of its work in a report “for consideration and appropriate action for the second phase of the WSIS in Tunis 2005”. In its report the WGIG states, with reference to IPRs: “While there is agreement on the need for balance between the rights of holders and the rights of users, there are different views on the precise nature of the balance that will be most beneficial to all stakeholders, and whether the current IPR system is adequate to address the new

---

37 [www.itu.int/wsis/docs/geneva/official/poa.html](http://www.itu.int/wsis/docs/geneva/official/poa.html)

38 WSIS Civil Society Plenary, 8 December 2003, *Shaping Information Societies for Human Needs - Civil Society Declaration to the World Summit on the Information Society*, Geneva. [www.smsitunis2005.org/plateforme/pdf/civil-society-declaration-en.pdf](http://www.smsitunis2005.org/plateforme/pdf/civil-society-declaration-en.pdf)

issues posed by cyberspace. On the one hand, intellectual property rights holders are concerned about the high number of infringements, such as digital piracy, and the technologies developed to circumvent protective measures to prevent such infringements; on the other, users are concerned about market oligopolies, the impediments to access and use of digital content, and the perceived unbalanced nature of current IPR rules.”

In summary, even if discussions about IP issues have deliberately been left out of the WSIS process and the major developed countries have, until now, been successful in confining IP discussions to WIPO and the WTO, the WSIS process has much to contribute and plays a crucial role in the shaping of a new IP regime.

The Civil Society Patents, Copyrights and Trademarks (PCT) Group<sup>39</sup> at WSIS has expressed that, since the WIPO is a specialized agency of the UN, it may rightfully receive input from the WSIS, a general UN Summit. In particular, the WSIS process should contribute to the initiative for a “Development Agenda”. The WSIS should recommend that WIPO adopt patent and copyright policies and positions that would concur with the WSIS Declaration and that facilitate the implementation of the WSIS Plan of Action.

## Conclusion

Intellectual property impacts all aspects of life including access to essential items such as medicines, educational materials, inputs for production, etc. For example, an extended copyright protection term which goes beyond what is required under the TRIPS Agreement would protect materials for an extended period of time although it should have fallen into public domain and be available to all without any payment of royalty.

It is thus important to have an IP regime that is balanced. The current national and international IP frameworks are very much tilted in favour of the IP holders, much to the detriment of public interest and

---

39 [www.wsis-pct.org/](http://www.wsis-pct.org/)

even the public domain. Developing countries are the most affected by its negative implications.

Therefore, a review of the international IP framework needs to be undertaken to understand the development implications, costs and benefits of the existing frameworks and identify the imbalances and where appropriate incorporate flexibilities, exceptions and limitations into the frameworks. Future standard setting and harmonization exercises should only be undertaken after sufficient evaluation and understanding of the implications of such an exercise.

At WIPO the “Development Agenda” initiative provides developing countries with an ideal opportunity to begin the process of reform. Developing countries should tenaciously pursue this initiative. ■

## REFERENCES

Commission on Intellectual Property Rights (CIPR), “Integrating Intellectual Property Rights and Development Policy.” Final Report. London, September 2002. [www.iprcommission.org/graphic/documents/final\\_report.htm](http://www.iprcommission.org/graphic/documents/final_report.htm)

Musungu, S.F. and G. Dutfield (2003), *Multilateral Agreements and a TRIPS-Plus world: The World Intellectual Property Organization (WIPO)*, Quaker UN Office, Geneva. [www.geneva.quino.info/pdf/WIPO\(A4\)final0304.pdf](http://www.geneva.quino.info/pdf/WIPO(A4)final0304.pdf).

World Intellectual Property Organization (WIPO), [www.wipo.int/](http://www.wipo.int/)

# Risks and Opportunities for Access to Knowledge

JAMES LOVE

DIRECTOR  
CONSUMER PROJECT ON TECHNOLOGY (CPTECH)  
WWW.CPTECH.ORG

*The development of the Internet and other information technologies (IT) has led to a dramatic increase in the importance of knowledge goods and services, in the realms of terms of economic, political, cultural and personal life. None of these developments are taking place in a social or political vacuum. Commercial interests are organized to influence governments and global intergovernmental bodies and the broader public is increasingly being empowered by the new IT to play a more important role in such policy discussions. There are many proposed and adopted measures to vastly increase the degree to which knowledge can be owned and controlled, as there also are many proposals, initiatives and experiments to expand access to knowledge. Some of the proposals and initiatives involve intellectual property rights while others involve policies that would support or undermine new methods of collaboration or new business models for creating and disseminating knowledge goods.*

تطور الإنترنت وتكنولوجيات المعلومات الأخرى أدى إلى ارتفاع كبير في أهمية خدمات وسلع المعرفة، سواءً في مجالات الإقتصاد، السياسة، الثقافة أو الحياة الشخصية. ولا تتم أياً من هذه التطورات في فراغ إجتماعي أو سياسي. المصالح التجارية تنظم صفوفها للضغط على الحكومات والهيئات الدولية الحكومية والعامّة بشكل أوسع تحظى ويشكل متنامي بالقدرة من خلال تكنولوجيات المعلومات الجديدة للعب دور أكثر أهمية في مناقشة هذه السياسات. هناك العديد من الإجراءات المقترحة أو المطبقة للرفع الكبير من درجة امتلاك أو السيطرة على المعرفة، كما توجد العديد من المقترحات، المبادرات والتجارب للتوسع في النفاذ على المعرفة. بعض المقترحات والمبادرات تتضمن حقوق الملكية الفكرية، في حين تتضمن أخرى سياسات تدعم أو إضعاف الآليات الجديدة للتعاون أو نماذج قطاع الأعمال الجديدة لزيادة ونشر السلع المعرفية.

El desarrollo de Internet y de otras tecnologías de la información ha conducido a un dramático aumento de la importancia de los bienes y servicios en el área económica, política y cultural, así como en la vida personal. Los intereses comerciales están organizados para influir a los gobiernos y a las instituciones intergubernamentales internacionales. Al mismo tiempo, la ciudadanía se ve potenciada por las nuevas tecnologías a un nivel cada vez mayor para jugar papeles más protagónicos en estos debates. Este documento analiza medidas propuestas y adoptadas para aumentar el nivel al que el conocimiento puede ser apropiado y controlado, así como iniciativas y experiencias tendientes a expandir el acceso al conocimiento.

*Le développement de l'Internet et d'autres technologies de l'information renforce l'importance des biens et des services du savoir sur l'économie, la politique, la culture et la vie personnelle. Les intérêts commerciaux sont organisés pour influencer les gouvernements et les organismes intergouvernementaux internationaux. En même temps, les citoyens gagnent des capacités d'organisation plus efficaces grâce aux nouvelles technologies et peuvent ainsi jouer un rôle plus important dans les débats sur les politiques publiques. Ce texte analyse une série de mesures proposées et adoptées pour atteindre un niveau du savoir approprié et contrôlé, et diverses initiatives et expériences orientées à élargir l'accès au savoir.*

## Introduction

The development of the Internet and other information technologies (IT) has led to a dramatic increase in the importance of knowledge goods and services, in the realms of terms of economic, political, cultural and personal life. In parallel, the research agenda for the development and use of new medical inventions has gained more attention among the public and policy makers and, despite the current relatively modest productivity in terms of new treatments, has raised expectations regarding the potential for dramatic advances in health. These raising expectations are contrasted with the increasingly aggressive pricing of new medicines and a growing awareness of the global disparities in access to them, based in part upon the high prices that are a consequence of intellectual property (IP) protection systems.<sup>1</sup>

At the same time, a number of new methods of creating and disseminating knowledge goods have emerged, with great promise in terms of expanding access to knowledge, and reducing disparities of such access. The changes in technology are partly driving a deep and far reaching reassessment of the rules under which knowledge will be controlled or shared.

None of these developments are taking place in a social or political vacuum. Commercial interests are organized to influence governments and global intergovernmental bodies and the broader public is increasingly being empowered by the new IT to play a more important role in such policy discussions.

**What types of access to knowledge (A2K) issues are likely to be addressed in global norm setting?**

Public policy is in play in a large number of areas, touching upon virtually every aspect of the knowledge economy. There are many proposed and

---

1 Including patents and exclusive rights to rely upon publicly available scientific data on safety and efficacy of medicines.

adopted measures to vastly increase the degree to which knowledge can be owned and controlled, as there also are many proposals, initiatives and experiments to expand access to knowledge. Some of the proposals and initiatives involve intellectual property rights (IPRs), while others involve policies that would support or undermine new methods of collaboration or new business models for creating and disseminating knowledge goods.

### *Copyright*

Modern copyright regimes involve government grants of certain commercial and non-commercial rights to the owners of particular forms or manners in which information is expressed, which are typically referred to as “works.” These might include literary works - which today would include nearly any novels, reference works, newspapers, letters, poems, plays, articles, books, blogs, or even unpublished emails between friends - as well as a variety of other forms, such as musical compositions and choreography, sound recordings, motion pictures, paintings, photographs, software, drawings, designs, maps, arrangements of information in databases or advertisements.

The nature of the rights varies from country to country within a global framework of treaties and trade agreements that set global norms. The two most important global agreements concerning copyright are the Berne Convention for the Protection of Literary and Artistic Works<sup>2</sup> and the 1994 World Trade Organization (WTO) Agreement on Trade Related Aspects of Intellectual Property Rights (the TRIPS Agreement). Taken together these agreements set out the core national obligations regarding copyright protection that most nations must follow - or risk trade sanctions in a WTO dispute resolution proceeding.<sup>3</sup>

- 
- 2 Of 9 September 1886, completed at Paris on 4 May 1896, revised at Berlin on 13 November 1908, completed at Berne on 20 March 1914, revised at Rome on 2 June 1928, at Brussels on 26 June 1948, at Stockholm on 14 July 1967, and at Paris on 24 July 1971, and amended on 28 September 1979.
  - 3 According to Article 9 of the TRIPS, “Members shall comply with Articles 1 through 21 of the Berne Convention (1971) and the Appendix thereto. However, Members shall not have rights or obligations under this Agreement in respect of the rights conferred under Article 6*bis* of that Convention or of the rights derived there from.”

Copyright owners are seeking new global norms that go far beyond the Berne/TRIPS standards. The efforts have led to a 1996 World Intellectual Property Organization (WIPO) Copyright Treaty, which has been formally accepted by more than 50 countries, and a number of regional and bilateral trade agreements that have extensive provisions on copyright, which greatly exceed the Berne/TRIPS requirements, as will be explained below.

### *Related (neighboring) rights*

There are also a set of “related” or “neighboring” rights, some of which are similar to copyright, such as the rights for performing or producing a sound recording, and some that have little in common with copyright, which normally requires a least a modicum of creativity to qualify for protection.

In some countries, broadcasting organizations receive certain rights in material they broadcast, which is independent of copyright. The basis for the rights for broadcasting organizations is not based upon a creative act but rather upon the act of transmitting information. The broadcasting right can extend to materials that are otherwise in the public domain or it can be an additional layer of rights on top of that which is awarded to a copyright owner for a creative work.

The 1961 International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations, known as the “Rome Convention,” sets out global standards for these rights - but it is not as widely accepted as the Berne Convention standards are for copyrighted works. The US has never signed the Rome Convention, for example. The rights of these parties are also addressed in Article 14 of the TRIPS, which is the most important global instrument.

The term *sui generis* - Latin for “one of a kind” - is used to describe special IPRs that do not fit into the traditions established for copyrights, patents, trademarks or trade secrets. Examples of *sui generis* regimes are those created to give special protections for plant breeders, semi-conductor chips or data used in the registration medicines or agricultural

chemicals. Some countries now provide a *sui generis* right for databases. This *sui generis* database regime is relatively new, following the adoption of an EU Directive which requires members to protect the underlying elements of databases, even when those elements do not qualify for copyright protection - for example, when the elements contain data, rather than creative works. The criteria to qualify for protection focus on the effort and investment undertaken by the owner of the database, rather than the creative nature of the work. The *sui generis* database right has many similarities to the broadcasters' right. They convey a property right on information on the basis of the act of transmission and it does not require the broadcaster - or database owner - to demonstrate any creative effort. Both the broadcaster right and the database right create a layer of ownership in the information, in addition to the rights of the copyright owner - if any - of the underlying information that is transmitted.

*Sui generis* regimes for databases are controversial. An attempt in 1996 to adopt a WIPO treaty on non-original database components failed, and the US continues to reject such approaches - due, in part, to opposition from a diverse coalition of librarians, academic researchers, consumer groups, database businesses and the US Chamber of Commerce. Some scholars have called upon the EU to reconsider its directive in light of evidence that it may have retarded the development of new databases and knowledge services.<sup>4</sup> However at present the EU is aggressively seeking to extend the *sui generis* database regime to its trading partners as part of its larger bilateral trade agenda.

## Limitations and exceptions to copyright and related rights

In the strongest form, copyright provides an exclusive right to authorize uses of a work. But nowhere are these rights unlimited and, in many jurisdictions and for certain works or uses, the limitations and exceptions to rights are extensive.

---

4 Boyle, James. "A natural experiment," *Financial Times*, 22 November 2004. <http://news.ft.com/cms/s/4cd4941e-3cab-11d9-bb7b-00000e2511c8.html>

The first limitations concern *what* is to be protected under copyright. The TRIPS provides that “copyright protection shall extend to expressions and not to ideas, procedures, and methods of operation or mathematical concepts as such.” Some governments exclude copyright protection for works of government employees or official texts of a legislative, administrative and legal nature. The Berne Convention states that protection does not extend to “news of the day or to miscellaneous facts having the character of mere items of press information.” Some jurisdictions, including the US, are fairly rigorous in excluding from copyright protection information that is mere compilation of factual data, such as books listing names, addresses and telephone numbers.

There are also time limits on rights referred to as *the term of protection* - an important distinction between IP and rights in physical goods and real property. The terms of protection vary in different agreements - and are generally longer in the more recent ones, particularly those involving bilateral or regional agreements that include the US or the EU.

Even when works are protected, certain uses without the permission of the right owner can be authorized by governments, consistent with various rules, including standards for fair practices, the payment of remuneration or the need to remedy anticompetitive practices. As noted by Professor Sam Ricketson:<sup>5</sup> “It has long been recognized that restrictions or limitations upon authors, and related rights may be justified in particular cases. Thus, at the outset of the negotiations that led to the formation of the Berne Convention in 1884, the distinguished Swiss delegate Numa Droz stated that it should be remembered that ‘limits to absolute protection are rightly set by the public interest.’ In consequence, from the original Berne Act of 1886, the Berne Convention has contained provisions granting latitude to member states to limit the rights of authors in certain circumstances.”

---

5 Standing Committee on Copyright and Related Rights, Ninth Session, Geneva, June 23 to 27, 2003. “WIPO Study on Limitations and Exceptions of Copyright and Related Rights in the Digital Environment” prepared by Mr. Sam Ricketson, Professor of Law, University of Melbourne and Barrister, Victoria, Australia.

Nations have implemented, with such public interest, exceptions in a number of important areas. As noted in the UN Conference on Trade and Development (UNCTAD) and the International Centre for Trade and Sustainable Development (ICTSD) Resource Book on TRIPS and Development:<sup>6</sup> “[...] limitations to facilitate private use, teaching, research and other socially valuable purposes are generally considered to be an important aspect of copyright regulations. In continental law jurisdictions, national copyright laws provide case-specific exceptions to copyright in the above areas. Common law jurisdictions follow the fair use or the fair dealing doctrines, on the basis of which similar exceptions have been developed through case law.”<sup>7</sup>

According to Ruth Okediji in a forthcoming article, “The international copyright system: Limitations, exceptions and public interest considerations for developing countries in the digital environment”, “There have been a few studies on the question of limitations and exceptions within the international copyright system [...] the effective diffusion of knowledge goods is directly related to the limitations placed on the proprietary rights of owners of such goods. Specifically with regards to education and basic scientific knowledge limitations and exceptions are an important component in creating an environment in which domestic initiatives and development policies can take root. A well-informed, educated and skilled citizenry is indispensable to the development process.” Okediji writes: “Although the importance of A2K goods has been emphasized with respect to developing countries, it must not be overlooked that access is also a significant part of the copyright balance in developed countries.” Libraries and educational institutions, for instance, provide access in developed countries, too, and depend on limitations and exceptions in developed and developing countries.

---

6 Resource Book on TRIPS and Development, UNCTAD-ICTSD Project on IPRs and Sustainable Development, Cambridge University Press, 2005, p. 186.  
[www.cambridge.org/9780521850445](http://www.cambridge.org/9780521850445).

7 See Correa, Carlos. “Fair use in Digital era”, *International Review of Industrial Property and Copyright Law (IIC)*, Vol. 33, No. 5/2002. For an analysis of this doctrine in the US legal system, see Okediji, R. “Toward an International Fair Use Doctrine”, *Columbia Journal of Transnational Law*, Vol. 39, 2000-2001, pp.75 et seq.

The Berne Convention has a mandatory exception allowing the use of quotations from a work that has already been lawfully made available to the public<sup>8</sup> - an exception strongly supported by scholarly works. The Berne Convention also specifically references some free uses of works in connection with teaching or in the reporting of current events and notes other cases where non-voluntary uses of works can be authorized, subject to equitable remuneration to the authors. On top of specific mentions such as these, there are more general exceptions clauses in treaties and trade agreements, which embody various “three-step” tests that regulate further exceptions. In the Berne Convention countries can permit reproduction of works (1) in certain special cases, provided that such reproduction (2) does not conflict with a normal exploitation of the work, and (3) does not unreasonably prejudice the legitimate interests of the author. The same provision is restated somewhat differently in Article 13 of the TRIPS. The context in the TRIPS is broader - it applies to any limitations or exceptions to exclusive rights (not just the reproduction right), and it refers to the legitimate interests of the “right owner,” rather than the “author.” A number of regional or bilateral trade agreements also have provisions that are similar to the TRIPS language.

The three-step test is ultimately political - a judgment call regarding ambiguous terms such as “special”, “normal”, “unreasonably” and “legitimate”. Under the Berne Convention, member countries are largely free to make those judgments themselves.

## Dispute resolution and the three-step test

With the TRIPS, the evaluation of the three step tests is subject to multi-lateral dispute resolution proceedings and enforceable by tough trade sanctions. The dispute resolution approach is now being used in a number of bilateral and regional trade agreements, which creates the possibility

---

8 Provided the use is “compatible with fair practice,” and “does not exceed that justified by the purpose.”

of forum shopping and inconsistent global norms. Developing countries are expected to fare better in multilateral dispute resolution proceedings, where the number of countries providing submissions is larger and consumer interests are likely to be better represented.

The types of issues that could be resolved in dispute resolution proceedings include the gamut of free and remunerative exceptions to exclusive rights - for example, compulsory licensing schemes; the extent to which certain personal, non-profit and commercial uses of works are free; as well as the degree to which governments undertake effort to enforce laws against infringement or the anti-circumvention of technological protection measures (TPM) and digital rights management (DRM) schemes, issues addressed below in this paper.

The outcomes of dispute resolution proceedings will be influenced greatly by global norms, including state practice, new multilateral and regional trade agreements and treaties and various “soft law” from fora such as the World Summit on the Information Society (WSIS) or bodies concerned with development or human rights.

The 1996 WIPO Copyright Treaty (WCT) is not currently referenced in the TRIPS but it is often included in bilateral trade agreements. It also provides a modern expression of multilateral norms. The preamble of the WCT notes “the need to maintain a balance between the rights of authors and the larger public interest, particularly education, research and access to information, as reflected in the Berne Convention” and includes a TRIPS-like three step test in the WCT Article 10, and an agreed statement regarding copyright limitations and exceptions that reads as follows:

*“It is understood that the provisions of Article 10 permit Contracting Parties to carry forward and appropriately extend into the digital environment limitations and exceptions in their national laws which have been considered acceptable under the Berne Convention. Similarly, these provisions should be understood to permit Contracting Parties to devise new exceptions and limitations that are appropriate in the digital network environment.*”

*It is also understood that Article 10(2) neither reduces nor extends the scope of applicability of the limitations and exceptions permitted by the Berne Convention.”*

## Exhaustion of rights (The first sale doctrine)

One area of particular controversy in the area of copyrighted goods concerns the exhaustion of the seller's rights once a good is placed on the market in a legal sale. The issue can be referred to as “the first sale doctrine” or as “the exhaustion of rights” (both terms are used below). National policies vary considerably, both between countries and between different types of copyrighted works.

Policies regarding the domestic first sale doctrine determine how much freedom a buyer of a work has to resell, lend, rent or give away the work to others. Before computers were an important means of distributing works, this was largely a concern for such entities as sellers of second-hand books or recorded music, video rental stores, or libraries. With the expanded use of digital IT, the issues have become much more complex. Publishers of software, data, music, films, video games and other digital works increasingly seek to limit not only the resale, rental, lending or giving away of works, but also the ways works are used by a person - for example, by restricting a work so it can be used on a single device, or for a limited period of time. The degree to which restrictions on the purchaser of a work are enforced by national copyright laws varies from country to country.

In a system of international exhaustion of rights it is possible to have parallel trade in copyrighted goods - the practice of buying goods in a country where prices are lower and importing them into a country where prices are higher. Parallel trade mitigates against high domestic prices for copyrighted goods. In some jurisdictions, seller restrictions on parallel trade have been found to be violations of competition laws. In other cases, they are permitted or enforced by governments.

Under Article 6 of the TRIPS Agreement, governments are generally free to enact laws that recognize the exhaustion of the seller's rights to prevent the resale, rental, lending or sharing of a work and countries also have the flexibility to recognize either national or international exhaustion - or in some limited cases, including the EU, regional exhaustion.

Copyright owners are seeking measures in regional and bilateral trade agreements that would undermine the flexibility in the TRIPS Agreement to recognize international exhaustion of rights for copyright goods - following the success of the pharmaceutical industry in obtaining restrictions against parallel trade in patented goods, in several US free trade agreements.

Civil society groups, including the Consumer Project on Technology (CP Tech), have called for a rethinking of TRIPS rules to permit recognition of exhaustion of rights among countries of similar or higher incomes for certain goods - including those relating to medicines and most copyrighted goods. Such a policy would permit the use of parallel trade to overcome pricing abuses in countries with inefficient or monopolistic distribution systems, while recognizing the public interest in market segmentation between countries of very different incomes. This would require changes in the TRIPS Agreement and the bilateral and regional trade agreements that address the issue of exhaustion of rights.

## Technical protection measures - Digital rights management

The development of new digital technologies to store, copy and distribute information has created vast new opportunities to share information. Even before the Internet was widely used by the general public, publishers of music recordings, motion pictures and databases anticipated possible widespread copying of works. They were concerned that software programmers could routinely circumvent technological protection measures that they were developing to control unauthorized copying of works. At the same time, academic experts and library, consumer and digital rights groups and high-tech consumer firms expressed concern that TPM and DRM systems would undermine the

ability of users to take advantage of traditional limitations and exceptions to copyrighted works - including those relating to personal, non-profit and commercial uses, stifle innovation in new technologies, and undermine privacy and freedom.

Even before national governments had acted, four new treaties were considered at WIPO to set global norms for new measures that would give copyright owners and others, including performers and producers of copyrighted works and publishers of databases, new powers to control and monitor copying and sharing of information. Two of the treaties were adopted. Their final texts were considerably influenced by the organized opposition from consumer interests and reflected a number of compromises and balancing provisions that were designed to address the legitimate concerns of users.

These two 1996 WIPO treaties<sup>9</sup> - the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonographs Treaty (WPPT) - created global obligations to prohibit the anti-circumvention of TPM and DRM information.

The US implementation of these obligations included passage of the Digital Millennium Copyright Act (DMCA)<sup>10</sup> in 1998. The DMCA contains a number of controversial restrictions on the development of new technologies, as well as a set of exceptions that are specifically designed to preserve some user rights in areas such as education or the development of interoperable products.

While most members of the EU have not formally joined the WCT or WPPT, the EU has adopted several directives that address these issues, the most important of which is the 2001 directive on the protection for anti-circumvention technologies and rights management technologies.<sup>11</sup>

The obligation to include anti-circumvention/TPM/DRM language is featured in many new bilateral trade agreements, including every one of the recent free trade agreements involving the US.

---

9 [www.wipo.int/treaties/en/](http://www.wipo.int/treaties/en/)

10 [www.copyright.gov/legislation/dmca.pdf](http://www.copyright.gov/legislation/dmca.pdf)

Many academic experts, library, education, consumer, civil liberties, free software, and development groups have called upon WIPO and others to evaluate the risks that TPM/DRM measures present to access to knowledge - particularly in areas where public policy has traditionally favored more access. When effective, the TPM/DRM measures vastly expand the powers of publishers to control uses of works - dramatically change the balance between consumers and publisher rights.

There is increasing attention not only to the negative impact of TPM/DRM measures on traditional limitations and exceptions to copyright, but to the problems of preserving access to works no longer commercially exploited (orphan works) and on the ways that consumers can use works. The new DRM technologies for music and software frequently restrict the devices that can be used by a person, for example, as well as the number of times or period when work can be used.

TPM/DRM measures are also introducing enormous new risks to privacy and freedom, as it becomes more and more feasible to track users of data. This extends to the issue of identifying persons who leak documents from governments or corporations engaged in violations of human rights or domestic laws, or which run counter to social norms.

## The WIPO Broadcasting/Webcasting Treaty proposal

The WIPO Secretariat and some member States are seeking a new diplomatic conference to consider a new treaty that would provide protections to broadcasting, cablecasting and webcasting organizations. The treaty is highly controversial among organizations that represent consumer and civil society interests, as well as by many copyright owners. The treaty proposal would expand the protections available to broadcasting organization far beyond what is now provided for in the WTO TRIPS Agreement, providing new commercial rights that extend to works that “casters” do not create and which they do not own under copyright laws.

---

11 [en.wikipedia.org/wiki/EU\\_Copyright\\_Directive](http://en.wikipedia.org/wiki/EU_Copyright_Directive)

The minimum term of protection for broadcasting organizations would be expanded from the 20 years of the TRIPS to 50 years, even though the IPR is justified on the rationale of protecting investments by the broadcasting organizations, rather than creative contributions to the works. This expanded IPR, which is obtained by transmitting information, would then be extended far beyond traditional television or radio broadcasting to the Internet, where the impact is far more troublesome. No country has ever tried to implement a property right for webcasting organizations, so there is no experience with such a regime when applied to the Internet.

## Contracts

An area of rapidly evolving global norms concerns the status of contracts. Particularly those involving non-negotiated contracts for copyrighted works, databases, and other knowledge goods. Publishers are seeking to vastly expand the legal status and use of contracts to restrict access to copyrighted works and data. There are several aspects of such efforts. One involves the issue of contract formulation. Publishers are seeking wide recognition that digital presentations of contracts, embedded in works, should be considered legally binding instruments. In some cases the contracts are approved as click-on agreements that are required before works can be used. But in the future publishers will seek to automatic the contractual approval between the work and the device that uses the work. Some of this work is taking place within the work program of the United Nations Commission on International Trade Law (UNCITRAL). Publishers are also seeking stronger measures on cross-border enforcement of such contracts, through such instruments as the newly negotiated Hague Convention on Jurisdiction and Enforcement of Foreign Judgments, and similar provisions in regional or bilateral trade agreements.

The acceptance of non-negotiated contracts to govern the use of copyrighted works will make copyright laws irrelevant and will allow publishers to essentially privatize policy making. In order to address the problems

that this presents, civil society must insist on the development of new norms that address the problems of non-negotiated contracts, which is particularly problematic in a world of cross border transactions.

## Control of anticompetitive practices

Article 40 of the TRIPS Agreement is a very important but largely underutilized provision to protect the public interest. It states that “Members agree that some licensing practices or conditions pertaining to IPRs which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology...” and “Nothing in this Agreement shall prevent Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of IPRs having an adverse effect on competition in the relevant market.”

From the point of view of WTO dispute resolution proceedings, Article 40 is extremely important, because it lies outside of the three-step test in Article 13 of the TRIPS and it provides a different mechanism to address a wide range of issues - including, for example, failures to license IP on reasonable terms, excessive pricing or restricts that frustrate interoperability or technology transfer. Among recent bilateral trade agreements involving the US, only the US/Chile contains a similar provision.

## An agenda for A2K

On 4 October 2004, the General Assembly of the WIPO agreed to adopt a proposal offered by Argentina and Brazil for the Establishment of a Development Agenda for WIPO.<sup>12</sup>

This proposal was strongly supported by developing countries, as well as by a large contingent of civil society. Prior to the General Assembly meeting, hundreds of non-profit organizations, scientists, academics

---

12 [www.wipo.int/documents/en/document/govbody/wo\\_gb\\_ga/pdf/wo\\_ga\\_31\\_11.pdf](http://www.wipo.int/documents/en/document/govbody/wo_gb_ga/pdf/wo_ga_31_11.pdf)

and other individuals had signed the Geneva Declaration on the Future of WIPO,<sup>13</sup> which calls on WIPO to focus more on the needs of developing countries, and to view IP as one of many tools for development - not as an end in itself.<sup>14</sup>

### *A2K Treaty project*

Following the “Development Agenda” proposal at WIPO, civil society and academic organizations - including CPTech - have lead an initiative to promote a new A2K Treaty, which would protect access to knowledge and facilitate the transfer of technology to developing countries.<sup>15</sup> This proposal addresses many of the issues detailed in this document, which pose a threat for citizens and consumers - particularly in developing countries - and supplies an extensive list of provisions regarding limitations and exceptions to copyright and related rights - including general limitations and exceptions to copyrights, first sale doctrine and measures regarding anti-circumvention/TPM/DRM, non-original or creative works, orphan works and compulsory licensing of copyrighted works in developing countries, among others.

The proposed Treaty also sets limits and preventions for patentability and includes a special section devoted to promote measures to expand the access to knowledge. The measures included in this section seek to enhance freedoms to access knowledge commons - particularly those based on public funded research.

The promotion of open standards, the control of anticompetitive practices, the transfer of technology to developing countries and a clause of obligation to finance free and open knowledge goods are also included in the draft text for the Treaty.

---

13 [www.cptech.org/ip/wipo/genevadeclaration.html](http://www.cptech.org/ip/wipo/genevadeclaration.html)

14 Shashikant, Sangeeta (2005), *Intellectual property and the WIPO “Development Agenda”*, [wsispapers.choike.org/](http://wsispapers.choike.org/)

15 Draft text of the new treaty proposed is available at [www.cptech.org/a2k/](http://www.cptech.org/a2k/)

## *Medical R&D Treaty*

Beginning in 2002, a number of economists, scientists and public health experts began work on an alternative trade framework for medical research and development (R&D). This led to a proposal for a new treaty framework that would ultimately replace existing or planned trade agreements that focus on patents or drug prices.<sup>16</sup>

The new paradigm includes minimum national obligations for supporting medical R&D, with flexibility regarding the business models, IP rules or other mechanisms - such as open source approaches - a country would choose to support R&D. There are also priority setting mechanisms, including a system of tradable credits for investments in particular projects that promote social or public interest objectives.

Since 2002, the proposal for a medical R&D Treaty<sup>17</sup> has been discussed at meetings, workshops and consultations and several governments have been asked to evaluate the proposed treaty. On 24 February 2005, a letter was presented to the World Health Assembly Executive Board and the World Health Organization (WHO) Commission on Intellectual Property Rights, Innovation and Health (CIPIH). The letter, signed by 162 scientists, public health experts, law professors, economists, government officials, members of parliaments and civil society organizations, states that the current global framework for supporting medical R&D suffers from profound flaws and imposes important costs - including problems of rationing and access to medicine, costly, misleading and excessive marketing of products, barriers to follow-on research, skewing of investment toward products that offer little or no therapeutic advance over existing treatments, and scant investment in treatments for the poor, basic research or public goods.

---

16 Love, James and Tim Hubbard, "Make drugs affordable: Replace TRIPs-plus by R&D-plus", *Bridges* No.6, June 2004. [www.cptech.org/ip/health/rndtf/bridges042004.pdf](http://www.cptech.org/ip/health/rndtf/bridges042004.pdf)

17 A draft version of the proposed Medical Research and Development Treaty is available at CP Tech website, [www.cptech.org/ip/health/rndtf/](http://www.cptech.org/ip/health/rndtf/)

The signatories of the letter “call upon the WHO CIPIH to engage in debates over the appropriate global framework to support medical R&D, and to evaluate the Draft R&D Treaty proposal. This initiative seeks to refashion global policy to better fulfill the objective of providing ‘access to medicine for all’.”

The letter also expresses that “the treaty proposal recognizes the importance of ensuring sustainable sources of finance for innovation, including R&D for neglected diseases and other public health priorities, and it provides opportunities to experiment with new and promising mechanisms to finance R&D [...] In order to create the best possible systems, policy makers should consider the fullest range of options, including this innovative, flexible and choice preserving idea.” ■

# Making ICTs Work for the Poor: Pursuing the Millennium Development Goals through ICTs

ANNA BADIMO

RESEARCHER  
UNIVERSITY OF THE WITWATERSRAND  
WWW.WITS.AC.ZA

*When considering ICTs the question should not be whether they have impacted the day-to-day business and social life, but how equitable this impact is and how significant it is in addressing the main problems that society faces today. Through the WSIS second phase and its implementation and follow-up processes, Governments must exercise a choice that will secure the future for today's generation. Several studies indicate that ICTs can indeed be used to address social challenges if applied in the right developmental activities. This paper argues that, if deployed correctly and where relevant, ICTs have the potential to help poor communities to meet key development priorities, especially in the areas of poverty, health and education, and to play a catalytic role in accelerating economic growth. Specific points are suggested to initiate a multistakeholder discussion within a country or region about possible linkages between some of the Millennium Development Goals and ICTs national strategies.*

ليس من المفترض أن يكون السؤال، ولدى دراسة تكنولوجيا المعلومات والاتصالات، حول ما إذا كان لها انعكاسات على الحياة اليومية والاجتماعية، وإنما مقدار عدالة هذه الانعكاسات ومقدار أهميتها في التعامل مع المشاكل الرئيسية التي يواجهها المجتمع اليوم. من خلال المرحلة الثانية للفترة العالمية لمجتمع المعلومات وعمليات المتابعة والتنفيذ، هناك ضرورة في اتخاذ الحكومات خياراً يضمن مستقبل الجيل الحالي. تشير العديد من الدراسات الى أن تكنولوجيا المعلومات والاتصالات يمكن بالفعل إستخدامها للتعامل مع التحديات الاجتماعية إذا ما طبقت في الأنشطة التنموية الصحيحة. وترى هذه الوثيقة أنه في حالة الإستخدام الصحيح وفي المجال المناسب فإن لتكنولوجيا المعلومات والاتصالات قدرة على مساعدة المجتمعات الفقيرة في تحقيق أولويات تنمية أساسية، وبشكل خاص في مجالات الفقر، الصحة والتعليم، وأن تلعب دوراً محفزاً للإسراع بالنمو الإقتصادي. تقترح بعض النقاط لبدأ حوار متعدد الأطراف داخل دولة أو إقليم حول الربط المحتمل بين بعض أهداف الألفية للتنمية وإستراتيجيات تكنولوجيا المعلومات والاتصالات الوطنية.

A través de los procesos de implementación y seguimiento de la segunda fase de la CMSI los gobiernos deberán hacer una opción que asegurará el futuro de las generaciones actuales. Este documento sostiene que las tecnologías de información y comunicación (TIC) tienen el potencial para ayudar a las comunidades pobres a alcanzar sus prioridades de desarrollo, especialmente en el área de la pobreza, salud y educación, desempeñando al mismo tiempo un papel de catalizador del crecimiento económico y el desarrollo social. Asimismo se sugieren puntos específicos para iniciar debates multisectoriales, a nivel regional o nacional, acerca de posibles vínculos entre los Objetivos de Desarrollo del Milenio y las estrategias nacionales de TIC.

*A travers les processus de mise en place et de suivi de la deuxième phase du SMSI, les gouvernements devront choisir une solution pour assurer l'avenir des générations actuelles. Ce texte affirme que les technologies de l'information et de la communication (TIC) ont le pouvoir d'aider les groupes démunies à traiter leurs priorités en terme de développement, notamment en matière de pauvreté, santé et enseignement, tout en jouant un rôle de catalyseur de la croissance économique et le développement social. L'auteur suggère des axes spécifiques pour aborder les débats entre les parties prenantes, à niveau régional ou national, concernant les possibles liens entre les Objectifs du Millénaire pour le Développement et les stratégies nationales de TIC.*

## Introduction

The 21st century has been defined as the “information era”, basically because information is used to gain knowledge, which is the major source of advancement in society. This information is not only important for businesses, learning institutions and research centres but it has become vital for the development of communities. When one looks at information and communications technology (ICT) the question should not be whether it has impacted the day-to-day business and social life, but rather how equitable this impact is and how significant it is in addressing the main problems faced by society today.

According to UNICEF’s *The State of the World’s Children 2005* report,<sup>1</sup> half of the world’s children are suffering extreme deprivations from poverty, war and HIV/AIDS. UNICEF also states in this report that more than one billion children are denied a healthy and protected upbringing. The report goes further to emphasize the important role governments can play in ensuring that these children’s future is secured and that their livelihoods are not blocked, as well as upholding their human rights and supporting their economic advancement. These children grow up in environments that are inherently problematic to support their development. UNICEF Executive Director Carol Bellamy has stated that “Too many governments are making informed, deliberate choices that actually hurt childhood. Poverty doesn’t come from nowhere; war doesn’t emerge from nothing; AIDS doesn’t spread by choice of its own. These are our choices.”

Coupled with the above mentioned problems, access and affordability with regard to the use of ICTs are also problematic, especially in developing countries. According to Mark Malloch Brown - Administrator of the United Nations Development Programme (UNDP) from July 1999 to August 2005 - “Today, close to 600 million people use the Internet today and in least developed countries there is at least one telephone subscriber per 100 people, most likely a cell phone, which

---

1 UNICEF (2004), *The State of the World’s Children 2005. Childhood under Threat*, [www.unicef.org/sowco5/](http://www.unicef.org/sowco5/)

now outnumber landlines across Africa and in most poor countries.”<sup>2</sup> With broadband and wireless technologies being rolled out worldwide, more and more people are getting connected using even cheaper devices than the traditional personal computers.

At the World Summit on the Information Society (WSIS) second phase<sup>3</sup> and through its implementation and follow-up processes, governments must exercise a choice that will secure the future for today’s generation.

Several studies indicate that ICTs can indeed be used to address the social challenges that are faced today, if applied correctly and in the right developmental activities.<sup>4</sup> We agree with Brown when he states that ICTs have the potential to help poor communities to meet key development priorities, especially in the areas of poverty, health and education. If deployed correctly and where relevant ICTs can be leveraged for the benefit of the poor and can also play a catalytic role in accelerating their economic and social development.

## The ICT framework for development

It is a well established fact that to achieve society’s full potential all individuals should be able to participate in its development, irrespective of race, creed, physical ability or gender. The opportunities presented by ICTs,<sup>5</sup> in particular, require a conscious and deliberate push to ensure that the imbalances that exist today in terms of access are not only stopped, but also reverted. ICTs have made it possible for free

---

2 Brown, M. M. (2003), “Unleashing the Benefits of technology for the World’s Poor”, *Choices. The Human Development Magazine*, UNDP, [www.undp.org/dpa/choices/2003/december/administrator.html](http://www.undp.org/dpa/choices/2003/december/administrator.html)

3 [www.itu.int/wsis/tunis/index.html](http://www.itu.int/wsis/tunis/index.html)

4 Please refer to WSIS Papers’ report *ICTD within the framework of the MDGs* for relevant information supporting this argument. [www.choike.org/nuevo\\_eng/informes/3010.html](http://www.choike.org/nuevo_eng/informes/3010.html)

5 When referring to ICTs, the importance of Free and Open Source Software (FOSS) needs to be stressed, in particular as an appropriate technological model in developing environments.

information to flow and for new and alternative media to emerge, but the issue of access beyond market limits should be seriously taken into consideration if people's freedom to access this information, an essential human right, is to be safeguarded.

In this section we pose the following question: how can the unprecedented opportunities presented by ICTs be used in a manner that will bring about a revolution in development such that real and lasting change can be brought to the world's poor?

Many initiatives have been implemented and attempts have been made to answer this question and to make progress in this direction. While some of them have partially succeeded, the reason behind the failure of many others is that there are often many players - a combination of governments, civil society, private sector and academic and research institutions - without a clear strategy and proper ways of interaction. It does not matter how much money is thrown at a problem: without an instrumental strategy there is no possibility of success.

Incorporating ICTs into development should be founded on six axes: strategy, regulatory framework, implementation, capacity development, partnerships, and measurement. Below we succinctly explain the role of each of these elements.

### *Strategy*

The first step for all governments is to develop a national ICT strategy document based on well researched information about the status of ICT relative to its citizens. This strategy document should express the country's vision with respect to ICTs and the specific development goals that would be achieved through its use.

A strategy document is essential to address the digital divide in general, but it also should clearly establish how capacity would be built in particular groups within the country's population.<sup>6</sup>

---

6 For instance, it should state how women, physically challenged and impoverished citizens would be empowered through the use of ICTs.

### *Regulatory framework*

Once a strategy has been defined, a review of policies must be carried out to determine the kind of regulatory framework that is required to support this strategy. This is a very critical point since even with a clear strategy the lack of enabling policies in place would be a major obstacle for implementation. Although the regulatory framework should contemplate “pure” ICT policies, ICT development-oriented policies should be specifically addressed.

It can be argued that several initiatives have succeeded even within an appropriate regulatory framework but, for a comprehensive ICT-for-development strategy to be successful at national level, it is important to have clearly defined policies that can be enacted into law and supported by all stakeholders.

### *Implementation*

Several actors are usually involved in the implementation of ICT policies - different players within governments, civil society organizations, private sector and academy. The most important elements for successfully implementing ICT policies in a multiskaholder framework are: coordination, integration and alignment:

- *Coordination* is necessary in order to avoid duplication and to track stocktaking activities.
- *Integration* is necessary in order to ensure that the different policies are in line with one another (*e.g.* the integration element will look at whether the ICT-for-development policy is in line with existing general development policies).
- *Alignment* is necessary in order to make sure that implementation follows the originally established objectives. The application of ICTs to realize major development objectives should be encouraged wherever possible but, for instance, a clear distinction must be made between using ICTs as an office automation tool and using ICT as an enabler of development objectives.

### *Capacity development*

As ICTs become more accessible, the need for a pool of skilled technical individuals - for technical support, application development, etc. - increases.

It is at this stage where strategy and integration come into play - as well as standards and accreditation - since integrated policy-based strategies that are used to develop ICT skills should be implemented in accordance with the country's overall development strategy.

Governments should play a major role in this area, since they usually are responsible for the curricula and programmes of educational institutions.

### *Partnerships*

Although governments can play a coordinating role in the implementation of ICT policies, all the other stakeholders - private sector, civil society and educational institutions - should be included both in the definition and the implementation of the country's ICT strategy.

Appropriate mechanisms for stakeholders' integral participation can determine the success of the strategy. For instance, remote and rural areas are often marginalised and under-served, and these communities often lack appropriate infrastructure. Grassroots civil society organisations can play an important role in supporting the deployment of ICTs in these areas.

In terms of practice, and so that projects may succeed, local context and culture issues should be considered as well as an operational participation. Operational constraints that pose an impediment for real participation and inherent problems that emerge even when participation does take place should be addressed.<sup>7</sup>

---

7 Heeks, R. (1999a), "The Tyranny of Participation in Information Systems: Learning from Development Projects", Development Informatics Working Paper Series, [www.sed.manchester.ac.uk/idpm/publications/wp/di/di\\_wp04.htm](http://www.sed.manchester.ac.uk/idpm/publications/wp/di/di_wp04.htm)

## Measurement

It is indispensable that progress being made by ICT projects is traced in a very clear, concise and quantifiable manner, so projects can be fine-tuned and actions can be adjusted to make sure that the original development goals included in the national strategy are accomplished. It is necessary, therefore, to develop baseline studies of ICT indicators and continue to measure the impact of their interventions with respect to this baseline, throughout all the phases in the implementation of policies.

According to the International Telecommunication Union (ITU),<sup>8</sup> while some developed nations are racing ahead in information society measurement and tracking many factors including infrastructure, access and usage, most developing nations are struggling to generate even basic indicators. The international community should support these efforts.

## ICTs to support the achievement of the MDGs

The UN ICT Task Force (UNICTTF) has stated that “the intersection of ICTs and the Millennium Development Goals (MDGs) forms a critical nexus for the future of sustainable human development and poverty eradication.”<sup>9</sup> Yet, continues the UNICTTF, “the great paradox of the information age - the persistence of scarcity in a digital era of near-ubiquitous and superabundant capacity - remains the greatest single challenge to the networked and development-rich economy and society.” The UNICTTF also argues that, with the strategic, intensive, widespread and innovative use of ICTs and media in development policies and programmes, the ambitious agenda of the MDGs becomes much more possible to realize. “Further, the scale of deployment and catalytic role played by ICTs and media can in turn help to make such investment in ICT sustainable”, they claim.

---

8 ITU (2003), *ITU World Telecommunication Development Report 2003*, [www.itu.int/newsarchive/press\\_releases/2003/31.html](http://www.itu.int/newsarchive/press_releases/2003/31.html)

9 UNICTTF, *Innovation and Investment: Information and Communication Technologies and the Millennium Development Goals*, [www.unicttaskforce.org/perf/documents.pl?id=1519](http://www.unicttaskforce.org/perf/documents.pl?id=1519)

The UNDP has expressed that, in spite of the enabling potential of ICTs in enhancing development, it is “yet to be widely mainstreamed to assist developing countries in addressing traditional development problems with innovative solutions and approaches that are both effective and more easily scalable and replicable.”<sup>10</sup>

We also believe that, instead of merely catching up, the developing world could use the “digital divide” challenges as opportunities to leapfrog to cutting-edge technologies.<sup>11</sup> The combination of emerging technologies and innovative ICT strategies and policies could then be mainstreamed for the achievement of the MDGs. Particularly those related to poverty reduction, education, health and HIV/AIDS.

#### *Some measures to include ICTs into MDGs agendas*

We include some points that could be used to initiate a multistakeholder discussion, within a country or region, about possible linkages between some of the MDGs and ICTs national strategies. ICTs can also be used to enhance the capacity to monitor, measure, and report on the progress of each of these goals.

Besides specific, goal-oriented measures, other more general ICT-related initiatives can also have an important impact on all development issues. ICT local research, for instance, should be encouraged, since it is through research that new, innovative ideas - suitable for local needs - are turned into concrete solutions.

---

10 UNDP (2003), *ICT for Development and the MDGs. Concept Note*, “Towards an Open Information Society. UNDP Global Meeting on ICT for Development”, Ottawa, 9-11 July 2003, [ictd.undp.org/it4dev/gpm/background.html](http://ictd.undp.org/it4dev/gpm/background.html)

11 With cell phones becoming increasingly popular, for instance, there is the opportunity for innovative solutions to be built around mobile technologies.

Goal	Measures
<p>1. Eradicate extreme poverty and hunger.</p>	<p>Create economic opportunities that contribute towards reducing poverty by fostering local initiatives.<sup>12</sup></p> <p>For example, supporting small, medium and micro enterprises (SMMEs), facilitating their adoption of ICTs to improve productivity and competitiveness<sup>13</sup> and promoting SMMEs participation in the telecoms sector.</p> <p>A specific case study in South Africa involves a FOSS solution that was developed by township youth to help the Traffic Department officials on the road to dial-in to their servers using cell phones and determine whether a motor vehicle owner has got outstanding traffic fines. Previously, motorists had to wait for a long time for the traffic officials to phone the office to get the same information. This specific solution gave the youth concerned an opportunity to earn an income, which was previously not possible.</p>

- 
- 12 Richard Heeks has analyzed how serious inequalities constrain the use of ICT-based information by poor entrepreneurs. "Information and communication technologies may therefore have a greater role to play in giving 'voice' to the poor; that is, in making the poor information providers more than information recipients." Heeks R. (1999b), "Information and Communication Technologies, Poverty and Development", Development Informatics Working Paper Series, [www.sed.manchester.ac.uk/idpm/publications/wp/di/di\\_wpo5.htm](http://www.sed.manchester.ac.uk/idpm/publications/wp/di/di_wpo5.htm)
- 13 There are promising experiences in different regions. See, for example: Tanburn, Jim and Alwyn Didar Singh (2001), *ICTs and Enterprises in Developing Countries: Hype or Opportunity?*, InFocus Programme on Boosting Employment through Small Enterprise Development, Job Creation and Enterprise Department, International Labour Office, Geneva.

Goal	Measures
<p>2. Achieve universal primary education</p>	<p>Provide e-learning as an alternative education channel, according to poor countries' needs and realities.</p> <p>For example, by implementing educational programmes targeted at children heads of household or that cannot afford to go to school at all.</p> <p>The situation of children heads of household after the death of their parents from HIV/AIDS raises serious concern, in particular in Africa. Specific educational solutions for their situation could be implemented with the use of ICTs.</p>
<p>3. Promote gender equality and empower women</p>	<p>Define ICT policies that emphasize women empowerment and introduce ICT designs that take into account women's circumstances.</p> <p>Very often "gender equality" is a term used to pretend that the needs of women are being taken into consideration. Policies on ICTs and ICTs for development must be very clear on their position on empowering women and on follow-up evaluations, which must be done to determine progress. There is a wide range of social problems - like cross-border child maintenance administration, HIV orphans administration, etc. - that affect women directly and can be addressed through the use of ICT.</p>
<p>4. Reduce child mortality</p>	<p>Introduce telemedicine and public health programmes to help in the clinical analysis of child health and pregnant women.</p>

Goal	Measures
5. Improve maternal health	There are already FOSS applications that can be used in this area. For example, “Care2X”, <sup>14</sup> “OpenYaLim”, and “Open EMR”. <sup>15</sup> Most often the focus on health systems is about the administration side of hospitals. There is a need to develop systems that focus on the clinical side (doctor to patient relationship) because that is an area where particular value can be added in terms of patients’ health.

Many other examples can be traced on ICTs application for each of the above MDGs. These experiences can be used as a basis to develop future strategies and policies.

## Conclusion

ICTs have a vital role to play in development, not just in accelerating economic growth in local economies, but also in achieving Southern countries’ development goals. To this aim, ICTs should be deployed correctly and ICT policies should be guided by a national strategy developed by consensus of all the relevant actors and with clearly defined goals.

The WSIS implementation should not only seek external and effective solutions to eliminate the ever-widening digital divide between developed and developing countries: it must also challenge participating countries to look internally and to examine what actions they have to take to ensure that access to ICTs is affordable to all.

A strong case exists for development initiatives to use ICTs as leverage at all levels: community, national and international. It is up to all stakeholders involved to show commitment to ICTs as a necessary factor in successful development efforts. ■

<sup>14</sup> Public Health Management System and HIV/AIDS Monitoring System, [www.care2x.org/](http://www.care2x.org/)

<sup>15</sup> [www.openemr.net/](http://www.openemr.net/)

3

## Regional Perspectives

# Progress and Issues in Financing ICTD in Africa

LISHAN ADAM

VISITING ASSOCIATE PROFESSOR  
UNIVERSITY OF STELLENBOSCH  
WWW.SUN.AC.ZA

*This paper looks at the issue of financing ICTs to support development in Sub-Saharan Africa. The author argues that ICT financing should primarily focus on the needs, aspirations, capacities and perspectives of the vast majority of poor people in Africa rather than on the dominant practice where ICT needs are articulated by ICT professionals with predetermined end products. The mainstream ICT financing mechanisms' debate should pay a great deal of attention to the needs of the poor and the question of "who is being served for what purpose" should be addressed when defining financial mechanisms and strategies. Financing ICT with a focus on poverty means scaling up ICT investment from the level of pilot projects to their integration in government services strategies - notably agriculture, education - and in support of the Millennium Development Goals. Such a spirit would be important to consider access to information and communication as a public good and move forward the Digital Solidarity Agenda agreed in the context of the WSIS.*

This document is based on the in-depth paper "Financing ICTs for Development with Focus on Poverty", by the author, available online at [wsispapers.choike.org/](http://wsispapers.choike.org/)

تتناول هذه الوثيقة موضوع تمويل تكنولوجيا المعلومات والاتصالات من أجل التنمية في إفريقيا جنوب الصحراء. ترى الوثيقة أن تمويل تكنولوجيا المعلومات والاتصالات يجب أن يتركز أولاً على الاحتياجات، التطلعات، القدرات ووجهات نظر الغالبية العظمى من الفقراء في إفريقيا بدلاً من التناول الحالي الذي يتولى في إطاره المتخصصون في تكنولوجيا المعلومات والاتصالات التعبير عن الاحتياجات، مع تحديد مسبق للنتائج. يجب أن يمتح الحوار حول الآليات الرئيسية لتمويل تكنولوجيا المعلومات والاتصالات أهمية أكبر لإحتياجات الفقراء وتحديد " لمن تقدم الخدمة ولأي غرض " لدى وضع آليات وإستراتيجيات التمويل. يعني تمويل تكنولوجيا المعلومات والاتصالات مع التركيز على الفقر ترقية إستثمارات تكنولوجيا المعلومات والاتصالات من مستوى المشروعات النموذجية إلى تضمينها في إستراتيجيات الخدمات للحكومات - بشكل خاص في الزراعة والتعليم - ودعماً لأهداف الألفية للتنمية. من المهم النظر إلى هذه الروح لدى دراسة النفاذ على المعلومات والاتصالات باعتبارها منافع عامة والتحرك قدماً نحو برنامج التضامن الرقمي المتفق عليه في إطار القمة العالمية لمجتمع المعلومات.

Este documento contextualiza el financiamiento de las tecnologías de información y comunicación (TIC) para favorecer el desarrollo en África Subsahariana. El autor sostiene que dicho financiamiento no debe hacerse a partir de soluciones predeterminadas, sino que debe estar enfocado a las necesidades, aspiraciones, capacidades y perspectivas de la gran mayoría de las comunidades pobres africanas. El debate sobre la inclusión horizontal de los mecanismos de financiamiento debería identificar, entonces, "quién está siendo servido y para qué propósito". Pensar el financiamiento de las TIC desde la pobreza debe implicar que la inversión en TIC trascienda del nivel de proyectos piloto hacia su integración en los servicios gubernamentales. En tal espíritu debería considerarse el acceso a la información y comunicación como un bien público global.

Ce document traite le sujet du financement des technologies de l'information et de la communication (TIC) en appui au développement en Afrique subsaharienne. L'auteur affirme que le financement des TIC ne doit pas se faire à partir des pratiques prédominantes; il doit viser par contre, les besoins, aspirations, capacités et perspectives de la plupart des communautés pauvres en Afrique. Le débat sur l'inclusion horizontale des mécanismes de financement devrait donc se préoccuper de "qui est desservi et dans quel but". Le financement des TIC axé sur la pauvreté, signifie que l'investissement doit aller au-delà du niveau des projets pilotes en faisant partie des stratégies des services. Cette vision devrait être présente au moment de fournir l'accès à l'information et à la communication en tant que bien public mondial.

## A brief overview

This brief overview looks at the issue of financing in information and communication technologies (ICTs)<sup>1</sup> in support of development in sub-Saharan Africa from two perspectives: 1) financing mechanisms aimed at supporting the information and communication needs of the vast majority of the African poor (for poverty eradication); and 2) mechanisms aimed at facilitating the exploitation of ICTs to increase national development and economic growth rates in the region. It argues that ICT financing should primarily focus on the needs, aspirations, capacities and perspectives of the vast majority of poor people in Africa rather than on the dominant practice where ICT needs are articulated by ICT professionals with predetermined end products. One way to maximize effective use of ICTs for economic growth and poverty alleviation is to systematically and deliberately integrate them into the next round of national plans and sectoral strategies.

Since pillars of sustainable development such as education, good governance, social equality, health and environmental protection are essential to the empowerment of poor people, investment in supportive backhaul and local backbone infrastructure, promotion of access to meaningful applications in these key sectors and advancement of innovation and research in ICTs are as important. Just as the catalytic effects of ICTs on poverty alleviation are the result of improved earning opportunities and empowerment of the poor, the entrepreneurship that underpins the capacity to use ICTs and to tailor them to local needs are likewise important.

For ICTs to make this impact on the majority of poor people there should be affordable access to them and sufficient human resources and technical capacity to create and use applications and content as well as an enabling policy environment that fosters entrepreneurship. Yet, it is important to take note of the fact that each country and community has unique sets of ICT needs and priorities. The needs are

---

1 ICTs in this paper comprise a spectrum of communication and information delivery tools as well as knowledge sharing technologies ranging from radio, television, film, and the press to people, systems, institutions and infrastructure supporting them.

extraordinarily diverse. Therefore adequate efforts are needed to design, prioritise and implement ICT programmes and reorganise resources and needs instead of relying on predefined “one size fits all” priorities.

Africa varies considerably and comprises 34 of the 50 least developed countries and 14 of the 32 landlocked countries<sup>2</sup> that are confronted with the most daunting economic, social and political challenges - high incidence of poverty, wider income inequality, internal civil strife and external conflicts, scourge of diseases including that of HIV/AIDS, high costs of basic infrastructure (including telecommunications), limited human and technological resources, dependence on a limited export market, debt burden, low productivity, acute vulnerability to natural and environmental disasters and, more importantly, over-dependence on foreign aid. Over 40% of the population in Africa earns less than USD1 a day - below the poverty line drawn by the World Bank.<sup>3</sup>

ICTs should be used to deal with these challenges along with the frameworks established by regional agreements such as the New Partnership for African Development (NEPAD). The NEPAD framework aims to improve the condition of African people by means of improved governance, prevention of conflicts, promotion and protection of democracy and human rights, restoration and maintenance of macroeconomic stability, extension of education and health services, and promotion of infrastructure development including ICTs.

Africa is the least developed region when it comes to ICT infrastructure. There is a wide and uneven disparity along the fault lines of social inequality including socio-economic status, age, gender, geographic location and ethnicity. The penetration of different technologies varies considerably - with broadcasting technology more disseminated than personal computers (PCs) and the Internet. Of the approximately 841 million people in Africa in 2003, it was estimated that only:<sup>4</sup>

---

2 Least Developing Countries Resources. [www.un.org/issues/m-ldc.asp](http://www.un.org/issues/m-ldc.asp)

3 See [millenniumindicators.un.org/unsd/mispa/mi\\_worldreg.n.aspx](http://millenniumindicators.un.org/unsd/mispa/mi_worldreg.n.aspx)

4 International Telecommunications Union (2004), *African Telecommunications Indicators, 2004 and estimates*.

- 1 in 4 had a radio (210 m)
- 1 in 12 had a TV (71 m)
- 1 in 33 had fixed lines (25 m)
- 1 in 16 had a mobile phone (51 m)
- 1 in 80 had access to a PC (10.3 m)
- 1 in 70 had access to the Internet (12.3 m)
- 1 in 360 had access to pay-TV (2.3 m)

Raising access to radio to at least 100%, television to 50%, phones to 20%, mobile phones to 50%, and computers and the Internet to 10% is required in order to achieve the same goals set in NEPAD's contract with the developed world, to contribute to poverty eradication and economic growth, and to support the achievement of the Millennium Development Goals (MDGs). This implies that efforts should be made to increase access to broadcasting technologies while making sure that all men and women including those in remote areas share the benefits of new interactive technologies widely. However, as access moves beyond radio and telephones to more strategic and interactive technologies like the Internet, costs will become higher, because resources are required to build broadband backbone infrastructure for the provision of network access, to pay for the electrical infrastructure that would make the ICTs work, to develop skills to keep all technologies working, to improve usage skills, and to increase literacy in order to read the content.<sup>5</sup> On top, Internet's rate of penetration in Africa has been recently declining compared to the explosive growth in the past decade; a suggestion that improving access to more interactive technologies in rural areas remains a challenging and expensive endeavour.

Bilateral and multilateral agencies, the United Nations bodies and foundations have played a key role in advancing the dissemination of ICTs in the region and fostering an enabling environment for the participation

---

5 Heeks, Richard (1999), *Information and Communication Technologies, Poverty and Development*. [idpm.man.ac.uk/idpm/diwpf5.htm](http://idpm.man.ac.uk/idpm/diwpf5.htm)

of the private sector in the delivery of services. Private sector investment was instrumental in the expansion of the cellular and Internet markets. Africa's mobile market has been the fastest growing market of any region over the last five years. The private sector has also played a key role in promoting ICT awareness, supplying hardware and software, providing training and maintenance of ICT equipment. Multilateral companies are also entering the field of ICTs for development in Africa.

However, the approach throughout most part of the 1990s was basically experimental and underpinned by the belief that the liberalization of the telecommunications sector and the empowerment potential of ICTs would overcome the major traditional constraints on development and allow countries to move quickly into an era of greater prosperity.<sup>6</sup> This was partly prompted by the integration of telecommunications into the rules of the World Trade Organization and the belief that market forces would lead to better access to infrastructure. However, it has become clear that liberalization or the imposition of free-market conditions onto the inequitable conditions in the region without redress programmes would simply reinforce the iniquitous status quo<sup>7</sup> or could lead to the transfer from public monopolies to private ones. It also showed that investment in ICTs is more than opening up the telecommunications sector or establishing telecentres. It requires regulatory capacity, political will, a competitive environment and a creative response to market failure. While mobile access grew tremendously due to limited regulatory oversight and the “pay as you go” business model that suited everyone, particularly the vast majority of African informal sectors, fixed line connectivity stagnated. The main lesson was that the barriers to ICT development in Africa are much wider than enabling policies and regulatory environments. The decade ended without making a dent in terms of universal access to ICTs and without actually attaining full liberalization and universal access in most African countries.

---

6 Wild, Kate. “Notes on ICT for development”, personal communication

7 Gillwald, Alison, “Policy and Regulatory Challenges of Access and Affordability”. [www.lirne.net/resources/netknowledge/gillwald.pdf](http://www.lirne.net/resources/netknowledge/gillwald.pdf)

Competitive markets represent one of the alternative options to promote universal service. However, there has always been a large segment of the African population whose needs are not met by markets. Africa has the largest segment of the population living below the poverty of line, with a weak purchasing power, so these people needs should be met by alternative financing mechanisms that extend beyond the borders of the market.

## Development strategies

Africa's ICT for development challenge extends beyond infrastructure. A recurrent theme that has been emerging from experience and the analysis of national e-strategies and position papers points to five key areas that should be taken into account when designing development strategies and financing ICTs:

*Promoting access to and empowering the vast majority of the African poor.* This implies raising access to radios to 100%, television to 50% and phones in rural areas to 25% to promote meaningful information and communications in support of the Millennium Development Goals over the next ten years. It demands the promotion of pro-poor radio programming, development and implementation of pro-poor broadcasting policies, building the capacities of independent media to integrate new technologies into the old technologies in order to increase access, and adapt globally/locally available information to the needs of the poor. Additional work is required in promoting universal service and encouraging policies that support experimentation with new bottom-up wireless technologies to build ad-hoc community networks that could be integrated into the broadcasting media.

*Facilitating the diffusion of modern and interactive ICTs by building regional, national and local backbone infrastructure.* This entails financing regional connectivity projects such as the East African Submarine Cable, South African Regional Infrastructure Initiative, COMTEL, East African Digital Transmission Project, Intelcom II, etc. to upgrade regional connectivity and public private partnership support for:

- Providing the right regulatory and policy framework to facilitate private investment in infrastructure and innovation in new technologies;
- Establishing Internet exchange points to keep local and regional traffic local;
- Promoting the building of dark fibre infrastructure at the level of municipalities;
- Rolling out a variety of broadband distribution networks including DSL, cable modem and terrestrial broadband networks to extend access further from traffic concentration centres, and expanding backbone access to rural areas using a mix of wire-line and wireless technologies;
- Building the backbone infrastructure for broadcasting and signal distribution;
- Building up supportive infrastructure such as rural electric grids.

*Investing in human capacities* particularly of development professionals and ICT experts so as to improve usage of ICTs and social appropriation while creating conditions for developing applications to solve development problems, fostering innovation and entrepreneurship.

*Mainstreaming ICTs in key development sectors* by integrating ICTs in agriculture, health, education and public sector strategies and systematically incorporating ICTs at project levels or at development plan levels.

*Supporting initiatives* that promote enabling policies and regulatory environments.

Based on the ballpark estimates above, African countries need at least USD 600-900 million of additional financing, which is well beyond what is available from the public, private and development finances and what could be achieved through development strategies integrating ICTs in order to make a dent on the information and communication capacities needed to achieve the MDGs within a shorter term. These resources should be available within the digital solidarity agenda specifically within the perspective of global public goods.

There is a growing consensus that African countries should heed to the creation and contribution to the Digital Solidarity Fund that was launched by the President of Senegal, as much as they should participate in the global debate on strengthening the effectiveness of existing financial mechanisms and the creation of new ones.

## The Global Public Good perspective

The global public good perspective provides a useful framework for generating additional resources for ICTs for development in Africa. The public goods framework posits that:<sup>8</sup>

“Extending access to the Information Society in developing countries is a global public good that benefits everyone because of the value of network externalities. The value of the global information network increases in value as more national networks and business and individual users are added. Since the global economy runs on global information networks to create a global marketplace, the private sector in developed countries stands to benefit from the extension of ICTs in developing countries and should help pay for ICTs for development as a global public good. Therefore, a Global ICT Fund should be established, similar to the Global Environmental Facility, which could raise funds through a global tax on microchips, for example. The proceeds of the Global Fund would be directed towards building information societies and economies in developing countries.”

Access to ICTs and knowledge in Africa meets these main characteristics of trans-national public goods. Universal access to ICTs “can be considered as a global public good in that it is theoretically and practically both non-rival [one person’s consumption of the good does not

---

8 Association for Progressive Communication, “Financing ICTD in Africa”. [africa.rights.apc.org/index.shtml?apc=2974ose\\_1&x=30657](http://africa.rights.apc.org/index.shtml?apc=2974ose_1&x=30657)

diminish the amount available to others] and non-exclusive [no one can be excluded from access].”<sup>9</sup> Moreover, access to ICTs and networks makes the delivery of a wide-range of services possible, thus enhancing other public goods. Likewise, access to ICTs and knowledge by the African poor is important for the international community, for both developed and developing countries.

The overwhelming financial burden for bridging the digital divide will not be adequately addressed by individual African countries or entities acting alone, but it will be best addressed collectively on a multilateral basis. It means that once a government begins to deliberately integrate ICTs into development plans (for example in integrated rural development that builds schools along wireless towers, or water distribution systems along fibre optics cables), there should be resources available to do that. The public good perspective provides a framework for securing resources to achieve integrated development in Africa where ICTs become one of the key constituents.

Therefore, the participation of African countries in global public good debates is essential. Historically, African countries were largely excluded from intergovernmental decision-making due to the limited technical and policy capacities, lack of financial resources and inadequate information and the inefficient working methods of the global governance system.<sup>10</sup>

## Other barriers

The ability of the African poor to improve their livelihood is not only limited by lack of access to ICTs, information and relevant applications in key sectors, but also by a complex web of constraints ranging

---

9 Accuosto, P. and N. Johnson (2004), *Financing the Information Society in the South: A Global Public Goods Perspective*.  
[rights.apc.org/documents/financing.pdf](http://rights.apc.org/documents/financing.pdf)

10 Commonwealth Telecommunications Organization and Panos London (2002), “Louder Voices: Strengthening Developing Country Participation in International ICT Decision-Making”. [www.panos.org.uk/resources/bookdetails.asp?id=1065&null=1002](http://www.panos.org.uk/resources/bookdetails.asp?id=1065&null=1002)

from unresolved problems of governance and injustice at the local levels to the dynamics of the global economic system.<sup>11</sup> The implication of policy and governance is far reaching. The quality of local governance does not only determine the characteristic of the policy and regulatory environment that ideally promotes optimum private sector investment and public and private sector partnership but also affects the extent to which resources are mobilised, thus ensuring that those resources invested benefit the people who need access the most. It is more likely to find limited access to ICTs in the most corrupt institutions or countries than in those with good governance structures.

African countries' participation in global governance issues and their access to trade and debt relief are critical for their improved participation in the information society. Financing the mainstreaming of ICTs in health and education will not make sense if the debt burden makes it virtually impossible for African governments to maintain adequate programmes of public education and health in the first place. Fairer access to trade will encourage optimum use and appropriation of ICTs. The deliberation on financing ICTs for development should therefore encompass a frank evaluation of the impediments associated with local governance, the global trade regime and broader debates on debt relief. Alternatively, debate on aid, debt relief and trade should also become ICT-conscious.

The recent commitment to debt relief for a number of African countries and to increase aid and trade undertaken by G8 countries could improve opportunities for poverty alleviation in the region. A joined-up thinking in mainstreaming ICTs in debt relief, aid and trade is required to maximize the benefits provided by these commitments. For example, a new school or a health centre that may benefit from debt relief should ideally integrate a solar panel for powering up future ICT equipment and an "e-ready" building; equally it will be cost effective to build an inter-city fibre network along with a new road network or a water distribution system that may benefit from increased aid.

---

11 Hewitt de Alcantara, Cynthia, "The Development Divide in a digital Age: an issue paper". [ftpserver.unicc.org/unrisd/outgoing/pp/tbs/hewitt.pdf](http://ftpserver.unicc.org/unrisd/outgoing/pp/tbs/hewitt.pdf)

On their part governments should encourage ICT financing with a focus on poverty.

### Governments should:

- Create an enabling legal, institutional and policy environment for increasing access to and effective use of available financing mechanisms;
- Remove barriers so that access as a “public good” will be available to everyone;
- Create innovative policy models that promote the participation of non-profit operators in the deployment of ICT infrastructure and the development of bottom-up ICT infrastructure using innovative wireless technologies;
- Embrace universal access strategies using locally available resources and innovative financing mechanisms such as universal service funds that employ methods such as the minimum subsidy auction or community-driven approaches such as rural cooperatives;
- Promote access to alternative and innovative financial resources including remittances. Remittances represent a significant resource and rely on moral contracts that promote the spirit of the public good;
- Design and implement development strategies that integrate ICTs within the spirit of public goods, for example, by promoting an integrated planning of ICTs with health, road, energy and other infrastructure at local levels;
- Support effective use of existing finances by enforcing proper management of resources;
- Encourage the participation of local researchers to develop and implement the concept of global public goods;
- Highlight ICT and access dimensions in the global debate on public goods and broader issues on financing development.

A well-crafted mix of old and traditional technologies adapted to local settings would be important. Similarly, financing mechanisms that bring a mix of effectively used traditional sources together with new mechanisms within the global public good and digital solidarity tag are essential. On the one hand, there is a need for greater coordination to align sources of finance with enabling policy environments and, on the other, new financing mechanisms within the public goods framework should be pursued to bridge the access gaps of those who are below the poverty line.

Governments play a key role in enriching development strategies with ICTs. Regional organizations such as the African Union and programmes such as NEPAD should also play a key role in studying new mechanisms and synchronizing existing sources of finance with enabling policy environments so as to enhance the impact of ICTs on most African people. ■

# The Information and Knowledge Society in Latin America and the Caribbean

## Different Approaches and their Implications for Policies

ANA LAURA RIVOIR

ASSOCIATE PROFESOR

DEPARTAMENTO DE SOCIOLOGÍA, FACULTAD DE CIENCIAS SOCIALES

UNIVERSIDAD DE LA REPÚBLICA ORIENTAL DEL URUGUAY

[WWW.FCS.EDU.UY](http://WWW.FCS.EDU.UY)

*The documents stemming from the global and regional debates within the framework of the WSIS reflect different concepts regarding the process of consolidation of an “information society”. These approaches and views have direct implication in the design and implementation of policies. The current trend tends to group Southern countries on the periphery or, directly, towards exclusion, so they should build their own development strategies, based on their needs and realities. Within the world scenario, Latin America shows cohabitation between sectors integrated into global power networks, others that are slowly reaching some of the advantages of technological progress and wide excluded sectors. This paper explores the possibilities of Latin American countries to become reinserted into the global economic structure by considering alternatives that could be undertaken for a strategic development of the information and knowledge society in the region.*

This document is based on research carried out by the author, whose conclusions are presented in “Visiones de la sociedad de la información y el conocimiento y sus implicancias en las políticas: El proceso en América Latina y el Caribe”, available on line at: [wsispapers.choike.org/](http://wsispapers.choike.org/)

تعكس الوثائق الصادرة عن المناقشات التي دارت في إطار القمة العالمية لمجتمع المعلومات مفاهيم مختلفة حول ما يترتب على عملية إستقرار وتعمق "مجتمع معلومات". لهذه المناهج والرؤى إبعكاسات مباشرة على صياغة وتنفيذ السياسات. الإلتجاه الحالي يقوم على تجميع الدول الجنوبية على هامش المراكز المحورية، أو إستبعادها بشكل مباشر، حتى تقوم من جانبها بوضع إستراتيجياتها الخاصة بالتنمية، القائمة على احتياجاتها وواقعها. أمريكا اللاتينية تصنف، في إطار المشهد الدولي الحالي، باعتبارها قارة تتعايش بها في نفس الوقت قطاعات تدخل ضمن شبكات القوى الدولية، وقطاعات أخرى تحقق وبشكل بطيء بعض الفوائد من مزايا التقدم التكنولوجي، وقطاعات عريضة مستبعدة تماما. هذه الوثيقة تستعرض فرص دول أمريكا اللاتينية في إعادة اندماجها في هياكل الاقتصاد العالمي، أخذاً في الإعتبار البدائل التي يمكن تبنيها من أجل تنمية إستراتيجية لمجتمع المعلومات والمعرفة في الإقليم.

Los debates en el marco de la CMSI reflejan diversas concepciones sobre lo que implica el proceso de consolidación de una "sociedad de la información y el conocimiento". Estos enfoques tienen implicancias directas en la elaboración de estrategias y en la implementación de políticas. En América Latina conviven sectores insertos en las redes globales de poder con sectores que lentamente se incorporan a las ventajas del progreso tecnológico y con amplios sectores de excluidos. Este documento, partiendo de las visiones existentes en América Latina, explora las posibilidades del continente de reinsertarse en la estructura económica global, proponiendo alternativas para un desarrollo estratégico de la sociedad de la información y el conocimiento en la región.

*Les débats qui ont lieu dans le cadre du SMSI montrent diverses conceptions relatives au processus de consolidation d'une "société de l'information et du savoir". Ces approches ont des implications directes sur l'élaboration des stratégies et sur la mise en place des politiques. En Amérique Latine cohabitent divers secteurs: ceux qui ont accès aux réseaux mondiaux du pouvoir, ceux qui bénéficient des avantages du progrès technologique et ceux qui en sont exclus. A partir des approches existantes en Amérique Latine, ce document explore les possibilités du continent de se réinsérer dans la structure économique mondiale et propose des alternatives pour un développement stratégique de la société de l'information et du savoir dans la région.*

## Introduction

The documents stemming from debates developed within the framework of the World Summit on the Information Society (WSIS) reflect different concepts regarding the process of consolidation of an “information society” (IS) within contemporary societies. It is worth mentioning these approaches and views given their implication in the design of strategies and implementation of policies, including both theoretical definitions and perspectives from the point of view of all stakeholders involved. It should be taken into account that those perspectives linked to definitions of the IS in advanced economies or core countries is not the same as that of countries located on the periphery of global centres of power.

The information and knowledge society (IKS) is led by core countries and directed by market dynamics. Southern countries should build their own development strategies, since the current trend tends to group them on the periphery or directly guides them towards exclusion. Within the world scenario, Latin America is placed as a continent which shows cohabitation between sectors integrated into global power networks, sectors which are slowly reaching some of the advantages of technological progress and wide excluded sectors. At the same time, although the region is characterized by the adoption of development models with different peculiarities according to each country and government, the main characteristic is that of technological (even economic) dependence on core economies.

It is worth wondering, then: What are the possibilities of these countries to become reinserted into the global economic structure, thus avoiding the increase of inequalities and fostering social development? What approach and options should be undertaken in view of the IKS? Which are the strategic focal points of the IKS in Latin America?

The following article is based on a more comprehensive research work on those documents produced in preparatory governmental meetings of Latin America and the Caribbean (LAC) for the WSIS.

## Conceptual elements to understand the IKS in Latin America

### *The Information and Knowledge Society*

As used in this paper, “information and knowledge societies” (IKS) are those representing the result of socio-historical processes which have been analyzed and described by several authors and which were first identified through the changes that started taking place in industrial societies throughout the 1970s.

The IKS becomes consolidated on the basis of a knowledge-intensive economy developing within the framework of the new socio-technical paradigm. As described by Castells,<sup>1</sup> a revolution has taken place within this emerging society in terms of information technologies; economies have become more interdependent and the world capitalist system has been restructured. The relationship between economy, State and society has changed, increasing the power of capital vis-à-vis labour and the trend towards dismantling the welfare state as it has been known. Likewise, a process of increased inequalities and territorial and cultural differentiation has also been taking place.

In this process, as stated by Mercado,<sup>2</sup> “the emergence of new technologies, on the other hand, entailed new forms of organization in terms of knowledge generation, redefining the borders between scientific research and technological development. As never before, knowledge started to be regarded as a commodity.”

Innovation represents an outstanding knowledge activity and although formal research is the pillar of its production, the system is widening. Stakeholders have diversified and places for innovation are multiplying - users, non-specialized people, workers, etc. In the same sense,

---

1 Castells, M. (2000), *La era de la información. Economía, Sociedad Cultura*. Vol. I La sociedad red. Alianza Editorial, Barcelona.

2 Mercado, A. (2005), “La estructura Productiva de América Latina: ¿Convergencia hacia la sociedad del conocimiento?” in *Revista Venezolana de Economía y Ciencias Sociales*, Vol. 11 No 1, (January–April), Caracas.

Arocena and Sutz<sup>3</sup> identify four tendencies that characterize the present situation with regards to innovation: a) the “innovative acceleration”; b) the growing relationship among scientific research, technological development and innovation; c) the economic importance of knowledge; d) the social polarization brought about by the previous trends.

The process of innovation involves, then, different actors. It does not only comprise those who produce innovations and those who receive or apply them but also the ones that promote them and act as links among one another. The actors that play these roles can be found in different public, private and social institutions. The processes of technology incorporation - as social processes that they are - are complex and diverse, while also being specific and articulated to other constitutive dimensions of societies.

#### *Peripheral development within the IKS: Peculiarities of Latin America*

According to Tedesco,<sup>4</sup> optimistic approaches regarding the IKS have been replaced by more complex visions about the democratizing effects of the new patterns of social and economic organization based on knowledge and information: “The more general hypothesis on which these reviews are based maintains that a society and economy based on the intensive use of knowledge simultaneously produce phenomena of more equality and more inequality, of greater homogeneity and greater differentiation.”

At a global level, these inequalities result in large gaps among countries, but they are also evidenced within each society, city and region. Access to basic elements such as health, education and income is becoming increasingly unequal for human beings according to the economic sphere they belong to. The richest countries monopolize the most important advantages and benefits of technological progress while

---

3 Arocena, R. and J. Sutz (2003), *Subdesarrollo e Innovación. Navegando contra el viento*, Cambridge University Press / OEI, Madrid.

4 Tedesco, J. C. (2000), *Educación en la Sociedad del Conocimiento*, Fondo de Cultura Económica, Mexico.

the poorest countries remain practically excluded from it. Organizations such as the United Nations have stressed the need to take global and national steps aimed at redressing these trends.<sup>5</sup>

There are historical components that cause the structural insertion into the global system to render the Latin American leap into the IKS difficult. Those areas engaged in the production of raw materials have had a peripheral insertion at world level, which has resulted in low investment in research, training and endogenous innovation. Arocena and Sutz<sup>6</sup> state that: “The contemporary globalization of world production tends towards a dual distribution structure, thus concentrating the intensive and advanced training in science and technology in the North, while in Southern areas most productive tasks are spread out with low participation of knowledge-intensive local activities. In this sense, the Southern region of Latin America seems to be going through a neoperipheral reinsertion into the global economy.”

Studies carried out on the impact of such restructuring process, economic reforms and economic opening models since the 1970s in Latin America evidence the prevalence of primary economic activities, the low incorporation of knowledge into industry and/or directly point to deindustrialization. Apart from the above, there is also lack of technology investment efforts in these countries, which according to Moguillansky<sup>7</sup> results in a “more vulnerable international insertion, if compared to that existing under the import substitution model. Therefore, the cure has been worse than the ailment.”

The analysis of different macroeconomic indicators shows that the region is not going in the right direction to face these challenges. A return to primary activities in most economic sectors is evidenced together

---

5 United Nations Development Programme (2001), *Human Development Report 2001. Making new technologies work for human development*, Washington D.C.

6 Arocena, R. and J. Sutz, *op cit*.

7 Moguillansky, G. (2003), “La Innovación: el talón de Aquiles de la Inserción global de América Latina”, pp. 45-84. In: Calderón, F. (Coord.) (2003), *¿Es sostenible la globalización en América Latina? Debates con Manuel Castells. Volumen I La Globalización en América Latina: Asignaturas pendientes*, FCE/UNDP - Bolivia, Chile.

with an increase in exports based on the exploitation of natural resources, production of primary goods and a disproportionate rise in imports of manufactured goods. We deal here with a model of unsustainable productive development.

The incorporation of technology takes place through transnational companies as enclaves instead of being the result of endogenous development. No demand for technology has arisen from the diverse sectors of the economy that may encourage links with universities and technology institutes so as to foster a virtuous circle among creation, innovation and investment. Nor has the State defined policies aimed at encouraging the national system of innovation or integration links to the global system.

On the other hand, as stated by Mercado, while the large corporations in developed countries become actively engaged in research and consider knowledge as a key asset for their operation and survival, Latin America continues to demand the kind of research work that produces “useful” knowledge without taking any financing responsibilities and only appreciating it rhetorically. In this sense, Mercado<sup>8</sup> points out: “The region faces four key challenges: a technological challenge, characterized by a more complex production; an institutional challenge, characterized by strengthened spaces for the promotion and development of technology and scientific knowledge; the economic-productive challenge, characterized by the huge power of multinational corporations; and the ethical-political challenge, defined by the imperatives of sustainable development.”

The information and communication technologies (ICTs) represent the core element of the new technological paradigm and, according to Castells, they are “the key element to foster productivity in the process of production”. These technologies are required for the improvement of information processing technologies, the creation of knowledge and the production of technology. The digital divide, or differential access to ICTs - access, production and consumption of hardware, software,

---

8 Mercado, A., *op cit.*

contents, endogenous capacities - represents another weak flank of development strategies in Latin American countries. ICT appropriation then is fundamental for the development of Latin American countries, particularly within a context of growing inequalities. Inclusion in information networks and knowledge generation are also considered as key elements.

However, this potential transformation should not be identified with the mere inclusion of ICTs in any social area. It is worth making some clarifications regarding the role of technology in social analyses. Studies on technology have been subject to determinisms that have reduced their interpretation to one among the many existing explanatory dimensions. Technological determinism has been of significant importance in social studies and within them technology is regarded as the autonomous factor that promotes social change. Cultural determinism has also encouraged ethnocentric interpretations about technologies and their applications.

The above different elements show the unequal conditions existing in terms of technological development and endogenous capacities for building the IKS. Briefly, it may be pointed out that the inequalities in terms of situations with regards to the IKS are placed at two different levels: a) with respect to the historical and structural peculiarities of a society and the articulation of actors around technological innovation within each society, and b) the inequalities imposed by the current structuring of international economic relations as starting point for the weakest societies.

## Definition of a position within Latin America and the Caribbean for the WSIS

In this section, there is a review of elements arising from a series of discussions and proposals within the Latin American process between the first and second phase of the WSIS. At intergovernmental level, the results of two key events are analyzed: the Latin American and Caribbean Regional Technical Preparatory Meeting for the World Summit on the Information Society and the 10<sup>th</sup> Biennial Advising Meeting for

the INFOLAC programme,<sup>9</sup> held in Quito from 4 to 6 May 2005 and the Regional Preparatory Ministerial Conference of Latin America and the Caribbean for the Second Phase of the World Summit on the Information Society,<sup>10</sup> held in Rio de Janeiro from 8 to 10 June 2005. There follows a review of the documents produced during those meetings (Declaration and Plan of Action) and an analysis carried out by means of the participation in those events.<sup>11</sup>

### *Technical preparatory meeting - Quito, June 2005*

The main input for this meeting was the document put forward by the Economic Commission for Latin America and the Caribbean (ECLAC), *Towards a Plan of Action for the Information Society in Latin America and the Caribbean. eLAC 2007*.<sup>12</sup> The main purpose of the meeting - taking ECLAC's document as starting point - was to advance in the formulation of a draft Regional Action Plan to be used later as negotiation basis in the Conference to be held in Rio. Upon starting discussions in Quito, an agreement was reached to work only on the annex: *Goals of the Plan of Action for the Information Society in Latin America and the Caribbean*, focusing on the proposal of quantitative goals (mostly set forth by 2007) and avoiding the discussion of basic concepts and definitions included in the original document.

An element that covered the whole work on the document was the debate on the contents linked to ICTs. Underlying this debate there are different views about the role to be played by LAC countries in the

---

9 [portal.unesco.org/es/ev.php URL\\_ID=27169&URL\\_DO=DO\\_TOPIC&URL\\_SECTION=201.html](http://portal.unesco.org/es/ev.php_URL_ID=27169&URL_DO=DO_TOPIC&URL_SECTION=201.html)

10 [www.riocmsi.gov.br/](http://www.riocmsi.gov.br/)

11 This analysis is based on the participant-observation method. In this technique the researcher joins the dynamic of the process subject to study and becomes another participant. From his/her participation, the researcher carries out an analysis of the dynamics and contents of the process, and faces the challenge of overcoming a partial or biased analysis of facts. He/she can take advantage of having access to first-hand information and to particulars regarding the fact dynamics.

12 [wsispapers.choike.org/hacia\\_elac\\_2007\\_esp.pdf](http://wsispapers.choike.org/hacia_elac_2007_esp.pdf)

global IS. In this sense, attention was drawn to the lack of proposals for a more active role of the region in terms of the production of technology, information and knowledge in the draft document.<sup>13</sup>

Some of the delegations taking part<sup>14</sup> presented a document for consideration, including additional goals that reflect concern about aspects related to the production of technology, knowledge, infrastructure and contents in Latin America, focusing these elements on the specific development problems of the countries within the region.

The proposal includes the following items, which were included in the final document of the meeting:

- Promote the development of common indicators to jointly quantify knowledge access and ICT use.
- Create and foster regional cooperation networks among institutions and technological poles and parks, allowing the participation of scientific and technology institutions in the systems of innovation and national production of high value-added products and services and promoting the development of technical and scientific local expertise.
- Encourage local creation and regional exchange of contents that would strengthen citizen participation and human development, particularly those related to science, technology, digital inclusion and job training.
- Promote the development of the local technology industry in the area of input materials and technology for development as well as the maintenance of infrastructure.

---

13 For example, in the initial proposal, the only reference made to the academy and/or university is that which refers to the *Clara* network ([www.redclara.net/](http://www.redclara.net/)) (Goal 8). There is also no goal related to the creation or production of value added technology, knowledge or products.

14 The original version was proposed by Argentina, Brazil, Bolivia, Chile, Cuba, Peru, Uruguay and Venezuela.

- Set up a regional working group to study the development and challenges of creative industries/content development industries, establishing regional and global coordination mechanisms, seeking solutions for common problems such as the financing of intangible goods, the distribution of cultural and communication goods and services in the region and the improvement of local capacities for the production of contents with due respect to cultural diversity.

Other substantial modifications proposed dealt with the incorporation of aspects of regional identity into the goals set forth, as well as inequalities within regions and countries in terms of issues such as access. Some of these elements were included in the “Quito revision” of the *eLAC 2007*<sup>15</sup> document, whose final version was in charge of the coordination of the Group of Latin American and Caribbean countries (GRULAC) at the International Telecommunication Union (ITU), in Geneva.

### *Participation of civil society*

A small number of civil society organizations were invited to participate as observers in the Quito meeting and had the possibility to make contributions during a space devoted to this end at one of the sessions. In this way, they put forward their proposals for the document on goals,<sup>16</sup> as well as a document<sup>17</sup> proposing some general criteria to be considered as being transversal to goals. Among these criteria were: a) that they should reflect UN principles and, particularly, their coordination with MDGs; b) to consider the gender dimension; c) to consider a broad perspective on ICTs, not only limited to the Internet; d) to

---

15 [wsispapers.choike.org/elac\\_2007\\_final\\_quito.pdf](http://wsispapers.choike.org/elac_2007_final_quito.pdf)

16 [wsispapers.choike.org/recomendaciones\\_metas\\_elac2007.pdf](http://wsispapers.choike.org/recomendaciones_metas_elac2007.pdf)

17 *General criteria proposed by civil society organizations for the Regional Action Plan eLAC 2007*. Quito, 4-6 May 2005. Signed by: Latin American Information Agency, Latin American Association of Radio Broadcasting Education, World Association of Community Radio Broadcasters (AMARC) in LAC, Third World Institute (ITeM), APC ICT Policy Monitor, DAWN Network, Sustainable Development Network, Information Network for the Third Sector (RITS), Infodesarrollo.ec Network. [wsispapers.choike.org/criterios\\_generales\\_elac.pdf](http://wsispapers.choike.org/criterios_generales_elac.pdf)

consider a broad participation when setting up the Working Groups proposed and to make financing sources known. Of these four core points, only the first one is partially taken into consideration in the Quito document.

#### *Interministerial Conference of Rio de Janeiro, June 2005*

The event that took place in Rio de Janeiro is part of the process that has been carried out by LAC countries since the Geneva Summit in 2003.

From the draft documents prepared at the preparatory meeting held in Quito and the compilation of comments carried out by the ITU-GRULAC Coordination, the Rio Conference made progress in building a LAC agenda towards the IS. Work was intense during the three-day meeting which concluded with the adoption of a Declaration of Principles: “*The Rio Commitment*” and a Regional Action Plan: “*eLAC 2007*”, aimed at the fulfilment of 30 goals by all LAC countries by 2007.<sup>18</sup>

#### *Participation of civil society*

At the Conference held in Rio de Janeiro, civil society organizations participated as observers, being allowed to attend the opening and closing sessions, as well as parallel events, although they could not witness debates. Those civil society organizations invited to the conference participated on two occasions at the plenary session on 8 and 10 June 2005.<sup>19</sup> On the last occasion, organizations expressed their disagreement with the fact that at the meeting in Rio de Janeiro “the mechanisms of participation and rules of procedure established within the framework of the Summit were not respected, thus preventing the participation of delegates from civil society in the debates and working meetings as well as the appropriate access to documents under discussion.”<sup>20</sup>

---

18 Both documents are available at: [www.cepal.org/socinfo/elac/](http://www.cepal.org/socinfo/elac/)

19 *Ibid.*

20 Participation of civil society organizations, 10 June 2005, Rio de Janeiro. [www.choike.org/nuevo/informes/2968.html](http://www.choike.org/nuevo/informes/2968.html)

Just as it happens at a global level, there are different perspectives coexisting with regards to the IS at the regional level. On the one hand, there is a view that considers this phenomenon in very complex terms, with an approach based on human rights and focused on aspects related to social development. This perspective is closely related to the principles put forward by civil society and to the documents developed by international organizations such as UNESCO. In the Latin American process, this view was expressed through the effort aimed at creating a perspective of the IS from Latin American countries, regarding them not as mere ICT and content users but also as current or potential producers of technology and related products. This vision is clearly reflected on item 20 of the *Rio Commitment*, for example.<sup>21</sup>

At the opposite end there could be a view that focuses on the market and the private sector as main stakeholders within the process. From this perspective, both the social and community aspects and the relation of the IS with the endogenous development processes of these countries remain limited to the minimum scope. The social dimension is linked to technology access, particularly the Internet, and to digital literacy for more distant social groups, addressing the “access gap” in terms of specific policies for excluded groups.

There is also an “intermediate” view, which highlights the importance of technologies for achieving social progress and aims to promote the development of technology industries, by engaging them in local productive systems.

Underlying these three views there are also different perspectives regarding the role to be played by the State and its policies. While in the second case it is understood that the State should limit its participation to the

---

21 “20. Our firm conviction that all individuals should take an active part in an information society based on shared knowledge, not only as users of new technologies but also as agents of development and content production. To achieve this, we reaffirm the need for promoting the free flow of ideas and information and the development of a regional and global culture of knowledge sharing.” [www.cepal.org/socinfo/noticias/documentosdetrabajo/7/21677/Compromiso\\_de\\_Rio\\_de\\_Janeiro.pdf](http://www.cepal.org/socinfo/noticias/documentosdetrabajo/7/21677/Compromiso_de_Rio_de_Janeiro.pdf)

creation of a suitable environment for extending infrastructure, the other two views consider that the State should be involved in a more extensive and proactive way throughout the development process.

## Focal points of discussion

The different perspectives previously described give rise to questions and debate points aimed at the development of Latin American strategies towards the IKS. By way of systematization, there follows a list of issues that should be studied more thoroughly:

Issues	Debate subjects	General questions
Knowledge property	<p>Rules that govern intellectual property systems, particularly patents and copyrights.</p> <p>How these systems promote the privatization of knowledge which remains in the hands of large corporations;</p> <p>Dissemination and use of local, cultural, native and identity-based knowledge of Latin American societies.</p>	<p>Who owns the cultural, biological and eventually digital property of Latin America? Which is the most suitable patent and copyrights system to the reality of the region?</p> <p>Should knowledge be considered as a public good?</p>
Production of technology	<p>The possibilities of Latin America to become globally inserted as producer of technology as opposed to the idea that these spaces cannot possibly be conquered.</p>	<p>Are there possibilities to establish regional strategies for technology production? Is the Latin American space within the global market limited to that of producer of raw materials?</p>

Issues	Debate subjects	General questions
Digital identity and culture	The creation of cultural contents and products by using multimedia and convergent new technologies; the need to feed Internet with Latin American information, the digitalization of the historical and cultural heritage, the digital back-up of collective memory. Strengthening of Latin American identities.	Which are the priorities and how should they be carried out? Who are those interested in systematizing, digitalizing and making this information public? Who would be benefited (markets, local societies)?
Software (free vs. proprietary)	This is a debate that takes place at international level. In the case of Latin America, there is an incipient software and computing service industry which defends proprietary software. On the other hand, certain consensus has been reached regarding the advantages of free software in terms of costs and democratizing aspects.	In order to strengthen the local industry, is it profitable for the State to make purchases from the local industry? Would the local industry be strengthened by the generalized expansion of free software to all possible areas, but above all to education, thus generating enabling environments in terms of innovation and learning?
Capacity building	The training of professionals and people in general, the infrastructure conditions and the extent to which education, technology and scientific production are valued.	Which dimensions and issues should be given priority when talking about training according to the local and regional realities?

Issues	Debate subjects	General questions
Market role	<p>The feasibility of technological innovations is not taken into account when dealing with financial support, regulation, promotion, policies and credits to be provided by the State. The constraints faced by countries in this respect are evident - priorities in budget distribution should also be reconsidered. Also, it should be consider that most telecommunication companies in the region have been privatized and they are key stakeholders.</p>	<p>What role is played by the market? What are the possibilities of public policies? Which is the degree of independence in terms of processes of infrastructure generation and their subsequent implementation? Which is the regulatory framework?</p>
Community access	<p>Telecentres, community centres and ICT dissemination represent important elements in terms of the creation, promotion and capilarity of technologies for social, useful and pedagogical use. However, their sustainability should be analyzed: their closing down when they do not offer tools to solve people's problems, their lack of feasibility when there is no technical and/or financial support, etc.</p>	<p>Should community centres be offered technological support? Should telecentres be endowed with social and cultural projects and aims?</p>

## What should be done?

The research work carried out provides some clues as to the perspectives and paths to be followed in order to link the IKS to the development of LAC countries. The perspective from which the IKS is considered has direct implications for the actions and measures to be taken by the different stakeholders involved (political sector, governments, international institutions, citizens, entrepreneurs, etc.). Being peripheral societies within the IKS, Latin American societies should build their own perspective.

The important thing is to reject pro-technology views and take steps aimed at creating new capacities and strengthening the already existing ones. These measures are to be implemented at all levels - local, national, sub-regional, regional and global - as framework for action. The idea is to include and coordinate the action of the different stakeholders within a process of endogenous development. Otherwise, current trends will keep consolidating and the socio-economic, political and cultural situation of LAC societies will be aggravated. Below, some suggestions are provided in this respect:

- Accept the relevance of *governmental policies*. The State should play a relevant role in terms of setting guidelines, legal context and negotiation spaces aimed at the fulfilment of goals and their incidence on social development. The institutional character of these policies should be considered, thus making them applicable throughout the pyramidal structure of States and turning them inter-sectoral.
- Aim at the commitment and *coordination with the different social actors* in an effective and plural way from the institutional point of view and at the same time to have the necessary capacities and powers to carry out such coordination and process. The education system, the industrial and economic agents, technology infrastructures, civil society organizations, Universities, research centres, and corresponding ministries should all be coordinated by means of a synergic work.

- *Private companies* and their articulation with development priorities set by governments should be a focal point of policies.
- Develop and strengthen *technology infrastructure* and basic training for the appropriation of technologies and their use in the different social, productive and cultural areas in order to achieve goals set according to the priorities of each population and aimed at solving the most pressing problems of societies. The socio-political and technological priorities should be articulated and subject to constant revision since they produce a dynamic of ongoing transformation and are sometimes difficult to predict.
- In view of the situation in many countries of the region, where a large number of people have no access to electric power networks, it is also important to coordinate the governmental and business agendas in order to implement *integrated and convergent processes* with regard to access to basic technologies.
- Provide resources and support to *education* or knowledge-creating institutions - universities, research centres, etc. To take into account the necessary literacy skills and their articulation with the new technologies and pedagogical and didactic challenges, by using ICT assets, including the traditional media. To encourage the training of people in issues and areas of top priority for development and inclusion into the IKS and to consider its implication in the proposal of curriculum guides for primary, secondary and tertiary education, aiming at giving priority to the training of professionals capable of creating knowledge and technology and managing local processes for their development.
- Implement policies and programmes to encourage the *innovation and development* of science and technology, with the participation of the different stakeholders; thus regarding this process as the setting up of a social network for innovation and development.
- Encourage and extend *ICT use as a tool* for social communication, productive development, improvement of working processes, governmental administration and social participation, among other

areas, thus preventing ICTs from becoming an end in themselves and linking their introduction to training processes and clear social development goals.

- Foster the *production of knowledge and local contents*, for the purpose of creating a local industry as well as promoting Latin American culture, thus strengthening its local identity within the global network.
- Make policies aimed at *social inclusion* taking advantage of ICTs. For example, to establish and use multimedia community centres, not for a consumption or connection purpose but instead for labour and citizen purposes.

The most suitable policies and strategies for Latin America in the IKS are aimed at encouraging changes in terms of development models by introducing a new social and productive paradigm and creating conditions, in all areas of society, for building sustainable and endogenous capacities for the generation, development, transformation and appropriation of information and knowledge from within the continent, as well as innovation and technological change. In this way, an attempt would be made to take advantage of a window of opportunities that is likely to unleash real development processes in Latin American societies. ■

# Fostering Local Resources and Technologies in the South

## Perspectives for the Arab World

LEILA HASSANIN

DIRECTOR  
ARABDEV  
[WWW.ARABDEV.ORG](http://WWW.ARABDEV.ORG)

*Actions decided in the WSIS context will take time to be implemented. The financial discrepancy to develop the “information society” in the North and the South is glaring and the extent to which the agreed policies and activities will cover the digital gap between them is questionable. Still, the Arab countries and the South, in general, are cautioned not to be overwhelmed by the challenges and economic inequities. In the interim, in order not to lose critical time, there should be an assessment of what is feasible with the existing human, in-kind and financial resources in the South and, more particularly to this document, the Arab region. This paper focuses on potential supplementary resources available in the Arab region as a starting point for serious local actions of ICTs for development.*

خطط العمل المقررة في إطار القمة العالمية للمعلومات سوف تتطلب وقتاً لتنفيذها. التفاوتات في الموارد المالية لتنمية "مجتمع معلومات" في الشمال والجنوب واضحة جداً، ودرجة تغطية السياسات والأنشطة المتفق عليها للفجوة الرقمية بينهما محل شك. ومع ذلك، فإن العالم العربي والجنوب، بشكل عام، عليهم توخي الحذر من أن تتلغهم التحديات والظلم الاقتصادي. خلال المرحلة الانتقالية، وحتى لا يضيع وقت حيوي، هناك ضرورة لتقييم ما هو متاح من الموارد الإنشائية، النوعية والمالية في الجنوب و، بشكل خاص بالنسبة لهذه الوثيقة، في الاقليم العربي. تركز هذه الوثيقة على الموارد الإضافية المحلية المحتملة التي تتوافر في الاقليم العربي كنقطة بداية من أجل أنشطة محلية جادة في مجال تكنولوجيا المعلومات والاتصالات من أجل التنمية. مناقشات وضع السياسات، و من المنظور الشعبي، تعد مطولة، مما يزيد من مخاوف أن يؤدي التأخر الزمني في إستفحال وضع تنموي هش قائم بالفعل.

Las acciones acordadas en el contexto de la CMSI tardarán tiempo en ser implementadas. La discrepancia financiera entre el Norte y el Sur para desarrollar la "sociedad de la información" es evidente, así como es cuestionable el grado en que las políticas y acciones acordadas lograrán cubrir la brecha entre estas regiones. La autora recomienda que los países del Sur - y los países árabes, en particular - no se dejen abrumar por los desafíos y las inequidades económicas. Sostiene que se deberían identificar iniciativas factibles de llevar a cabo con recursos humanos y financieros disponibles. Examina además los potenciales recursos suplementarios disponibles en la región árabe como punto de partida para el desarrollo de acciones locales en materia de información y comunicación.

*La mise en place des actions accordées dans le contexte du SMSI prendra encore un certain temps. La divergence financière entre le Nord et le Sud concernant la société de l'information est évidente, et le doute est permis pour savoir si les politiques et les actions accordées réussiront à combler le fossé entre ces deux régions. L'auteur de ce document recommande aux pays arabes et aux pays du Sud, de ne pas baisser les bras face aux défis et inégalités économiques. Elle affirme qu'on devrait déterminer le potentiel des pays vis-à-vis des ressources humaines et financières disponibles. Ce texte vise les ressources supplémentaires de la région arabe, comme point de départ pour le développement des actions locales en matière d'information et de communication.*

## Introduction

The World Summit on the Information Society (WSIS) is centred on the so-called “digital divide”<sup>1</sup> between the North and the South.<sup>2</sup> Therefore, it should deal with providing solutions on how to implement and follow up the Geneva and Tunis decisions by stakeholders at national, regional and international levels. Particular attention has been given in the process to the challenges that Least Developed Countries (LDCs) currently face.

Actions decided at the WSIS, however, will take time to be implemented. The extent to which the agreed policies and activities will cover the digital gap between North and South is questionable. In the interim, in order not to lose critical time, a look at what is feasible with the existing human, in-kind and financial resources in the South and, more particularly to this paper, the Arab region, should be assessed.

This briefing paper focuses on potential supplementary resources to address the digital divide. The idea is to use the resources available at the academic institutions involved in information and communication technologies (ICTs) in the Arab region as a starting point for serious local actions of ICTs for development (ICT4D). From a grassroots perspective, policy discussions are lengthily adding to the fear that the time-lag will exacerbate an already tenuous developmental situation.

- 
- 1 Commonly defined as “The gap that exists between those who have and those who do not have access to technology (telephones, computers, Internet access) and related services”. “Digital divide” is simplified here to encompass infrastructure, access, content and training, among others.
  - 2 According to the UN General Assembly Resolution 56/183, the WSIS was convened “to marshal the global consensus and commitment required to promote the urgently needed access of all countries to information, knowledge and communication technologies for development so as to reap the full benefits of the information and communication technologies revolution, and to address the whole range of relevant issues related to the information society, through the development of a common vision and understanding of the information society and the adoption of a declaration and plan of action for implementation by Governments, international institutions and all sectors of civil society.” [www.itu.int/wsis/docs/background/resolutions/56\\_183\\_unga\\_2002.pdf](http://www.itu.int/wsis/docs/background/resolutions/56_183_unga_2002.pdf)

At the first phase of the WSIS in Geneva, member States could not reach an agreement on the implementation of specific financial mechanisms to develop ICTs in Southern countries and they considered that, “while all existing financial mechanisms should be fully exploited, a thorough review of their adequacy in meeting the challenges of ICT for development should be completed by the end of December 2004”. This review was entrusted to a Task Force on Financial Mechanisms (TFFM), under the auspices of UN Secretary-General, Kofi Annan. The TFFM report was submitted to the second meeting of the WSIS Preparatory Committee (PrepCom 2), held in Geneva in February 2005.

What seems lacking in the TFFM report<sup>3</sup> and other WSIS discussions is how to leverage local human capital and in-kind resources readily available in the South. The TFFM’s role has been “to identify sustainable ways to ensure the continuation of current trends and innovative approaches to accelerate the use and availability of ICT resources to a wider range of developing countries and to a broader sub-set of the population in individual countries”. TFFM’s objectives can be furthered by countries in need of financial assistance to become integrated into the Information Society.

## Using local human capital and technology

The Arab region has an adequate number of skilled information technologies (IT) experts and students. Most Arab countries have established national and regional universities that house computer engineering faculties and/or departments. Many governments (United Arab Emirates, Egypt, Lebanon, Jordan, and Morocco, among them) have made it an educational policy to make computer literacy a mainstream skill taught throughout the school system and at diploma level education. Resources are tight in most cases, computer labs are not universal at schools, but the plans exists to make them so.

---

3 [www.itu.int/wsisis/documents/doc\\_multi.asp?lang=en&id=1372137614251377](http://www.itu.int/wsisis/documents/doc_multi.asp?lang=en&id=1372137614251377)

Egypt is an example from the Arab world; it has an adequate number of IT educated youth at the university level that, if the right incentives are given,<sup>4</sup> could be used to spread ICT use and training in many areas of the country that are lacking in services and know-how. Computer faculties can also encourage students to start low cost research and development (R&D) projects that address local needs. In this way universities could become an engine to help address the digital divide. At the same time, they provide for their students hands-on experiences and a foray into exploring potential market opportunities they could use in the future.

Universities are not the only educational institution that can play a role. Jordan is a good illustration of the innovative use of school children's IT knowledge. King Abdullah<sup>5</sup> launched an ambitious national initiative to bring computer equipment and basic technology training to the country's schools. Yet financing the day-to-day ICT technical support for school labs proved to be too costly to sustain. This problem turned out to be prevalent in richer countries. New York City's public schools were financially strapped to pay for needed technical support for their computer labs. To meet this challenge, a not-for profit organization, Making Opportunities for Upgrading Schools & Education (MOUSE),<sup>6</sup> established a programme that trains elementary, middle, and high school students to establish and run computer help desks. In addition, the learned IT troubleshooting skills provide job shadowing opportunities to the participants outside the school system.

---

4 The incentive could be a curriculum assignment, for example, such as how to make a certain software user friendly or to know the needs and the challenges that a local person of low income faces in accessing ICTs.

5 Like many of his counterparts in Egypt, Lebanon, Jordan, the Gulf states, to mention a few.

6 Since its inception, nearly four years ago, 315 MOUSE members have provided technical support to 52,217 students and 3,675 teachers in 49 New York City and 8 regional schools. The subsequent cost benefits have been enormous: as of June 2004, MOUSE has saved the city's Department of Education an estimated USD 708,936 in technology support costs. [www.mouse.org](http://www.mouse.org)

Computer coverage is a big challenge, not only in the Arab region, but for most Southern countries. To improve computer accessibility, India is producing low cost computers at USD 75 without a monitor and USD 120-150 with a used monitor.<sup>7</sup> The concept of developing inexpensive and easy-to-use computer devices, conceived as a “platform for social change”, was already present in India with the “Simputers” project<sup>8</sup> and similar ideas are being implemented in Brazil. These computers have preinstalled Linux operational system. Free and Open Source Software (FOSS), like Linux, makes it possible to efficiently operate many outdated computers at the same level of the latest proprietary operational systems. This means an extended lifetime and use for refurbished computers. It also allows low income earners to afford such a refurbished computer and still have the software that supports higher end applications.

A more tailored solution is offered by Fantsuam,<sup>9</sup> a Nigerian non profit organization currently working to create the “tropicalised computer” - a low cost, solar-powered computer suitable for the sub-Saharan rural climate. Fantsuam became aware of the unsuitability of Northern-made personal computers (PCs) through its imports of refurbished computers from Europe that it sells in rural Nigeria. While there was continuous demand for more refurbished PCs, technical breakdowns and premature failure occurred due to the PCs getting overheated in the tropical climate of northern Nigeria. Fabricated in the North, PCs use mechanical drives which are cooled by air-flow

---

7 Kanellos, M., “India’s tech renaissance: The \$ 100 computer is key to India’s tech fortunes”, CNET, 29 June 2005. [news.com.com/Indias+renaissance+The+100+computer/2009-1041\\_3-5752054.html](http://news.com.com/Indias+renaissance+The+100+computer/2009-1041_3-5752054.html)

8 The “Simple, Inexpensive, Multi-lingual Computer” or “Simputer”, was first described in a concept paper presented at the first Bangalore IT.com conference in 1998. Later, a Simputer Trust was formed dedicated to realizing this concept ([www.simputer.org](http://www.simputer.org)). Even if not having been made widely available, Simputers have been used in pilot projects with promising results. For a general overview of “low-cost” computer projects in India, see [www.networkmagazineindia.com/200508/coverstory07.shtml](http://www.networkmagazineindia.com/200508/coverstory07.shtml).

9 [www.fantsuam.org/](http://www.fantsuam.org/)

from the surroundings. This creates problems in hotter climates, where computers need air-conditioned rooms to be housed in - an added expense that is hard to meet in many cases.

To counter this problem Fantsuam is currently testing “Solo”, a PC that employs a solid-state drive instead of rotating magnetic media. With no inbuilt mechanical devices, the expected lifetime is in excess of 10 years, even in a hot climate. Solar energy is provided by a DIY (do-it-yourself) solar system. The main service items on a Solo are the replacement (high-temperature) battery stacks and the backlight on the LCD (liquid crystal display) screen. The Solo is designed for all of this service work to be done locally and is based on Linux. The project hopes to transfer technology and new skills, and to open up marketing opportunities for rural ICT enterprises.

These are a few examples of many. The lesson is that there is a lot of technical potential in the South. The talent in the faculties for computer engineering, grassroots offshoots, and small enterprises can be used to create ICT solutions that fit the local circumstances. Furthermore, if the IT experts are supported by grassroots, the spread of ICT services and knowledge can go further. This knowledge and research potential can be tapped in at a relatively low local cost.

It is to be seen if the e-strategies that are going to be developed will look at these low cost possibilities in addition to more time and money demanding national strategies, least to say regional ones. The most critical aspect in creating an Information Society is time. Therefore, immediate action with a creative use of the available resources should be a priority.

## Major funding is still an issue

The creative use of local resources, human and otherwise, does not diminish the reality of the financial gap that faces the South and that makes the digital divide such an acute developmental problem. This has already been addressed by many other contributions to the WSIS process and will not be developed here.

To consider the magnitude of the challenge faced by Southern countries some examples in the North should be looked at: the European Union (EU), for instance, has allocated just under EUR 1.4 billion for its “Leonardo da Vinci” vocational training from 2000 to 2006, serving 31 countries with a yearly training of around 40,000 persons. The “Leonardo da Vinci” programme promotes transnational projects based on co-operation between the various players in vocational training - training bodies, vocational schools, universities, businesses, chambers of commerce, etc. - in an effort to increase mobility, foster innovation and improve the quality of training, with the end goal of maintaining Europe’s competitiveness in the global market place.<sup>10</sup>

## What should be done?

All the above mentioned experiences present both a challenge and an aspiration for the Arab region, and another reason to take some essential measures as soon as possible to address digital - and social - gaps among its countries. Some steps that could be taken include:

- *Creating partnerships* between the decision-making levels (i.e. national, regional and local) but also between public authorities and education service providers (schools, universities, etc.), the business sector and grassroots partners, vocational guidance services and research centres, among other actors.
- *Attract adequate resources* from private and public sources in the Arab region and beyond by presenting IT pilot initiatives that address local needs, preferably having a market potential. At the same time, a system has to be established that ensures the effective transparent allocation of these resources and the encouragement of new forms of investment.
- *Striving for excellence* at the ICT sector through creating mechanisms for quality control that use standards, guidelines and mechanisms whereby achievements can be recognised and rewarded.

---

10 [europa.eu.int/comm/education/programmes/leonardo/leonardo\\_en.html](http://europa.eu.int/comm/education/programmes/leonardo/leonardo_en.html)

- *Facilitating access to learning opportunities* by making them more visible and removing obstacles to access. For example, through the creation of more local learning centres - these can be established at local schools to make them more cost effective. Special efforts are necessary in this context for different groups such as women, people with disabilities or people living in rural and/or remote areas.
- *Investment in human capital* at all points in the economic cycle; making digital education accessible in various forms to all citizens. Educational institutions should gear their curricula towards the needs of the knowledge-based society - redefining basic skills to include ICT technologies. Analysis should be made to forecast labour market trends.

## Conclusion

The financial discrepancy is glaring, still the Arab countries and the South in general are cautioned not to be overwhelmed by the challenges and economic inequities. Through creative use of their human resources local solutions can be found.

The so called “less developed” countries can make important contributions to the global Knowledge Society and, most importantly, synergies can be discovered that benefit the North as much as the South. Finally, human linkages can be forged as a bi-product of enhancing ICT for the global good and, then, we might have achieved much more than we have set out at the start of the WSIS. ■

We, the representatives of the peoples of the world, assembled in Geneva from 10-12 December 2003 for the first phase of the World Summit on the Information Society, declare our common desire and commitment to build a people-centred, inclusive and development-oriented Information Society, where everyone can create, access, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life, premised on the purposes and principles of the Charter of the United Nations and respecting fully and upholding the Universal Declaration of Human Rights.

## DECLARATION OF PRINCIPLES - WORLD SUMMIT ON THE INFORMATION SOCIETY 2003

This Summit is unique. Where most global conferences focus on global threats, this one will consider how best to use a new global asset. [...] The challenge before this Summit is what to do with it. The so-called digital divide is actually several gaps in one. There is a technological divide - great gaps in infrastructure. There is a content divide. A lot of web-based information is simply not relevant to the real needs of people. And nearly 70 percent of the world's web sites are in English, at times crowding out local voices and views. There is a gender divide, with women and girls enjoying less access to information technology than men and boys. This can be true of rich and poor countries alike: some developing countries are among those offering the most digital opportunities for women, while some developed countries have done considerably less well. There is a commercial divide. E-commerce is linking some countries and companies ever more closely together. But others run the risk of further marginalization. Some experts describe the digital divide as one of the biggest non-tariff barriers to world trade. And there are obvious social, economic and other disparities and obstacles that affect a country's ability to take advantage of digital opportunities. We cannot assume that such gaps will disappear on their own, over time, as the diffusion of technology naturally spreads its wealth. An open, inclusive information society that benefits all people will not emerge without sustained commitment and investment. We look to you, the leaders assembled here, to produce those acts of political will.

## ADDRESS BY UN SECRETARY-GENERAL, KOFI ANNAN, TO THE WORLD SUMMIT ON THE INFORMATION SOCIETY 2003

*The papers included in this volume - as well as in-depth research papers on which they are based - were produced in the context of the "WSIS Papers" project, developed by ITeM and supported by the IDRC.*

*Southern stakeholders need timely and appropriate information to have an active and effective role in global negotiations - such as the World Summit on the Information Society (WSIS). "WSIS Papers" was aimed at contributing to the materialization of an Information Society for the South by supporting well informed decision-making during the second phase of the WSIS process.*

PAPERS ARE AVAILABLE ONLINE AT [wsispapers.choike.org](http://wsispapers.choike.org)