

Internet Governance
A Review in the Context of the WSIS Process

Carlos A. Afonso

Document prepared for
Instituto del Tercer Mundo (ITeM)

July 2005

*ITeM gratefully acknowledges the funding support of the
International Development Research Centre*

Table of contents

1. Introduction	2
2. Misconceptions	4
3. The WGIG process: a review	7
<i>The context</i>	7
<i>The WSIS Resolutions and the WGIG</i>	8
<i>Establishment of the WGIG</i>	9
<i>Position of the ITU</i>	9
<i>A “working definition” of the Internet</i>	10
4. Internet governance models: a review	13
<i>A summary of the four WGIG models</i>	14
5. Civil society and Internet governance	18
<i>Context</i>	19
<i>The governance caucus and the WSIS process</i>	19
<i>Global governance and the community</i>	22
<i>Global governance and the commons</i>	24
Appendix I – Brief history of ICANN.....	25
Appendix II – The WGIG Report.....	28
Appendix III – References.....	44
Appendix IV – Glossary	46

1. Introduction

Like the natural laws of physics, the architecture of the Internet determines the spaces in which public policy can be developed and executed. But while the laws of physics are not made by man, the architecture of cyberspace is constructed by individuals and institutions. As a consequence, we have two different, but interlinked problems: 1. how public policy is framed inside the global Internet architecture; and 2. how the technical architecture of the Internet itself is designed.

Wolfgang Kleinwächter¹

In the recent discussion process on Internet governance, stimulated since the World Summit on the Information Society (WSIS) meeting in Geneva by the creation of the Working Group on Internet Governance (WGIG)², visions of what governance of the network of networks' logical infrastructure³ ought to be kept floating between two polar views: on the one hand, Icannians⁴ insist that, if there is something which needs to be fixed, it can be done within the current structure, which they like to characterize as private-sector based.

On the other extreme, there are a few representatives of some countries (not necessarily members of the WGIG) who advocate a transfer of all functions from the Internet Corporation for Names and Numbers (ICANN) to the International Telecommunication Union (ITU). This last polar position is reinforced by the fact that ITU sponsored the WGIG and kept very vocal observers permanently participating both in the face-to-face and the online meetings of the group, not to speak of the initial, very explicit interventions defending this view in the WGIG meetings by ITU's Secretary-General Yoshio Utsumi.

Between these polar views lie a diverse number of proposals, generally aimed at covering far more issues which have been identified as components of a future global governance system of the Internet, beyond the "names, numbers and protocols" set under the ICANN system. These views seek to tackle issues such as, among several others: inter-country connection costs; cyber security and cyber crime (including spam, "phishing" and other forms of crime or socially damaging actions via Internet); patents, copyrights and trademarks (in WIPO's jargon⁵, "intellectual property rights" or IPR); privacy and data protection; and many others, as described in the analysis of the WGIG report.

The WGIG had to take into account that the Internet's sprawling logical infrastructure has serious consequences far beyond it, for all aspects of society, politics, economies and culture, and thus options must be analyzed and considered which would deal with a long list of these serious consequences.

¹ Wolfgang Kleinwächter, "Internet Co-Governance -- Towards a Multilayer Multiplayer Mechanism of Consultation, Coordination and Cooperation (M3C3)", paper presented to the Informal Consultation of the Working Group on Internet Governance (WGIG), v.2.0, Geneva: September 20- 21, 2004.

² Reference information on the WGIG is in Appendix II. A glossary of acronyms is in Appendix IV.

³ Governance of the logical infrastructure encompasses functions related to worldwide distribution of IP addresses, top level domain names' delegation and administration, as well as oversight on data transport and routing protocols.

⁴ The term is used by the author to refer to people involved professionally or politically with the ICANN system.

A description of the ICANN system and its origins is in Appendix I.

⁵ WIPO stands for the World Intellectual Property Organization.

As an example, in response to the amazingly degraded situation of e-mail spam and “phishing”, not to mention the vulnerability of the current Domain Name System (DNS) technology, the Internet Engineering Task Force (IETF) can and is trying hard to build, let us say, a better “lock”, which in this case would mean a secure system of e-mail sender authentication which would be adopted as a standard by all e-mail server operators worldwide. But no matter how good a lock is, thieves will still manage to invade my home, so I will expect the lock is accompanied by a series of other measures to protect my community and so on. So IETF will certainly understand that prescribing legal and other measures against perpetrators of Internet-related crimes goes far beyond its expertise or capacity.

On the other hand, it is nearly impossible for a person to dominate enough expertise to deal with all the issues which might pertain to Internet governance. The WGIG has listed more than 40 of those issues and, despite some impressions to the contrary, the group is not fully constituted of experts covering all of those themes. Rather, members have brought to the group their specific expertise in certain fields related to the issues, as well as their vision and wisdom from diverse perspectives to try to put together a useful, hopefully unbiased report corresponding to the mandate received from the WSIS Plan of Action.

This document seeks to provide information on the current Internet governance transition processes, discussing some of the approaches being submitted to public discussion, and reviews the final report of the WGIG. It also provides brief historical and reference information on the current global governance system specifically created for the Internet (in this text referred to as the *ICANN system*). In addition, it presents a review of the perspectives on Internet governance from the point of view of the organized groups of civil society organizations who have been involved in the corresponding discussions both within and outside the WGIG.

This text relies on a large amount of contributions to the debate from the civil society governance caucus, on information accumulated during the WGIG work, and on many articles from experts in one or more of several fields related to the main theme. They are just too many to list here, and none of them bears any responsibility for the opinions in this document.

2. Misconceptions

Now, we shall try to respond to the question: is there need for an additional arrangement or body? We say that, yes, we need arrangements; however, we do not need a new body or a new forum. Why? Because we believe that the specialized organizations, which [are] ITU, UNESCO, and WIPO are capable of covering all the issues that we are dealing with today.

Syrian government representative at the WGIG open consultation
Geneva, June 14th, 2005, quoted from the transcript

The heated debate on Internet governance brings biased or misinformed views of the issues and processes, as many vested interests feel challenged by the idea that what is in existence is faulty or just insufficient.⁶ Some try to present the WGIG as a group entirely controlled by the ITU. This is not true, although ITU has tried a lot to influence it (and so did ICANN and other interested parties – an ICANN Board member, as well as a few other members of the ICANN system, are also members of WGIG).

Misconceptions from participants in the global debate range from believing content traffic goes through the root server system to thinking that the Internet's governance functions as a whole should be under the ITU. ICANN is also frequently presented as a global organization, which is true only in a small part, and legally not true at all. ICANN is subject to United States (US) federal laws and the laws of the state of California, and its Internet governance powers are limited by several contracts and a Memorandum of Understanding (MoU) involving the US government, ICANN and the main operator of the global domain name system, a private company called Verisign.

When the MoU between the US Department of Commerce and ICANN expires, in September 2006, no one knows for sure what the US government will do at that point, but the clear fact is that *it can do anything* regarding governance of the logical infrastructure (the set of governance functions under ICANN). In fact, one of the main arguments for discussing worldwide Internet governance is to establish a true global organization which is autonomous from *any* government, the US included -- and this is an interest widely shared well beyond the United Nations (UN).

As mentioned, the ITU has a very strong interest in taking over at least a chunk of governance. Parodying Marx and Engels in the *Communist Manifesto*: "A spectre is haunting the world of telecommunications – the spectre of Convergence." Actually, convergence basically means migration of the entire information layer (content) of telecommunications and broadcasting services to the Internet – what the ITU likes to sell as NGN (a “New Generation Network”).

This is a major concern of the ITU (because it is a concern of the big telecommunications and broadcasting companies), so they will fight for a place in the Sun as convergence relentlessly progresses. ITU's power structure today includes about 90 governments and nearly 650 telecommunications companies and associated organizations – it is not conceivable they would just sit and wait. However, as clearly demonstrated by the results (the report), it is wrong to present the WGIG as a parrot for the ITU.

⁶ As an example of a surprisingly misinformed view, see Elliot Noss, “A battle for the soul of the Internet”, ZDNet News, June 3rd, 2005 (http://news.zdnet.com/2100-9588_22-5730589.html). Several of the misconceptions described here are present in that article.

Some people believe the presence of government delegates from “non-democratic” countries in the WGIG and WSIS processes represents a menace for they might have the opportunity to lead a global governance structure if it is somehow linked to the UN. Concerns are raised regarding censorship, taxes, and heavier regulation by governments. Actually, nearly all governments of the developed world have been present in the discussions, being at least as influential as countries in the South or “authoritarian” regimes.

Would an ICANN world keep the countries listed as undemocratic out of the decision-making process? It should not be so. The Internet is supposed to be open for all, including the decision-making processes that keep the Internet evolving. Cuba is a participant in the Latin American and Caribbean Internet Addresses Registry (LACNIC), for instance, at par with other countries, and the Latin Americans/Caribbeans are proud of this lesson in openness – in a region where the US precludes Cuba from participating in most other regional organizations.

Arguments in favor of “not touching anything” frequently quote the level and quality of participation in the ICANN system. It is true the UN system is not characterized by transparency and pluralist processes, the WGIG being an exception which will hopefully be repeated in other contexts within the UN.

However, the so-called “bottom-up” processes within ICANN start from a very narrow bottom and are manipulated in the nomination procedures, as Nominating Committee members get involved in the search for potential candidates. But the WGIG has converged to a view that a new kind of global organization is needed (which at a minimum would be a global forum), which would be above the current US-based ICANN system (as it would embrace many more components of governance beyond running the logical infrastructure), and far more transparent and representative than any current agency of the UN system.

In general, the strongest opposition to a reformulation of governance which might affect how the logical infrastructure is run comes from the powerful interests involved in the worldwide domain names' market and the business opportunities derived from it. In fact, *investors.com* is one of the few media which reacted aggressively against the WGIG report and any possibility of UN (or any other global organization's) involvement in Internet governance, on the grounds of the “market success” of the current model.⁷

An overriding fact is that the original Internet governance process which led to the creation of ICANN generated an artificially created commodity expropriated from the commons,⁸ called a generic top-level domain name (gTLD) – a view which unfortunately has been followed by several countries regarding their country-code top-level domains (ccTLDs), the identity of a country on the Internet. Sometimes a ccTLD is in the hands of a private company outside of the country to which the ccTLD belongs (as in the case of “.iq”, the Iraq domain, held by a US-based vendor since the times of the Saddam regime until recently).

⁷ The article opens with the following statement: “A notoriously inefficient, corrupt bureaucracy wants to regulate the world's fastest-growing industry. Note to Internet companies: Start worrying.” *“Hands Off the Net”*, *investors.com*, July 18, 2005..

⁸ “Commons” in this text is used according to the concepts developed by David Bollier, *“Silent Theft – The Private Plunder of our Common Wealth”*, New York, Routledge, 2003, referring to common goods for the benefit of all which should be kept out of reach of private business enclosures.

ICANN today is little more than a broker for the gTLD business, entangled in its controversies and decision-making processes (like the latest “.net” redelegation issue), not to speak of its funding dependency on this business – another aspect of its operations which speaks strongly against its autonomy, as recognized explicitly by its main funders (the registrars' constituency, who pay an ICANN fee per domain through their corresponding registries) in statements at the ICANN meeting in Luxembourg, in July, 2005.⁹

⁹ See the public forum transcripts for the ICANN Meeting in Luxembourg, July, 2005 (<http://www.icann.org>).

3. The WGIG process: a review

As the Internet becomes increasingly important to people around the globe, a critical question has been raised: How can the voice of a growing community of stakeholders be appropriately included in new mechanisms for the coordination or “governance” of key Internet technical functions? This question is posed today in one such coordination body, the Internet Corporation for Assigned Names and Numbers (ICANN), which is tasked with managing aspects of the Internet’s naming system and other critical technical functions.

NAIS Report, August, 2001.¹⁰

The context

The first phase of WSIS, which concluded with the Geneva summit of December 2003, left open for further elaboration two crucial issues. The first deals with how to fund the leveraging of ICTs for development, particularly in the least developed countries. This involves, in all countries, funding of digital inclusion strategies, and in the developing countries, leveraging of infrastructure, capacity building and sustainability, besides digital inclusion. The Task Force on Financial Mechanisms (TFFM), specially created by the UN General Secretariat to review funding alternatives, released its report¹¹ in January 2005.

The second issue deals with global Internet governance – how to create, improve or adapt global mechanisms to handle the central themes derived from the increasingly decisive presence of the Internet in the economy, society, politics and culture of all nations. Issues such as defining and distributing domain names and IP addresses, inter-country data bandwidth cost settlements, right of access to infrastructure (universal access) and to information, freedom of expression, security and adequate or legal use and so on.

The UN has therefore created a Working Group on Internet Governance (WGIG), composed of 40 members from several countries and constituencies (governments, business, academics, organized civil society). The WGIG has released its report on July 15th, 2005, in all six official idioms of the UN. Both reports will serve as inputs and as a reference for the ensuing debates in the preparatory process leading to the second WSIS summit in Tunis, in November 2005.

Not that similar efforts were never before been done. Actually, as will be described later, the civil society's governance caucus had already advanced a proposal for a working group (or a set of specific thematic task forces) much earlier, during PrepCom II in February 2003, and functioned as an ICT governance working group (including Internet governance) since at least March 2003.

Earlier, another governance working group was set up (in 2001, with the support of Markle Foundation and Germany's ccTLD registry, DENIC) – the NGO and Academic ICANN Study (NAIS), focusing on turning ICANN into a more global, democratic and pluralist organization.

¹⁰ NGO and Academic ICANN Study (NAIS) Report, ICANN, “Legitimacy, and the Public Voice: Making Global Participation and Representation Work”, Executive Summary, August, 2001, p.1 (<http://www.naisproject.org>).

¹¹ Available at http://www.itu.int/wsisis/documents/doc_multi.asp?lang=en&id=1372|1376|1425|1377.

A group of university researchers led by Professors Milton Mueller and Hans Klein set up the Internet Governance Project, which has been presenting critical analyses of Internet governance since at least 2002.¹² Also, components of Internet governance are contained in the overall discussion and propositions on ICT governance in the *Louder Voices* report submitted to the DOT Force in June, 2002.¹³ Finally, a relevant contribution to the debate was also provided by the UN ICT Task Force Global Forum on Internet Governance, in March, 2004.¹⁴

The WSIS Resolutions and the WGIG

What is today referred to as “Internet governance” goes far beyond the mandate of the entity created in 1998 to globally coordinate the Internet's logical infrastructure. ICANN took some time to recognize that the scope of Internet governance needed to be extended, incorporating broader issues crucial to the future of the Internet.

In fact, ICANN and the Internet Society (ISOC), who have kept a close relationship on several issues, resisted the use of the concept of governance until recently, preferring to emphasize the idea of “coordination” between the different entities of the private sector. An ISOC brochure distributed during WSIS in Geneva in December 2003 had the title: “Developing the Potential of the Internet through Coordination, not Governance.”¹⁵

However, a consensus achieved during WSIS in Geneva was that Internet “coordination” or governance should have a more comprehensive character. The WSIS Plan of Action linked to the Declaration of Principles establishes four main objectives for the working group. As part of the “enabling environment”, the Plan states:

We ask the Secretary General of the United Nations to set up a working group on Internet governance, in an open and inclusive process that ensures a mechanism for the full and active participation of governments, the private sector and civil society from both developing and developed countries, involving relevant intergovernmental and international organizations and forums, to investigate and make proposals for action, as appropriate, on the governance of Internet by 2005. The group should, inter alia:

- i) Develop a working definition of Internet governance;
- ii) Identify the public policy issues that are relevant to Internet governance;
- iii) Develop a common understanding of the respective roles and responsibilities of governments, existing intergovernmental and international organizations and other forums as well as the private sector and civil society from both developing and developed countries;
- iv) Prepare a report on the results of this activity to be presented for consideration and appropriate action for the second phase of WSIS in Tunis in 2005.¹⁶

¹² <http://www.internetgovernance.org>.

¹³ Don MacLean et al., “*Louder Voices: Strengthening Developing Country Participation in International ICT Decision-Making*”, Commonwealth Telecommunications Organisation and the Panos Institute, June 2002.

¹⁴ Don MacLean (ed.), “*Internet Governance: A Grand Collaboration*”, UN ICT Task Force, New York, September, 2004 (<http://www.unicttf.org>).

¹⁵ The ISOC bulletin is available at <http://www.isoc.org/news/7.shtml>.

¹⁶ WSIS Plan of Action, ref WSIS-03/GENEVA/DOC/0005,

Establishment of the WGIG

In October 2004, the WGIG was established by the UN Secretary-General. Its members were chosen from a list of names compiled by governments, civil entities, the private sector and international and multilateral agencies, with the final decision on who should participate being made by the UN. The complete list of selected names is in Appendix II.

The group is presided over by Nitin Desai, Under-Secretary-General for Social and Economic Affairs of the UN, and Special Advisor to the Secretary General on the WSIS. The executive coordinator is Markus Kummer, whose role is to “manage the group's production process.”

Desai has sought to characterize the WGIG as a group of “specialists”, not as representatives of governments or other interested parties. However, disassociating from institutional representation is difficult, especially for government representatives. On the other hand, persons selected by other interest groups (private sector, civil society entities, academia) are connected with these groups and will seek whenever possible to express opinions in agreement with them (or are at least non-conflicting). To this end, the free flow of information amongst WGIG members and their interest groups has been essential.

The group was reasonably balanced with regard to the various non-governmental interest groups, but seriously unbalanced in terms of gender (only 10% were women).

Position of the ITU

The work of the WGIG began on November 23, 2004. A total of 38 members were present, as well as observers from some multilateral organizations (in particular the ITU).

The meeting was opened with an objective speech by the ITU Secretary General, Yoshio Utsumi. To summarize Utsumi's speech in a few words, the focus of the group's work should be the managing of names, addresses and protocols – the rest, according to Utsumi, was illusory. In other words, the group should concentrate on discussing proposals for the worldwide management of the Internet's logical infrastructure.

It is important to take into account the fact that the motivation for pro-ITU proposals comes from the fact that the telecommunications “oligarchy” (the traditional telecommunications companies) feel as scared by digital convergence (Internet telephony, or voice over IP, rapid progress of connection alternatives via digital radio etc, all forms of interactive broadcasting of audio and video via Internet etc) as Recording Industry Association of America (RIAA) and Motion Picture Association of America (MPAA) feel desperate with the inexorable and rapid progress of information exchange through peer-to-peer networks.

The pro-ITU strategy (or strategy in favor of an UN-linked intergovernmental organization) seems to be to join at least two of the main Internet service layers (the logical infrastructure including data transport layer, i.e. connection, addressing, and data transmission) under the control of the ITU (or the UN). Addressing means IP addresses, domain names (DNS) and data exchange protocols – the exact set of responsibilities for

http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=1161|1160.

which ICANN was created.

A “working definition” of the Internet

After an intensive debate which took a good deal of time of two face-to-face sessions, seeking a definition which would be a conceptual foundation for establishing a global governance mechanism, and which would be “adequate, generalizable, descriptive, concise and process-oriented,” the following “working definition” was established:

“Internet governance is the development and application by governments, the private sector, and civil society, in their respective roles, of shared principles, norms, rules, decision making procedures, and programmes that shape the evolution and use of the Internet.”

The effort actually was to build a reasonably “useable” definition which was generic enough to achieve consensus in the group, while containing a reference to the crucial procedures and activities which are common to any public, democratic governance system. Also, it served as the basis on which the WGIG has built its broad analysis.

Working methodology

Confronted with a list of issues as large as the one for the whole WSIS debate, the WGIG had no choice but to try to group them into a manageable set of components, taking into account the unavoidable percolation among them. On the basis of public consultations and internal discussions, a set of 25 “problems” was chosen and grouped into 12 central issues (considered as “clearly being Internet governance issues which require immediate and urgent action”)¹⁷ as a basis for configuring four thematic clusters. Those central issues (with the main identified problems leading to them in parentheses) are:

1. *Unilateral oversight of the root zone file* (unilateral control by the US government; lack of transparency) – actually includes the issues directly related to the governance of the logical infrastructure.
2. *Interconnection costs* (uneven distribution of charges) – the focus here is on the uneven cost settlements on inter-country Internet bandwidth links.
3. *Cyber crime and cyber security* (differences in national laws; lack of capacity in the judicial system; low level of international cooperation).
4. *Spam* (no unified, coordinated approach; no global procedure or body).
5. *Development and capacity building* (low awareness; low financing; low local and multilingual content; missing training; national institutional capacity).
6. *Participation in global policy development* (lack of participation of developing countries and civil society).
7. *Allocation of domain names* (lack of certainty and no clear ongoing procedure for new gTLDs and sponsored top-level domains (sTLDs); no clear rationale with regard to the meaning of top-level domain names).
8. *IP addressing* (slow transition to IPv6; historically uneven distribution of addresses).
9. *Intellectual property rights* (lack of participatory and open processes; opposing views of the aims of IPR; freedom of knowledge and free software).
10. *Freedom of expression* (censorship).
11. *Personal data protection* (privacy; policy on WHOIS data; no consistent application of

¹⁷ WGIG internal discussion document, June 17th, 2005.

privacy rights).
 12. *Consumer protection* (lack of global standards).

The four thematic clusters, referred to in the report as “key public policy areas,” are:

Cluster 1-- Logical infrastructure and management of critical Internet resources: includes all the basic functions performed by the ICANN system (administration of the DNS and Internet protocol addresses (IP addresses), administration of the root server system), as well as technical standards, peering and interconnection, telecommunications infrastructure including innovative and convergent technologies, and multilingualization. Issues of cluster 1 are seen by the WGIG as “matters of direct relevance to Internet governance falling within the ambit of existing organizations with responsibility for these matters.”

Cluster 2 – Internet usage: includes spam, network security and cyber crime. Although the WGIG sees these components as “directly related to Internet governance,” they suggest that “the nature of global cooperation required is not well defined.”

Cluster 3 -- Issues whose impact goes well beyond the Internet: includes components like patents, copyrights, and trademarks (so-called “intellectual property rights”), as well as international trade. These are issues for which the WGIG considers there are existing governance organizations, and the group “started examining the extent to which these matters are being handled consistent with the [WSIS] Declaration of Principles.”

Cluster 4 – Developmental aspects of Internet governance: includes an extensive list of components related to human development, with focus on developing countries, most of which are interrelated, and for which global governance mechanisms in most cases do not exist, such as: social dimensions and inclusion; affordable and universal access, content accessibility (right to information), cultural and linguistic diversity, education, human capacity building, free and open source software, access costs in the last mile, national infrastructure development, and so on. The report refers explicitly only to capacity building in this cluster.

In this way the group organized the collection of themes brought to it with the understanding that there is some overlapping among clusters, as several issues in one cluster ought to be analyzed in their relationship to topics in other clusters (like, to quote an obvious example, affordable and universal access on the one hand, and inter-country bandwidth costs, on the other).

In addition, in line with the consensus that any global governance should be pluralist, the group included an attempt to develop “a common understanding of the respective roles and responsibilities of all stakeholders from both developed and developing countries.” The reasons are that establishing multistakeholder presence in any forum is not enough to ensure ample participation in decision-making processes, on the one hand; and on the other, that public policy functions pertain to the decision-making realm of governments.

Regarding the possible mechanisms for global Internet governance, the group decided to separate for analytical purposes what it called a “forum function” (a global space where all stakeholders would be able to discuss any Internet-related issue with a view to provide

policy advice, recommendations or a common understanding for joint actions) from an “oversight function” -- a far more complex category.

In fact, oversight is the kernel of global governance and unavoidably embraces the current governance structure around the ICANN system – so it has been politically the most difficult to handle, as strongly diverging interests, as already commented, engaged in sometimes quite aggressive disputes. Oversight requires the definition of a global public policy (based on some type of international convention), as well as the establishment of a form of institutional coordination at global, regional and national levels. The consensus expressed in the final report 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.¹⁸

Some proposals for a global mechanism have suggested the creation of a global forum separated from an oversight structure, while others considered it viable and far more simple (at least for structural and efficacy reasons) to have the oversight components as part of a global forum – so oversight, normatization, advice, dispute resolution, and several other functions would be under one single global institutional umbrella established by worldwide consensus through an international convention.

There was also strong discussion around the relationship to existing intergovernmental organizations. There are several relevant arguments against considering an existing UN agency (like the ITU, or even a new one along the same lines as the other 16 existing agencies) to take over global Internet governance. First, there is no single agency qualified to handle all the governance-related issues. Secondly, no UN agency (or the UN as a whole) can be characterized by transparency, pluralism, and democracy in decision-making – key criteria identified by the WGIG for a global governance mechanism.

Although it was not an explicit part of its mandate, the WGIG ended up formulating four structural models for global governance, to be used as reference or examples in the ensuing discussions of the WSIS preparatory process leading to Tunis. An effort was made to include in the models some forms of relationship to the UN system. These are discussed in the next chapter, together with other recent proposals.

¹⁸ WGIG Final Report, paragraph 48.

4. Internet governance models: a review

Besides the models for global governance presented in the WGIG report there are several other proposals developed during the WGIG process, by members of the group or by others, which are worth reviewing and comparing to the suggested models presented in the final WGIG report.

An important preamble: there is to date no detailed proposal covering all components of global Internet governance, including a detailed formulation of the central aspects needed as a basis of concrete implementation. The WGIG report is no exception. The four “models” presented in the report are very general, incomplete on many counts; actually, they are no more than an itemization of certain aspects of governance which would be emphasized in each of the four options. In several instances they might contribute to confuse instead of clarifying crucial questions. For example: what exactly is the meaning of a “Global Internet [Governance] Council anchored in the UN”, as suggested in Model 1, or an “internationalized ICANN linked to the UN”, as proposed in Model 3?

However, all WGIG models have something in common which is of concern to everyone seeking a pluralist form of global governance: civil society organizations, the private sector, and the academic community are all relegated to, at best, an observer role. This is curious as the report elsewhere advocates for multistakeholder forms of global advice, coordination, and oversight.

Actually, there is an internal aspect of the WGIG process which ought to be taken into account to understand this paradox – the decision to insert specific examples of governance models was taken shortly before the final round of face-to-face meetings, and there was no opportunity for adequate refining of the concepts. This is in part a result of the relative short time available for a volunteer group to handle such a complex task. But is also in part a consequence of certain pressures to provide a constraining balance to the demands of civil society for full participation in all aspects of a future global governance system.

As the UN has no tradition of full participation in its decision-making processes, admittance in the WGIG report that pluralism, democracy and transparency are essential preconditions for a new global organization or system tried to cope with the resistance of some UN member states on the issue. So the models (except for Model 2, which questionably assumes that the current ICANN system already provides pluralist participation) end up providing this apparently contradictory balance between the generic expressions of commitment to pluralism with the expectation that global oversight ends up somehow in the hands of a UN-related (or UN-dependent) government-controlled body.

Another important aspect of the proposed models is their focus on changes in the current logical infrastructure governance system. It is as if the WGIG decided that, first and foremost, something must be done regarding the ICANN system (even if almost nothing except for the creation of a permanent global forum, like Model 2 proposes), and if there is anything which needs detailing, it is not freedom of information, cost settlements for inter-country bandwidth, cyber security, privacy, and so on, but what really matters is the global coordination of the names-and-numbers system. So if there is any detailing in the models, these are mostly devoted to the disputes around who will coordinate the logical infrastructure.

A simple table is presented below to try to summarize some of the models' features. The reader should refer to the description of each model in the WGIG report (Appendix II).

A summary of the four WGIG models

Model	Oversight role	Advisory role	Oversight structure	ICANN role	UN role	CS/PS role
1	Global Internet Council (GIC)	None	Intergovernmental	Subordinated	"Anchored to"	Advisory
2	None	Pluralist Forum	Private	Unchanged	None	Advisory
3	International Internet Council (IIC)	None	Intergovernmental	Subordinated	Not specified	Advisory
4	Global Internet Policy Council (GIPC)	Global Internet Governance Forum (GIGF)	Intergovernmental	Subordinated	"Linked to"	Advisory

In the above table, column two lists the new global oversight organisms to be created. Column three includes the proposed global forums. Column four refers to the nature of the oversight structure. Column five describes how ICANN relates to the oversight organism – the nature of “subordination” varies with each model. Column six describes how the oversight organism relates to the UN (the report presents no definition of the terms “anchored to” and “linked to”). Column seven shows the role envisioned in the oversight organisms for the private sector and civil society.

Regarding formulations made during the WGIG process, Vittorio Bertola has presented the most detailed proposal for a pluralist, open and transparent global forum mechanism - what he calls Internet Steering/Coordination Group (ISG)¹⁹ - which would be "mostly based on 'soft power,' i.e. authoritativeness rather than authority." The forum would not have formal oversight functions but would be authoritative enough to be regarded as a de facto reference on global Internet governance policy. Its mandate would use WSIS criteria and principles, as well as the UN Millennium Development Goals (MDG) as benchmarks, and include, among other functions:

- to identify Internet-related issues in need of global governance, verifying the existence of governance structures to deal with these issues or proposing new ones;
- to serve as the global dispute resolution body regarding Internet governance institutions, processes, and policies;
- to establish mechanisms to monitor policy making processes;
- to promote mechanisms for organized public participation in all discussion and decision-making processes;
- to provide "Internet expertise to other governance institutions that might need it in their policy making processes as they are impacted by the Internet."

¹⁹ Vittorio Bertola, "Internet Steering-Coordination Group", WGIG, April 2005. Available in the proposals repository of the Internet Governance Project (<http://www.internetgovernance.org>).

Bertola's proposal is derived in some aspects from the operating structure and pluralist representation of the WGIG. The ISG would have about 30 members, equally distributed among governments, civil society and private sector. Members would serve as individuals, acting as peers, and would select board members, including the chair, from among them. The ISG would approve its own internal working rules, and the initial members would be selected much like the WGIG, by the Secretary General of the UN after rounds of public consultations open to all stakeholder representations. Internet governance-related organizations would appoint observers to participate in the group's online and face-to-face discussions, who would also work as connectors between the ISG and their institutions.

Bertola thus makes a contribution to a possible implementation of the global forum component in WGIG's Model 2.

Wolfgang Kleinwächter advances a proposal which separates global Internet governance in two instances: an oversight instance called Multilayer Multiplayer Mechanism (M3), and a forum layer called Communication, Coordination and Cooperation (C3)²⁰, with the following meanings for each component:

- “Multilayer” means to differentiate between different layers and to find adequate governance models for each individual layer;
- “Multiplayer” means to identify for each layer the main (governmental and nongovernmental) players who have to be involved for effective and workable solutions;
- “Mechanism” means no single hierarchical central organization but a network of different governmental and non-governmental institutions.
- “Communication” means that each member of the mechanism should establish permanent communication channels with other members of the mechanism so that everybody is "informed" what is going on inside the other individual organizations;
- “Coordination” means that if a communication signals that two or more members of the mechanism are doing similar things (with different priorities) they should enter into consultation and should, where needed, coordinate their activities. This could be done, where needed, via "liaisons";
- “Cooperation” means that if coordination signals that there are overlapping or conflicting activities of different members of the mechanism, formal "cooperative agreements" (MoUs) among the affected and/or concerned members of the mechanism should be signed.

Both instances would act on the coordination/oversight levels which Kleinwächter calls the Basic Internet Governance level (the logical infrastructure today under ICANN), and the Enhanced Internet Governance level (all issues related to the upper layers of the Internet stack, like, as Kleinwächter puts it, "e-commerce, e-content, e-music, e-government, cyber crime, spam, IPR, privacy" and so on).

This proposal approaches Model 4, except for the multistakeholder aspect which in all WGIG models is relegated to an advisory condition.

²⁰ Wolfgang Kleinwächter, Internet Co-Governance - Towards a Multilayer Multiplayer Mechanism of Consultation, Coordination and Cooperation (M3C3), WGIG, September, 2004.

A proposal submitted by the Internet Governance Project (IGP) focuses on changes in governance of the logical infrastructure.²¹ The following initiatives are proposed:

- *Limits on power and internationalized oversight*: a legally-binding international agreement narrowly defining ICANN's powers and replacing US Government supervision with internationalized supervision; this would allow abolition of ICANN's Government Advisory Committee (GAC);
- *Democratization*: reinstatement and strengthening of the At Large membership of ICANN, especially a return to election of the At Large Board members and the granting of voting rights on ICANN's Generic Names Supporting Organization (GNSO) to At Large representatives;
- *Competition*: coordinated sharing of responsibilities between ICANN and the ITU in a way that would allow ccTLD managers and IP address users a choice of alternative governance arrangements.

The distinctive features of this proposal are: global governance must be established on the basis of an international convention framework; the ITU would share with the regional Internet registries (RIRs) and ICANN the global distribution of IP address numbers and top level domain names.

While the first one has a serious timing problem (global conventions take many years to be formalized and even more to be accepted by a significant number of countries), the second raises the problem of leaving part of the top level administration of logical infrastructure components to an existing agency of the UN which, as such, is not characterized by transparency, pluralism, or democratic decision-making. The proposal shares in part the idea of true internationalization of ICANN formulated in Model 4.

Another proposal, which is part of an excellent analysis of the implications of changes in the current governance of the logical infrastructure, is advanced by Raul Echeberria²² and, in general terms, agrees with WGIG's Model 2.

Finally, a proposal for a single body which includes both the general oversight and forum functions in a pluralist, transparent, and democratic structure has been presented by the author.²³ Like the IGP proposal, it requires the true internationalization of the ICANN system. However, it also proposes a restructuring of the current ICANN umbrella by decomposing it into three instances, all becoming global multistakeholder organizations with the corresponding host country agreements:

- a global ICANN, handling all its current attributions except for ccTLDs and allocation of IP numbers;
- a global country-code Domain Name Supporting Organization (ccNSO), in charge of global coordination of ccTLDs distribution;

²¹ Hans Klein and Milton Mueller, "What to do About ICANN: A Proposal for Structural Reform", Internet Governance Project, April 2005. Available in the proposals repository of the Internet Governance Project (<http://www.internetgovernance.org>).

²² Raul Echeberria, "Possible Changes to the Internet Governance Systems: Root Servers, IP Addresses and Domain Names" (Working Document), WGIG, May 2005. Available in the proposals repository of the Internet Governance Project (<http://www.internetgovernance.org>).

²³ Carlos A. Afonso, "Scenario for a New Internet Governance", version 6, WGIG, May 2005. Available in the proposals repository of the Internet Governance Project (<http://www.internetgovernance.org>).

- a new Number Resource Organization (NRO), globally coordinating with the RIRs distribution of IP addresses.

Other organizations (existing or to be created/adapted) would handle additional oversight/coordination components of Internet governance, but all of them, including the three organizations mentioned above, would be part of a global, pluralist, transparent, democratic oversight/coordination/advisory forum called the International Internet Coordination and Evaluation Council (IIEC). A framework convention would be developed in parallel with the constitution of this body, which would progressively take additional attributions as the corresponding international agreements advance, starting with a global coordination forum much along the lines suggested by Vittorio Bertola (as commented above).

This is a partial listing of proposals – several others have been advanced and are being prepared. All of them may serve as “food for thought” for the WSIS preparatory process leading to Tunis, particularly the recently created Internet Governance Subcommittee.

5. Civil society and Internet governance

Our participation in the WSIS process has been intense, in both human and financial terms, and many people of course have been unable to participate, notably from the poorest countries. Despite these constraints, civil society has produced many contributions to this meeting. We have offered diverse and practical recommendations. We have spoken about our suggestions with you, but we do not have the feeling we have been heard, or even listened to. Our legitimacy is not the same as yours [governments], and we do not claim to be representative. Our legitimacy is anchored in our expertise, our field experience and our defense of a vision with public interest at its centre. We do not feel that this has been recognized or taken into account thus far.

Human Rights in the Information Society Caucus, Paris, July, 2003.²⁴

Contrary to many other proposals (which try to concentrate on the disputes regarding the domain names market and oversight or administration of the root zone), civil society organizations' formulations seek to deal with Internet governance issues as a whole, which is what the WSIS Geneva Plan of Action recommends.

Some important premises on the current governance system should be in order, and in the heat of the discussions are sometimes overlooked by civil society organizations. As an example regarding governance of the logical infrastructure, the current hierarchical DNS is old, actually quite old in Internet terms. It was conceived in 1983, when there were not enough technical resources such as memory, processing power, advanced routing software, and bandwidth, and when security issues were not properly taken into account. Highly vulnerable to attacks, the current DNS system is to be replaced by a more advanced and secure one (DNSSEC) which, while sticking to the pyramidal paradigm, might have serious implications on the right to privacy of domain name holders, as Paul Vixie has observed.²⁵

This pyramidal structure for names-to-numbers translation, which contradicts the very conceptual foundations of the Internet – a network of networks, after all – is a basis for perpetuation of a quasi-monopolistic business which creates and distributes top-level domain names, in which ICANN is on the one hand a victim (it not only depends significantly for its survival on the income from the domain name registries but also consumes most of its energies on brokering this business) and on the other hand a business partner.

It is quite probable that these procedures in the future will be based on a network model, a

²⁴ Human Rights in the Information Society (HRIS) Caucus, Declaration on behalf of the Civil Society Plenary, Address to the [WSIS] intersessional meeting of July 15-18, 2003, Paris, France, July 18, 2003 (<http://www.iris.sgdg.org/actions/smsi/hr-wsis/hris-cs-180703.html>).

²⁵ Paul Vixie, "Some Comments on Working Group on Internet Governance (WGIG)" July 19th, 2005 (<http://fm.vix.com/internet/governance/wgig-report-july05.html>). Vixie states: "WGIG's report points out an IETF gaffe, which was to standardize a Secure DNS solution that was completely unworkable for any number of CcTLD's due to national privacy laws and other considerations more or less related to sovereignty. Apparently, IETF should design the Internet's protocols for a larger audience than "whoever shows up at the meeting". This sounds absurd, but it's true. And so, any zone that deploys DNSSEC as specified gives up any subdomain naming privacy they thought they had, because DNSSEC exposes all the information needed to prove the nonexistence of non-existent names, and that information indirectly highlights all of the existing names. While this lack of naming privacy is commercially uncomfortable for a number of gTLD's, when combined with WHOIS data, it's an actual violation of the law for some CcTLD's. It'll be interesting to see how WSIS proposes to get Internet protocol design to leave the ivory tower."

decentralized system in which many systems which translate a combination of letters (in any idiom and character codes) to IP numbers could be created and maintained autonomously, under the coordination of some global forum in which standards for properly merging these networks would be established.

This scenario should mean far more freedom to label domains, while traffic will continue smoothly as the IP numbering system will be preserved. But the business of the likes of Verisign would probably go to the swamp and ICANN would finally have to put its act together and turn itself into a true global organization.

This line of reasoning is presented in this preamble as an example of what is expected from civil society organizations – to boldly think at or beyond the constraining border of current paradigms instead of being imprisoned within them. However, in the WGIG civil society members had to work in a pluralist group with quite diverse views, in which consensus was not easy to achieve and much less proposals which could be seen as disruptive.

Context

Civil society organizations' advocacy around Internet governance issues is part of their broader work on ICT governance. Actually, the ensemble of issues suggested to the WGIG by civil society are actually nearly the same as the overall list of ICT governance issue, ranging from network infrastructure to freedom of knowledge and free and open-source software.

Not surprisingly, divergent views coexist in the discussions on many issues. For example: the role of inter-governmental organizations, how pluralism in decision-making processes should be effectively carried out, forms of global organizations, range of mandate of these organizations, the extent to which free software policies should be imposed or become part of government policies, and so on.

Properly summarizing the entire governance discussion in the civil society caucus from the beginning of the WSIS process is a daunting task. The review here tries to deal with some of the relevant issues taken as such by the WGIG.

The governance caucus and the WSIS process

Civil society organizations interested in Internet governance started a discussion process at the occasion of the second preparatory meeting for WSIS phase one, in February, 2003. They sought to centralize their debate through an electronic mailing list which was formed by the initiative of Y. J. Park in March, 2003.²⁶

The original terms of reference for the debate, as posted in the mailing list's opening message, were focused on the following main topics:

- a pluralist (multistakeholder) approach for governance;
- language communities and multi-lingual domain names;
- ICANN, stability and security of the Internet's logical infrastructure.

²⁶ <https://ssl.cpsr.org/mailman/listinfo/governance>.

The initial goals were stated as follows:

- to help ensure that not only organizations but also individuals participate in the WSIS process;
- to help set up language communities and let them be connected to the relevant parties for globally available resources;
- to critically monitor ICANN contracts, processes and activities.

Since then, a lot of new ground has been covered in a far more sophisticated debate. In fact, the governance caucus' debate has been a primary source of concepts and ideas which led to the formulation of a long list of issues to be considered in Internet governance – actually, of ICT governance as a whole, as the list embraced nearly all themes of WSIS itself.

The caucus also pioneered the idea of a working group on the several aspects of Internet governance, by submitting observer comments to the action plan draft during PrepCom II.²⁷

However, during 2003 the caucus was so concerned that ITU could easily take over the functions currently performed by ICANN and hand them over to intergovernmental control (overlooking the fact that ICANN as a whole is from its inception under oversight of a single government) that it decided to remove from its official declaration in the Intersessional PrepCom Meeting (Paris, July, 2003) the following phrase: “...the current management of Internet names and numbers and other related mechanisms should be re-examined with the full participation of all stakeholders in light of serving public interests and compatibility with human rights standards...”

As expected, this raised strong discussions and the opposing view was clearly expressed by Meryem Marzouki at the Paris Intersessional Meeting: “I cannot disagree more with your request for deleting from the CS draft document [the above sentence]. Let me remind you and everyone that the current situation is that the control of Internet resources is currently in the hand of the US government through the Department of Commerce under the cover of ICANN. Is this what we want? Surely not. Moreover, the protocols and standards definition are currently in the hands of big corporations. Is this also what we want? Again, surely not.” This last view on ICANN has finally prevailed only during the WGIG process itself.

The overall caucus vision at the time was summed up in a presentation by Y. J. Park at the Paris meeting on July 18th, 2003. At the time, governments at the meeting proposed an *ad hoc* government working group on Internet governance. The presentation stressed the importance of mutual collaboration among all stakeholders, and criticized the post-2001 ICANN reform which drastically reduced participation from individual Internet users in its decision-making processes. It also emphasized the relevance of adopting internationalized domain names (IDNs): “...there is very pressing need to proceed with implementation and

²⁷ Adam Peake, message to the [governance] list on April 17th, 2003 (<https://ssl.cpsr.org/pipermail/governance/2003-April/000007.html>). Adam Peake quotes a civil society caucus proposal: “To widen the participation of all stakeholders in the global bottom up policy development and decision making processes Task Forces on related public policy and technical issues (Root Server, Multilingual Domain Names, Internet Security, Ipv6, ENUM, Domain Name Disputes etc.) could be established. Such [Internet Governance] Task Forces should promote awareness, distribute knowledge and produce reports which would help all stakeholders to get a better understanding of the issues and to cooperate with the relevant bodies like ICANN, IETF, RIRs, ccTLDs and others.”

deployment of multilingual top level domains because [these] could be the start for enabling local communications and access to Internet content in the native languages and would reflect the linguistic diversity which has been given priority in the draft [WSIS] Declaration.”

During the first phase's PrepCom III, in September, 2003, the caucus proposed that a better name for it would be “ICT governance caucus” as it extended the scope of discussions well beyond the components presented in July – sparking a discussion which has not been settled since then (and was eventually abandoned) on a clearly secondary issue. At this point the list of issues started to cover dozens of themes, and it was the basis for the extended list of themes taken as Internet governance issues by the WGIG process.

It was also during the PrepCom III process that the caucus adopted the “multistakeholder” concept to express a pluralist view of participation in decision-making by all interest groups in society in addition to governments, proposing this formulation to replace the word “multilateral” (which has the usual meaning of “inter-governmental”).

One temporary difficulty within the caucus which was more apparent during the Geneva summit (December 2003) was the relationship between the existing civil society structures inside the ICANN system (the Non Commercial Users Constituency, NCUC, and the At-Large Constituency, ALAC) and the civil society caucus as a whole. Some caucus members viewed NCUC and ALAC as too influenced by ICANN's internal debate to the point in which it could introduce a bias on the broader governance debate.

It is relevant to note that NCUC members have recently proposed a debate within ICANN to seek ways to form a civil society caucus inside the ICANN structure, which would absorb both NCUC and ALAC. The idea is to establish more effective ways to critically monitor ICANN developments and processes as a whole. NCUC is currently formally restricted to an advisory role within the gTLD supporting organization, GNSO, while ALAC is not being successful in attempting to change its constituency from individual users to a structure of associations of users assembled in a regional configuration, which renders it ineffective in the adequate follow-up of the ICANN processes.

During 2004 most of the discussions focused on the formation and methods of the WGIG. Heated caucus discussions in several lists sought to define a list of civil society candidates to be selected by the UN Secretariat General to form the working group.

In September 2004 ALAC submitted a detailed proposal on how the WGIG should be constituted and function, and advanced suggestions on governance which were later taken into account in the proposed scenarios or “models” of the WGIG's final report. As an example ALAC's opening statement reads: “...the most important long term result of this process should be the creation of a permanent multi-stakeholder table where every stakeholder may raise Internet-related issues as necessary and discuss whether they need governance and at which level, or whether the current governance framework for such issues is satisfactory. Moreover, this table should define standard models for the inclusion and consultation of all stakeholders, which can be used as a blueprint for the governance of any new issue that might arise in the future.”²⁸ Several other suggestions advanced by ALAC coincided with the final format decided by the UN for the WGIG.

²⁸ Posted by Vittorio Bertola on behalf of ALAC in the [governance] list on September 14th, 2004.

During the WGIG report's official presentation, the civil society governance caucus praised the quality of the report as “the result of both the multistakeholder collaboration and the open and inclusive consultation with the wider WSIS community,” and presented a list of the report's positive aspects:

- the broad working definition of Internet governance;
- the comprehensive nature of issues outlined and prioritized for action in the background and the final report;
- the emphasis on values fundamental to civil society, including freedom of expression, data protection and privacy rights, consumer rights, multilingualism, capacity building, and meaningful participation in Internet governance processes;
- the overarching goal of enhancing the legitimacy of Internet governance arrangements underlying many of the public policy recommendations;
- acknowledging that capacity building in developing areas and the effective and meaningful participation of all stakeholders around the world are the most essential steps in reaching this goal.

The caucus also emphasized the continuing existence of barriers to full pluralist participation in governance mechanisms, and recommended that global and intergovernmental organizations should “take measures to enable effective participation from developing countries and from civil society.”²⁹

Global governance and the community

Civil society organizations participating in the governance caucus have worked hard to monitor events and to participate in the WGIG and WSIS discussions. A lot of work was dedicated to issues directly related to basic human rights, such as freedom of expression, privacy, universal access, right to communication, capacity building and so on. These and other issues have been usually treated in a generic context, seeking rightfully to formulate proposals of a global nature.

However, in this way focus has been deviated from the very concrete challenges at the local level – at the rural villages, the small towns, the poor neighborhoods in larger cities. In Latin America and the Caribbean, for example, very few – on the average less than 6% of the population – have regular access (or any access at all) to the Internet. They are usually those who reside in the main urban centers, and in their majority belonging to social strata who can afford to pay for a telephone line and access services, besides owning or having free access to a computer in their home or office. These are the people on the privileged side of the digital divide.

Why are those issues important when discussing global governance? Not only because if one achieves better cost settlements in connectivity, for example, prices will go down in the last mile (the lowest end of the commercial Internet's “food chain”) – so they provide the relevant motivation for many of the central issues –, but also because certain decisions in policy might impact directly on the freedom the communities might have to implement their own creative solutions to overcome the digital divide.

²⁹ WSIS Civil Society Internet Governance Caucus, verbal statement presented by Jeanette Hoffmann at the public presentation of the WGIG report, Geneva, July 18th, 2005.

For example, if a global governance model decides to take for granted as a matter of policy principle that all physical infrastructure and network services are telecommunications services (which might be a way to establish just cost settlements in inter-country Internet bandwidth usage), this might stimulate national governments to determine that only telecommunications incumbents are entitled to run services at the community level – thus condemning most communities to oblivion as they are not commercially attractive to Telco operators.

In fact this is a struggle already happening in several cities around the world. On the one hand the communities, pressed by the urgent need to find an effective solution to their near isolation from the Internet or pressed by the high costs of commercial providers, create their own networks. On the other, large incumbent carriers press local, state and national governments for policies precluding those communities from taking their Internet future in their own hands. In countries where community networks have not yet become popular or do not threaten potential profits from the incumbents in a significant level, like in Brazil, a handful of these projects have flourished without visible opposition.

But in the US many cities, big and small, have embarked on the quest for alternatives to what the carriers or local telecoms have to offer. Many community networks have been built covering both the needs of the local government and the goals of digital inclusion, connecting public schools, libraries, public telecenters and so on. In the state of Pennsylvania, for example, the governor succumbed to the pressure from the Telecoms and ruled that no municipality should build its own network. But the governor had to make an exception, a big exception – the city of Philadelphia already runs its sprawling community net, and it would be politically inconvenient for the governor to take it down.

The many experiences in building and maintaining community networks have led to an overall vision of what they mean for their communities, what are their goals and the creative solutions found to make them worth the effort. Among the characteristics of a community network one finds many of the features summarized below:

- It is an asset of the commons, covering a neighbourhood, a village, a city, or even a region of a country.
- It is managed by the community in a transparent, democratic, pluralist and non-profit approach, involving all interested local constituencies (local government, private sector, civil society organizations, education and research communities).
- It is fully supported by a local, regional, state and/or federal public policy. The municipal government, above all, has a crucial role in taking the initiative to call the community to join this cooperative project and to create facilities and incentives for development of the network, but this role may be also taken by the academic community, civil society organizations, or even local entrepreneurs.
- It optimizes network resources for the local administration, for digital inclusion (public schools and libraries, community telecenters) – currently these networks, by using a single high-speed link to a backbone and by running services such as voice over IP telephony, may provide full return on the initial investment in a few months of operation.
- It may be self-sustaining: while poor communities pay a symbolic or zero price to use its services (typically these network projects seek to democratize access through free community telecenters, and also run computer reconditioning services to be distributed at very low cost in poorer areas, among other actions), other users pay a competitive price to use a high-speed, efficient network; the municipality itself

saves substantially by unifying all of its Internet and telephony services, and can return part of these savings to keep and further develop the network.

- It uses a combination of proven technologies to assemble its own infrastructure maximizing its benefit-cost ratio (fiber, digital radio etc) – the municipal government can usually exercise its legal right to run any cabling throughout neighborhoods.
- It uses a single high-capacity Internet backbone connection, thus radically reducing the cost per Mbps for each access point.
- It guarantees freedom to locate and distribute access points, with its own pricing criteria.
- Technical and administrative maintenance of a well designed system is relatively simple and cost effective – there is already a wealth of best practices throughout the world.
- It can be deployed in a modular approach – starting with a borough, for example, or covering only most urgently needed areas in a first phase.
- It can offer additional services on a non-profit basis, many times relying on volunteers, such as: computer reconditioning, training programs in schools etc.
- It may offer technical training for operators as well as users and future instructors, thus leveraging local ICT-related initiatives.
- It may offer access, hosting and other services to individuals and institutions that can pay, or alternatively it can support local Internet service providers with lower cost access to the backbone, thus further stimulating dissemination of Internet technology use in the area.

This list per se already contains a program proposal for digital inclusion policy at the local level. It is essential that the discussions on the global Internet governance issues take into account how they can positively influence such actions, or at least not create difficulties against these possibilities.

Global governance and the commons

Just like a community network as presented above, other components of the Internet should be regarded as assets of the commons. One example is the domain names system itself. The original decision by the US government to convert domain names to commodities shortly before the creation of ICANN created a worldwide market dominated by one company (Verisign) and drove many ccTLD operators to do the same.

Thus many countries simply relinquished their national identities on the Internet (their ccTLDs), in most cases without consultation with their national constituencies, in favour of making money (the main beneficiaries of which in several cases are foreign companies).

Civil society organizations have sought to identify these and other components in an advocacy process to rescue them from private enclosures. This includes the efforts leading to freedom of information and knowledge, involving free and open source software, content in the public domain, alternatives to the current PCT (patents, copyrights and trademarks) or “intellectual property rights” enclosures, and son on.

These are part of the “central issues” of Internet governance listed by the WGIG in the building of any global governance mechanism, and the “commons approach” to any international covenant or institutional arrangement should be considered.

Appendix I – Brief history of ICANN

This is a short historical reference to complement what has already been mentioned regarding the ICANN system. Since 1987 the US government has been involved in organizing the global administration of the Internet's logical infrastructure. The Internet, as a network of computer networks, is decentralized, reasonably horizontal in its operational rules, and, for anyone who can pay for the necessary connectivity and computer resources, free from barriers to entry, but its logical kernel is run by a consortium of US entities under oversight of the US government.

Given the current hierarchical addressing paradigm (in which the entire network depends upon a US-based root server hosting a single root zone file) and for historical reasons, governance of the logical infrastructure remains under US control. When the current DNS system was conceived, the Internet was still under the Department of Defense (DoD). In 1987, the DoD contracted the Internet Assigned Number Authority (IANA) and the University of California's Information Sciences Institute (ISI) to run the first official root system. This IANA/ISI services contract with the DoD, under Jon Postel's coordination, obtained ample legal and executive authority to define and distribute domain names and IP numbers.

Also in 1987, another contract was signed between the DoD and a private company, SRI International, to run the first commercial domain name registration service – which did not include country-code domain names. In 1991, this contract was transferred to another company – Government Systems, Inc. (GSI).

It is significant to note that the mid-90's mark the worldwide eclosion of the commercial Internet, stimulated by services based on the World Wide Web (WWW) – the graphical user interface to interact with information stored in Internet servers, associated with the hypertext transfer protocol (HTTP).³⁰ This new situation led to growing disputes around domain names and trademarks, as well as on who exactly should coordinate the global DNS, as the Internet became de facto global.

In 1996, domain name registry functions were transferred by contract to another private company, Network Solutions, NSI (which today is a subsidiary of Verisign), which unilaterally established ownership and dispute resolution rules for approval of domain names – a private company took to itself the power of deciding on rights related to domain names and of establishing a pricing policy for domain names' registration and maintenance. The process of enclosure of an asset of the commons for private gain (the domain name system) was complete.

In 1997, partly in response to this privatization process, a group of Internet experts proposed the creation of a set of more than 100 top level domains (TLDs) similar to the existing generic (or global) TLDs such as “.com”, “.net,” and “.org.” The fact generated a lot of debate on the jurisdiction of the entire process of creation and distribution of TLDs.

With the core DNS already turned into the new commercial realm of the domain name

³⁰ The first experimental WWW server (<http://info.cern.ch>) was activated in Geneva, at the Organisation Européenne pour la Recherche Nucléaire-CERN, by its inventor, Tim Berners-Lee, in November, 1990. In May, 1991, another server started operations at Stanford University, and by 1993 there were already about 50 WWW servers running in several countries.

business, the Clinton administration issued in June, 1998, a “white paper” proposing to create a specific private organization to handle the governance of such logical infrastructure functions – the Department of Commerce (DoC) was assigned with this task, initiating the process to move control over the Internet infrastructure from the Department of Defense (DoD).

Although the paper suggested that no national government or intergovernmental organization would participate in management of global Internet names and addresses, a national non-profit organization under US government oversight was finally created in October, 1998, in the state of California – the Internet Corporation for Assigned Names and Numbers (ICANN) – for the specific purpose of coordinating the creation and distribution of TLDs, as well as the global distribution of IP addresses and basic transport and addressing protocols.

ICANN received this assignment from the Department of Commerce (DoC) through a Memorandum of Understanding (MoU) and other contracts which also involved Network Solutions/Verisign. Verisign today handles editing of the root zone file and is the largest member of the ICANN-brokered cartel of the generic top level domains business, as well as the largest funder of ICANN.

Thus the first (global in outreach but US-controlled in nature) Internet governance system was created. ICANN should operate on a “bottom-up” basis, seek to involve individuals and organizations of other countries in its supporting organizations, and keep all other governments at bay by receiving advice only through a Government Advisory Committee (GAC). Other advisory groups were created, including two to allow for participation in an advisory capacity of civil society organizations (the Non-Commercial Domain Name Holders Constituency or Non-Commercial Users Constituency, NCUC) and “individual Internet users” (the At-Large Advisory Committee, ALAC).

The main functions of the new governance system as established by contracts with the DoC have been:

- to establish and oversee the rules regarding worldwide distribution of IP addresses;
- to coordinate development and maintenance of the root server system;
- to establish policy and coordinate decision-making regarding the creation, delegation and redelegation of all top-level domains;
- to coordinate definition and adoption of connectivity and transport protocols' standards.

On November 18th, 1998, ICANN's founding interim Council met for the first time, with the following agenda:

- to elaborate the new institution's operational organigram for managing its activities through specific divisions and supporting organizations;
- to propose functioning methods which would guarantee operational transparency to the organization;
- to create an advisory organization which would represent the realm of Internet users – which later became the ALAC.

ICANN today maintains the following supporting organizations, which are formal part of its organic structure and which are able to appoint members to the Board (descriptions taken from the corresponding Web sites' home pages):

- *Address Supporting Organization* (ASO, <http://www.aso.icann.org>) – The purpose of the ASO is to review and develop recommendations on Internet Protocol (IP) address policy and to advise the ICANN Board.
- *Country Code Domain Name Supporting Organization* (CCNSO, <http://www.ccnso.icann.org>) – This is the policy development body for a narrow range of global ccTLD issues within the ICANN structure. It is responsible for developing and recommending to the Board global policies relating to country-code top-level domains, nurturing consensus across the ccNSO's community, including the name-related activities of ccTLDs, and coordinating with other ICANN Supporting Organizations, committees, and constituencies under ICANN.
- *Generic Names Supporting Organization* (GNSO, <http://www.gnso.icann.org>) – This is the successor to the responsibilities of the Domain Name Supporting Organization that relate to the generic top-level domains.
- *At-Large Advisory Committee* (ALAC, <http://www.alac.icann.org>) – Responsible for considering and providing advice on ICANN's activities, as they relate to the interests of individual Internet users (the "At-Large" community).
- *Governmental Advisory Committee* (GAC, <http://www.gac.icann.org>) – ICANN receives input from governments through the GAC. The GAC's key role is to provide advice to ICANN on issues of public policy. In particular, the GAC considers ICANN's activities and policies as they relate to the concerns of governments, particularly in matters where there may be an interaction between ICANN's policies and national laws or international agreements. Currently, the GAC is regularly attended by over 30 national governments, distinct economies, and multinational governmental organizations such as the ITU and WIPO.

Appendix II – The WGIG Report

I. Introduction

1. This report has been produced by the Working Group on Internet Governance (WGIG), which was set up by the Secretary-General of the United Nations in accordance with the mandate given to him during the first phase of the World Summit on the Information Society (WSIS), held in Geneva, on 10 – 12 December 2003. The WGIG comprised 40 members from governments, private sector and civil society, who all participated on an equal footing and in their personal capacity. It was chaired by Mr. Nitin Desai, Special Advisor to the Secretary-General for the WSIS. The list of the members of the WGIG is attached as an annex to the report.

2. A background report (hereafter referred to as “Background Report”) that includes much of the work produced in the course of the WGIG process is made available separately. It reflects the wide variety of opinions held within the group and reflects many comments made by stakeholders. The Background Report makes clear whether an argument or opinion is shared by the entire group or only by some of its members. It does not have the same status as the WGIG Report, but can be used as a reference.

3. The WGIG held four meetings in Geneva: 23 - 25 November 2004; 14 – 18 February 2005; 18 – 20 April 2005; and 14 – 17 June 2005.

4. The mandate of the WGIG stemmed from the Geneva phase of the WSIS, where Heads of State and government recognized the importance of the Internet: they acknowledged³¹ that the Internet is a central element of the infrastructure of the emerging information society, while recognizing that there are differing views on the suitability of current institutions and mechanisms for managing processes and developing policies for the global Internet. For this reason they requested the Secretary-General to set up a Working Group on Internet Governance, in view of preparing the ground for negotiations at the second phase of the WSIS, to be held in Tunis in November 2005.

5. The WSIS Declaration of Principles and the WSIS Plan of Action³² adopted in Geneva set the parameters for the WGIG and contain its Terms of Reference and work programme. The WGIG has been asked *inter alia* to “investigate and make proposals for action, as appropriate, on the governance of the Internet by 2005”³³, dealing with the following issues³⁴:

- Develop a working definition of Internet governance;
- Identify the public policy issues that are relevant to Internet governance;
- Develop a common understanding of the respective roles and responsibilities of governments, existing international organizations and other forums as well as the private sector and civil society from both developing and developed countries.

6. In carrying out its assignment, the WGIG was guided primarily by the key WSIS principles. In particular, the WSIS principle relating to the stable and secure functioning of the Internet was judged to be of paramount importance. Hence, at the outset, the WGIG agreed that all recommendations aiming to improve current governance arrangements be fully assessed in function of their capacity to address the WSIS principles.

³¹ WSIS Declaration of Principles, Paragraph 50, WSIS-03/GENEVA/DOC/0004

³² WSIS-03/GENEVA/DOC/0005

³³ WSIS Declaration of Principles, Paragraph 50, WSIS-03/GENEVA/DOC/0004

³⁴ WSIS Plan of Action, Paragraph 13 b), WSIS-03/GENEVA/DOC/0005

7. For developing an understanding of governance issues, the WGIG found it useful to review the different phases of the Internet's development, from a research project in the 1960s, to a widespread commercial infrastructure with close to one billion Internet users connected in 2004. This historical lens was useful to identify guiding principles and factors that have enabled or contributed to the Internet's successful development, including the open and decentralized nature of its architecture and the underlying technological development of its core standards, as well as the management of names and numbers.

II. Working definition of Internet governance

8. While there is a common understanding of the Internet there is not yet a shared view of Internet governance, hence the mandate from the WSIS for the WGIG to develop a working definition of Internet governance. During the ten years in which the Internet evolved from a research and academic facility into "a global facility available to the public"³⁵, very different points of view emerged about the scope and mechanisms of Internet governance.

9. The WGIG first considered five criteria, namely that the working definition should be *adequate, generalizable, descriptive, concise and process-oriented*. Second, the WGIG analyzed a wide range of public sector, private sector and multi-stakeholder governance mechanisms that currently exist with respect to different Internet issues and functions. Finally the WGIG assessed a number of alternative definitions proposed by various parties in the course of the WSIS process and related international discussions.

10. Taking into account the criteria, analysis, and proposals mentioned above, as well as the larger debate among stakeholders involved in WSIS, WGIG and the broader Internet community, the WGIG provides the following working definition:

Internet governance is the development and application by governments, the private sector, and civil society, in their respective roles, of shared principles, norms, rules, decision making procedures, and programmes that shape the evolution and use of the Internet.

11. This working definition reinforces the concept of inclusiveness of governments, private sector and civil society in the mechanisms of Internet governance. This working definition also acknowledges that with respect to specific issues of Internet governance each group will have different interests, roles and participation, which in some cases will overlap.

12. However, for the avoidance of doubt, Internet governance is not just Internet names and addresses, issues dealt with by the Internet Corporation for Assigned Names and Numbers (ICANN), but also includes other significant public policy issues, such as critical Internet resources, the security and safety of the Internet, developmental aspects and issues pertaining to the use of the Internet.

III. Identifying public policy issues that are relevant to Internet governance and assessing the adequacy of existing governance arrangements

13. The WGIG devoted much of its attention to the identification of public policy issues that are potentially relevant to Internet governance, as called for in paragraph 13 (b) of the Plan of Action. It agreed to take a broad approach and not exclude any potentially relevant issue. Based on this fact finding work, the WGIG established four key public policy areas:

³⁵ WSIS Declaration of Principles, Paragraph 48, WSIS-03/GENEVA/DOC/0004

(a) Issues relating to infrastructure and the management of critical Internet resources, including administration of the domain name system and Internet protocol addresses (IP addresses), administration of the root server system, technical standards, peering and interconnection, telecommunications infrastructure including innovative and convergent technologies, as well as multilingualization. These issues are matters of direct relevance to Internet governance falling within the ambit of existing organizations with responsibility for these matters;

(b) Issues relating to the use of the Internet, including spam, network security and cyber crime. While these issues are directly related to Internet governance, the nature of global cooperation required is not well defined;

(c) Issues which are relevant to the Internet, but with impact much wider than the Internet, where there are existing organizations responsible for these issues, such as intellectual property rights (IPRs) or international trade. The WGIG started examining the extent to which these matters are being handled consistent with the Declaration of Principles; and

(d) Issues relating to developmental aspects of Internet governance, in particular capacity building in developing countries.

14. After examining in depth the issues pertaining to these four clusters, the WGIG identified and included in the Background Report the public policy issues that are relevant to Internet governance. Of these, the following list of highest priority issues are brought to the attention of the WSIS. The list below identifies the issues and assesses the problems related to them.

15. Administration of the root zone files and system

- Unilateral control by the US Government.
The existing system involves only one government in the authorization of changes to the root zone file, because of historical reasons.
- Lack of formal relationship with root server operators.
The root zone operators perform their functions today without a formal relationship with any authority.

16. Interconnection costs

- Uneven distribution of cost.
Internet service providers (ISPs) based in countries remote from Internet backbones, particularly in the developing countries, must pay the full cost of the international circuits.
- Absence of an appropriate and effective global Internet governance mechanism to resolve the issue.

17. Internet stability, security and cyber crime

- Lack of multilateral mechanisms to ensure network stability and security of Internet infrastructure services and applications.
- Lack of efficient tools and mechanisms to be used by countries to prevent and prosecute crimes committed in other jurisdictions using technological means that might be located within or outside the territory where the crime caused the negative effect.

18. Spam

- No unified, coordinated approach.
There is no global consensus on a definition of spam and no global arrangement to address

this matter, or enable national anti-spam laws to be effective. However, there is a growing number of bilateral and plurilateral agreements between countries to enforce national anti-spam laws and share best practices and cooperate on solutions.

19. Meaningful participation in global policy development

There are significant barriers to multi-stakeholder participation in governance mechanisms.

- There is often a lack of transparency, openness and participatory processes.
- Participation in some intergovernmental organizations and other international organizations is often limited and expensive, especially for developing countries, indigenous peoples, civil society organizations and small and medium sized enterprises (SMEs).
- Content produced by some intergovernmental organizations and other international organizations is often restricted to members only or is available at prohibitive cost.
- Frequency and location of venues for global policy meetings causes some stakeholders from more remote areas to limit their participation.
- There is a lack of a global mechanism for participation by governments, especially from developing countries, to deal with multi-sectoral issues related to global Internet policy development.

20. Capacity building

Adequate resources have not been available to build capacity in a range of areas relevant to Internet management at national level and for effective participation in global Internet governance, particularly for developing countries.

21. Allocation of domain names

- Need for further development of policies and procedures for generic top-level domain names (gTLDs)³⁶.
The need for further development of policies for the management and further development of the domain name space, though also due to the inherent complexity of the matter, impacts strongly on key issues such as the equitable distribution of resources, access for all, multilingualism, and others.

22. IP addressing

- Concerns over allocation policies for IP addresses.
Due to historical reasons, there is an imbalance in the distribution of IPv4 addresses³⁷. This issue has already been addressed by the regional Internet registries (RIRs). In light of the transition to IPv6³⁸, some countries feel that allocation policies for IP addresses should ensure balanced access to resources on a geographical basis.

23. Intellectual property rights (IPR)

- Application of intellectual property rights to cyberspace.
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 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

³⁶ Cf. Glossary

³⁷ Version four of the Internet Protocol

³⁸ Version six of the Internet Protocol

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.

24. **Freedom of expression**

- Restrictions on freedom of expression.
Measures taken in relation to the Internet on grounds of security or to fight crime can lead to violations of the provisions for freedom of expression as contained in the Universal Declaration of Human Rights and in the WSIS Declaration of Principles.

25. **Data protection and privacy rights**

- Lack of existence or inconsistent application of privacy and data protection rights.
There is a lack of national legislation and enforceable global standards for privacy and data protection rights over the Internet; as such, users have few means, if any, to enforce their privacy and personal data protection rights, even when recognized by legislation. An example of this is apparent lack of personal data protection in some of the WHOIS³⁹ databases.

26. **Consumer rights**

There is a lack of global standards for consumer rights over the Internet, for example in the international purchase of goods through e-commerce; as such, users have few means, if any, to enforce their rights, even when these rights are recognized by legislation. In the case of digital goods and online services there are problems for practical and full application of traditional consumer rights.

27. **Multilingualism**

Insufficient progress has been made towards multilingualization. Unresolved issues include standards for multilingual TLDs, e-mail addresses and keyword lookup as well as insufficient multilingual local content. There is a lack of international coordination.

28. The WGIG identified other issues such as convergence and “next generation networks” (NGNs), as well as trade and e-commerce, as being important, without however focusing on them in any detail.

IV. Developing a common understanding of the respective roles and responsibilities of all stakeholders from both developed and developing countries

29. Recognizing the essential role of all stakeholders in Internet governance, this section expands on the roles and responsibilities of the principal stakeholders, i.e. governments, private sector, civil society as well as intergovernmental organizations and international organizations, as outlined in the WSIS Declaration of Principles.⁴⁰ The academic and technical communities also play an important role.

30. **Governments.** The roles and responsibilities of governments include:

- Public policy making and coordination and implementation, as appropriate, at the national level, and policy development and coordination at regional and international levels;

³⁹ A database that is widely used to provide information services to Internet users (cf. Glossary)

⁴⁰ WSIS Declaration of Principles, Paragraph 49, WSIS-03/GENEVA/DOC/0004

- Creating an enabling environment for information and communication technology (ICT) development;
 - Oversight functions;
 - Development and adoption of laws, regulations and standards;
 - Treaty making;
 - Development of best practices;
 - Fostering capacity building in and through ICTs;
 - Promoting research and development of technologies and standards;
 - Promoting access to ICT services;
 - Combating cyber crime;
 - Fostering international and regional cooperation;
 - Promoting the development of infrastructure and ICT applications;
 - Addressing general developmental aspects;
 - Promoting multilingualism and cultural diversity;
 - Dispute resolution and arbitration.
31. **Private Sector.** The roles and responsibilities of the private sector include:
- Industry self-regulation;
 - Development of best practices;
 - Development of policy proposals, guidelines and tools for policy makers and other stakeholders;
 - Research and development of technologies, standards and processes;
 - Contribution to the drafting of national law and participate in national and international policy development;
 - Fostering innovation;
 - Arbitration and dispute resolution;
 - Promoting capacity building.
32. **Civil Society.** The roles and responsibilities of civil society include:
- Awareness raising and capacity building (knowledge, training, skills sharing);
 - Promoting various public interest objectives;
 - Facilitating network building;
 - Mobilizing citizens in democratic processes;
 - Bringing perspectives of marginalized groups including for example excluded communities and grassroots activists;
 - Engaging in policy processes;
 - Bringing expertise, skills, experience and knowledge in a range of ICT policy areas;
 - Contributing to policy processes and policies that are more bottom-up, people-centred and inclusive;
 - Research and development of technologies and standards;
 - Development and dissemination of best practices;
 - Helping to ensure that political and market forces are accountable to the needs of all members of society;
 - Encouraging social responsibility and good governance practice;
 - Advocating for development of social projects and activities that are critical but may not be 'fashionable' or profitable;
 - Contributing to shaping visions of human centred information societies based on human rights, sustainable development, social justice and empowerment.
33. Furthermore, the WGIG recognized that the contribution to the Internet of the academic community is very valuable and constitutes one of the main sources of inspiration, innovation and creativity. Similarly, the technical community and its organizations are deeply involved in Internet operation, Internet standards setting and Internet services development. Both of these groups make

a permanent and valuable contribution to the stability, security, functioning and evolution of the Internet. They interact extensively with and within all stakeholder groups.

34. The WGIG also reviewed the respective roles and responsibilities of existing intergovernmental and international organizations and other forums and the various mechanisms for both formal and informal consultations among these institutions. It noted that there is scope to improve coordination to some extent.

V. “Proposals for action, as appropriate”⁴¹

A. Recommendations related to Internet governance mechanisms

35. The WGIG addressed the adequacy of current Internet governance arrangements in relation to the principles outlined in the final WSIS documents and came to the conclusion that some adjustments needed to be made to bring these arrangements more in line with the WSIS criteria of transparency, accountability, multilateralism and the need to address all public policy issues related to Internet governance in a coordinated manner. It grouped these issues in four clusters: a forum, global public policy and oversight, institutional coordination, as well as regional, sub-regional and national coordination.

36. The WGIG recommends the creation of a new space for dialogue for all stakeholders on an equal footing on all Internet governance related issues.

37. With regard to the roles and responsibilities of governments, the WGIG decided to put forward different options for the deliberations within the WSIS context. They all complement the forum mentioned in Section V.A.1; and set out four different proposals.

38. The WGIG also concluded that there would be merit in improving institutional coordination, as well as coordination among all stakeholders at regional, sub-regional and national levels.

39. The proposals mentioned in the above paragraphs are set out below.

1. Forum function

40. The WGIG identified a vacuum within the context of existing structures, as there is no global multi-stakeholder forum to address Internet related public policy issues. It came to the conclusion that there would be merit in creating such a space for dialogue among all stakeholders. This space could address these issues, as well as emerging issues, that are cross-cutting and multi-dimensional and that either affect more than one institution, are not dealt with by any institution, or are not addressed in a coordinated manner.

41. The WGIG also noted that one of its overarching priorities was to contribute to ensuring the effective and meaningful participation of all stakeholders from developing countries in Internet governance arrangements. Existing institutions that address some of these Internet related public policy issues, such as the Organization for Economic Cooperation and Development (OECD), are not generally global in their membership and therefore developing countries lack a forum for discussing Internet related public policy issues. Other global institutions are narrower in focus or do not allow for multi-stakeholder participation. It noted that the existing mechanisms do not sufficiently take into account geographic balance and linguistic diversity. Their fragmented nature and structure also make it difficult for developing countries to have their voices heard.

⁴¹ WSIS Declaration of Principles, Paragraph 50, WSIS-03/GENEVA/DOC/0004

42. One of the main aims of the WGIG is to foster full participation in Internet governance arrangements by developing countries. The WGIG placed this aim in the context of one of the priorities it had identified in the course of its work, namely, capacity building in developing countries.

43. Such a space or forum for dialogue (hereafter referred to as “the forum”) should allow for the participation of all stakeholders from developing and developed countries on an equal footing. Gender balance should be considered a fundamental principle with the aim of achieving an equal representation of women and men at all levels. Special care should be taken to ensure diversity of participation as regards, *inter alia*, language, culture, professional background, involvement of indigenous peoples, people with disabilities and other vulnerable groups.

44. The forum should preferably be linked to the United Nations, in a form to be defined. It would be better placed than existing Internet institutions to engage developing countries in a policy dialogue. This would be an important factor in itself, as the future growth of the Internet is expected to be mainly in developing countries.

45. The forum should be open to all stakeholders from all countries; any stakeholder could bring up any Internet governance issue. The forum would be reinforced by regional, sub-regional and national initiatives and supplemented by open online mechanisms for participation. It should support the information and communication technologies for development (ICT4D) agenda emerging from the WSIS and Millennium Development Goals (MDG) processes. It could assume *inter alia* the following functions:

- Interface with intergovernmental bodies and other institutions on matters under their purview which are relevant to Internet governance, such as IPR, e-commerce, trade in services, and Internet/telecommunications convergence;
- Identify emerging issues and bring them to the attention of the appropriate bodies and make recommendations;
- Address issues that are not being dealt with elsewhere and make proposals for action, as appropriate;
- Connect different bodies involved in Internet management where necessary;
- Contribute to capacity building for Internet governance for developing countries, drawing fully on local sources of knowledge and expertise;
- Promote and assess on an ongoing basis the embodiment of WSIS principles in Internet governance processes.

46. There was a clear understanding that such a forum should not be seen as a continuation of the WGIG. Rather, it should be modelled on the WGIG open consultations, supported by a very lightweight structure and guided by a multi-stakeholder coordinating process, to be defined. Overlap or duplication with existing institutions should be avoided and the best possible use should be made of research and work carried out by others.

47. The forum should develop partnerships with academic and research institutions to access knowledge resources and expertise on a regular basis. These partnerships should seek to reflect geographic balance and cultural diversity and promote cooperation among all regions.

2. Global public policy and oversight

48. 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;

- That 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;⁴²
- That the organizational form for the governance function will involve all stakeholders and relevant intergovernmental and international organizations within their respective roles.⁴³

49. The WGIG agreed that the continued internationalization of the Internet and the principle of universality reinforces the need for a review of existing governance mechanisms, hence the WGIG undertook such a review and the results are presented here.

50. There is a wide range of governance functions that could include audit, arbitration, coordination, policy setting, and regulation amongst others but not including involvement in day-to-day operational management of the Internet that does not impact on public policy issues.

51. The review considered different organizational models for this purpose and the following four models are offered for consideration.

Model 1:

52. This model envisages a Global Internet Council (GIC) consisting of members from governments with appropriate representation from each region and with involvement of other stakeholders. This council would take over the functions relating to international Internet governance currently performed by the Department of Commerce of the US Government. It would also replace the ICANN Governmental Advisory Committee (GAC).

53. The functions of the GIC should include:

- Setting of international Internet public policy and providing the necessary oversight relating to Internet resource management, such as additions or deletions to the root zone file, management of IP addresses, introduction of gTLDs, delegation and redelegation of ccTLDs.
- Setting of international public policy and coordination for other Internet related key issues, such as spam, privacy, cyber security and cyber crime, which are not being fully addressed by other existing intergovernmental organizations.
- Facilitating negotiation of treaties, conventions and agreements on Internet related public policies.
- Fostering and providing guidance on certain developmental issues in the broader Internet agenda including but not limited to capacity building, multilingualism, equitable and cost based international interconnection costs, and equitable access for all.
- Approving rules and procedures for dispute resolution mechanisms and conduct arbitration as required.

54. The relationship between the GIC and technical and operational Internet institutions such as the reformed and internationalized ICANN should be formalized. In this model, ICANN will be accountable to GIC.

55. The GIC should be anchored in the United Nations.

56. For the issues dealt with in this body, the governmental component will take a leading role. The private sector and civil society will participate in an advisory capacity.

⁴² WSIS Declaration of Principles, Paragraph 48, WSIS-03/GENEVA/DOC/0004

⁴³ WSIS Declaration of Principles, Paragraph 48, WSIS-03/GENEVA/DOC/0004

Model 2:

57. There is no need for a specific oversight organization.
58. It may be necessary to enhance the role of ICANN's Governmental Advisory Committee (GAC) in order to meet the concerns of some governments on specific issues.
59. The forum, as proposed in Section V.A.1, with full and equal participation of all stakeholders, could, in addition to the various functions set out therein, provide coordination functions for participating stakeholders and produce analysis and recommendations on some issues.
60. This forum would provide a coordination function for participating stakeholders by creating a space where all issues involving the existing Internet governance organizations can be openly discussed. These discussions will be enabled by the transparency of the participating organizations and participation should include a commitment to transparency.
61. The forum would also interact with or create specific issue initiatives to produce analyses or recommendations on different Internet related issues. The initiatives should include all the stakeholders involved in the issue and would make recommendations to the forum and to the stakeholders.

Model 3:

62. For policy issues involving national interests, with a view that no single government should have a pre-eminent role in relation to international Internet governance, an International Internet Council (IIC) could fulfil the corresponding functions especially in relation to ICANN/IANA competencies.
63. In addition its functions may include international public policy issues relating to the Internet resource management as well as international public policy issues not within the scope of other existing intergovernmental organizations.
64. For those issues the governmental component of the IIC will take a leading role, the private sector and civil society providing advice.
65. Equally the IIC could perform a fostering role for certain developmental issues in the broader Internet agenda.
66. The new body could make the Governmental Advisory Committee (GAC) redundant.
67. This internationalization should be accompanied by an adequate host country agreement for ICANN.

Model 4:

68. This model brings together and addresses three inter-related areas of Internet policy governance, oversight and global co-ordination, and proposes structures to address the following challenges;
 - o Public policy development and decision making on international Internet related public policy issues led by governments;
 - o Oversight over the body responsible at global level for the technical and operational functioning of the Internet led by the private sector;

- Global coordination of the development of the Internet through dialogue between governments, the private sector and civil society on an equal footing.

69. *The Global Internet Policy Council (GIPC)*

- “Responsible for international Internet related public policy issues”, and contribute the public policy aspects to Internet related technical standards making.
- Government-led mechanism that encompasses issues addressed by existing inter-governmental organizations and other public policy issues that currently do not have a natural home or cut across several international or inter-governmental bodies.
- Participation by private sector and civil society, both in observer capacity.

70. *World Internet Corporation for Assigned Names and Numbers (WICANN)*

- Responsible for the “development of the Internet in both technical and economic fields” (a role similar to what is performed by ICANN). Private sector led body made up of a reformed internationalized ICANN linked to the United Nations.
- In this body governments will have two distinct and separate functions.
- The oversight function over the body responsible, at global level, for the technical and operational functioning of Internet (ICANN). This is the role currently performed by the Department of Commerce of the US Government. This role would be played by an Oversight Committee appointed by and reporting to the inter-governmental body (the Global Internet Policy Council). The oversight function would not be of an operational or management nature.
- The second function is advisory as currently played by the ICANN Governmental Advisory Committee (GAC).
- Participation of government and civil society, both in observer/advisory capacity.
- WICANN would have a host country agreement.

71. *The Global Internet Governance Forum (GIGF)*

- Responsible for “facilitating coordination (and discussion) of Internet related public policy issues”.
- Participation on equal footing by governments, private sector and civil society.

3. Institutional coordination

72. Pursuant to Paragraph 50 of the WSIS Declaration of Principles, the WGIG recommends that the Secretariats of intergovernmental organizations and other institutions dealing with Internet governance issues continue to improve the coordination of their activities and exchange information on a regular basis both among themselves and with the forum.

4. Regional and national coordination

73. The WGIG noted that international coordination needs to build on policy coordination at the national level. Global Internet governance can only be effective if there is coherence with regional, sub-regional and national level policies. The WGIG therefore recommends:

- (a) In order for the work on Internet governance to be fully supported at the regional and sub-regional levels, that the multi-stakeholder approach be implemented as far as possible in all regions;
- (b) Coordination among all stakeholders at the national level and the setting up of a multi-stakeholder national Internet governance steering committee or similar body.

B. Recommendations to address Internet related issues

74. The WGIG agreed that there are two overarching prerequisites to enhance the legitimacy of Internet governance processes:

- the effective and meaningful participation of all stakeholders, especially from developing countries; and
- the building of sufficient capacity in developing countries, in terms of knowledge and of human, financial and technical resources.

75. The WGIG identified a number of recommendations emanating from the priority issues outlined in Section III. Some of these are addressed to the various Internet governance mechanisms, proposed in Section V.A, while others are not attributed to any specific institutions.

76. Administration of the root zone files and root server system of the domain name system (DNS)

- Define the institutional arrangements, and the responsibilities and relationships between the institutions, required to guarantee continuity of a stable and secure functioning of the root server system of the DNS;
- Noting that the number of root servers cannot be increased to more than thirteen due to protocol limitations, carry out a requirements analysis to determine the appropriate evolution, including possible restructuring, of the architecture to meet end user requirements;
- Clarify the institutional arrangements needed to guarantee continuity of a stable and secure functioning of the root system during and after a possible period of governance reform.

77. IP addressing

- Transition to IPv6 should ensure that allocation policies for IP addresses provide equitable access to resources.

78. Interconnection costs

- Invite international agencies and the donor community to intensify their studies in this area, in particular to examine alternative solutions such as the development of regional IP backbones and the establishment of local and regional access points.
- Call on the groups studying Internet governance issues to take note of the WSIS Declaration of Principles, i.e. to be multilateral, transparent, democratic and have the capacity to address Internet governance in a coordinated manner, based on a multi-stakeholder approach.
- Invite relevant international organizations, to report on these matters to whatever forum, body or mechanism(s) that the WSIS will create for issues related to Internet governance and global coordination.
- Encourage donor programmes and other developmental financing mechanisms to take note of the need to provide funding for initiatives that advance connectivity, Internet exchange points (IXPs) and local content for developing countries.
- Building on current international agreements, encourage interested parties to continue and deepen work in relevant international organizations on international Internet connectivity issues.⁴⁴

⁴⁴ This issue has received sustained attention in the Asia-Pacific Economic Cooperation (APEC) and the International Telecommunication Union (ITU), and has been raised in the World Trade Organization

79. **Internet stability, security and cyber crime**

- Efforts should be made, in conjunction with all stakeholders, to create arrangements and procedures between national law enforcement agencies consistent with the appropriate protection of privacy, personal data and other human rights;
- Governments, in cooperation with all stakeholders, should explore and develop tools and mechanisms, including treaties and cooperation, to allow for effective criminal investigation and prosecution of crimes committed in cyberspace and against networks and technological resources, addressing the problem of cross-border jurisdiction and regardless of the territory from which the crime was committed and/or location of the technological means used, while respecting sovereignty.

80. **Spam**

- There is a need for global coordination among all stakeholders to develop policies and technical instruments to combat spam.
- WSIS should recognize the need to act against spam and include common principles of action concerning cooperation in this field. It should recognize the need to produce anti-spam efforts not only on legislation and cross-border enforcement, but also in terms of industry self-regulation, technical solutions, partnerships between governments and the Internet community, awareness raising and user education. In this context special attention should be given to connectivity and bandwidth limitations of developing countries. A joint statement could be agreed on the occasion of the WSIS and annexed to the final document(s) of the Summit.

81. **Freedom of expression**

- Ensure that all measures taken in relation to the Internet, in particular those on grounds of security or to fight crime, do not lead to violations of human rights principles.

82. **Meaningful participation in global policy development**

- International organizations, including intergovernmental organizations where relevant, should ensure that all stakeholders, particularly from developing countries, have the opportunity to participate in the determination of policy decisions that affect them, and promote and support such participation.
- Specific efforts should be made to address the lack of funds of the different stakeholders of developing countries that impedes them from actively and consistently participating in international Internet governance processes.

83. **Data protection and privacy rights**

- Encourage countries that lack privacy and/or personal data protection legislation, to develop clear rules and legal frameworks, with the participation of all stakeholders, to protect citizens against the misuse of personal data, particularly in those countries with no legal tradition in these fields and where information access laws have been enacted;
- The broad set of privacy related issues described in the Background Report should be discussed in a multi-stakeholder setting, to define practices to address them;
- The policies governing the WHOIS databases should be revised to take into account the existence of applicable privacy legislation in the countries of the registrar and of the registrant;
- Policy and privacy requirements for global electronic authentication systems should be defined in a multi-stakeholder setting; efforts should then be made to develop open

(WTO) as well.

technical proposals for electronic authentication that meet such requirements.

84. Consumer rights

- Efforts should be made to render consumer protection laws and enforcement mechanisms fully and practically applicable, to protect consumers during the online purchase of physical and digital goods and online services, especially in cross-border transactions.
- Efforts should be made to define global consumer rights industry standards, applicable in the use and/or purchase of online services and digital goods. These efforts should be agreed by all stakeholders and take into consideration applicable local laws and regulation on consumer protection, IPR and on other applicable matters;
- An ongoing multi-stakeholder assessment process for newly developed technologies that may affect consumer rights should be created.

85. Multilingualism

(a) Domain names

- Ensuring bottom-up and inclusive development of a transparent policy for the introduction of multilingual domain names;
- Strengthening participation and coordination of all governments and all stakeholders in the governance process is required to push forward the development and implementation of multilingual domain name solutions including multilingual e-mail addresses and key word lookup;
- Strengthening cooperation between IETF and IDN registries, thus creating a sound international environment for the further development of technical standards and action plan for global deployment.

(b) Content

- More effort should be put into developing content development tools to facilitate creation of multilingual content.
- Governments, private sector and civil society are encouraged to promote and create more content in local languages to be posted on the Internet.

WGIG Report Annex

Members of the Working Group on Internet Governance:

Abdullah Al-Darrab - Deputy Governor of Technical Affairs, Communications and Information Technology Commission of Saudi Arabia; Riyadh

Carlos A. Afonso - Director of Planning, Information Network for the Third Sector (Rits); Member, Brazil's Internet Steering Committee (CGIbr); Member, Non-Commercial Users Constituency (NCUC/ICANN); Rio de Janeiro

Peng Hwa Ang - Dean, School of Communication and Information, Nanyang Technological University; Singapore

Karen Banks - Networking and Advocacy Coordinator, Association for Progressive Communications; Director, GreenNet; London

Faryel Beji - President and CEO, Tunisian Internet Agency; Tunis

Vittorio Bertola - Chairman, ICANN At Large Advisory Committee; President & CTO, Dynamic Fun; Turin

José Alexandre Bicalho - Member, Brazilian Internet Steering Committee; Advisor to the Board of Directors of the National Telecommunications Agency; Brasília

Kangsik Cheon - Chief Operating Officer, International Business Development, Netpia; Seoul

Trevor Clarke - Permanent Representative of Barbados to the United Nations in Geneva; Geneva

Avri Doria - Research Consultant; Providence, Rhode Island

William Drake - President, Computer Professionals for Social Responsibility; Senior Associate, International Centre for Trade and Sustainable Development; Geneva

Raúl Echeberria - Executive Director/CEO of LACNIC - Latin American and Caribbean Internet Addresses Registry; Montevideo.

Dev Erriah - Chairman, ICT Authority of Mauritius; Port Louis

Baher Esmat - Telecom Planning Manager, Ministry of Communications and Information Technology of Egypt; Cairo

Juan Fernandez - Coordinator of the Commission of Electronic Commerce of Cuba; Havana

Ayesha Hassan - Senior Policy Manager for Electronic Business, IT, and Telecommunications, International Chamber of Commerce; Paris

David Hendon - Director of Business Relations, UK Department of Trade and Industry; London

Qiheng Hu - Adviser to the Science and Technology Commission of the Ministry of Information Industry of China; Former Vice-President of the Chinese Academy of Sciences; Beijing

Willy Jensen - Director General, Norwegian Post and Telecom Authority; Oslo

Wolfgang Kleinwächter - Professor, International Communication Policy and Regulation, University of Aarhus; Aarhus

Jovan Kurbalija - Director, DiploFoundation, Geneva/La Valletta; Geneva

Iosif Charles Legrand - Senior Scientist, California Institute of Technology; Pasadena, California

Donald MacLean - Director, MacLean Consulting; Ottawa

Allen Miller - Executive Director, World Information Technology and Services Alliance; Arlington, Virginia

Jacqueline A. Morris - Consultant, Port of Spain

Olivier Nana Nzépa - Coordinator, Africa Civil Society, Yaoundé

Alejandro Pisanty - Director of Computing Academic Services, Universidad Nacional Autónoma de México; Vice-Chairman of the Board of ICANN; Mexico City

Khalilullah Qazi - Counsellor, Permanent Mission of Pakistan to the United Nations in Geneva; Geneva

Rajashekar Ramaraj - Managing Director, Sify Limited; Chennai (formerly Madras)

Masaaki Sakamaki - Director, Computer Communications Division, Ministry of Internal Affairs and Communications; Tokyo

Joseph Sarr - President, NTIC Commission, Dakar Regional Council; Dakar

Peiman Seadat - Counsellor, Permanent Mission of Iran to the United Nations in Geneva; Geneva

Charles Sha'ban - Executive Director, Abu-Ghazaleh Intellectual Property; Amman
Lyndall Shope-Mafole - Chairperson, Presidential National Commission on Information Society and Development of South Africa; Pretoria
Waudu Siganga - Chairman, Computer Society of Kenya; Nairobi
Juan Carlos Solines Moreno - Executive Director, Gobierno Digital; Quito
Mikhail Yakushev - Director of Legal Support Department, Ministry of Information Technology & Communications of the Russian Federation; Moscow
Peter Zangl - Deputy Director-General, Directorate General Information Society and Media, European Commission, Brussels
Jean-Paul Zens - First Counsellor, Director of the Media and Telecom Department, Ministry of State of Luxembourg; Luxembourg City

Secretariat:

Markus Kummer, Executive Coordinator
Frank March, Senior Programme Advisor
Tarek Cheniti, Consultant
Hind Eltayeb, Administrative Assistant

Robert Shaw, part-time, seconded by ITU
Howard Williams, part-time, seconded by University of Strathclyde
David Satola, World Bank (part-time, in his personal capacity)

Chengetai Masango, Intern (April – July 2005)
Seiiti Arata, Fellow, in association with DiploFoundation (June 2005)
Dhrupad Mathur, Fellow, in association with DiploFoundation (June 2005)
Chango Mawaki, Fellow, in association with DiploFoundation (June 2005)

Appendix III – References

This list of papers, books and URLs serves as an additional reference on the Internet governance debate. Several of these works include extensive bibliography.

Papers and books:

Carlos A. Afonso, *Scenario for a New Internet Governance, version 6*, WGIG, May 2005. Available in the proposals repository of the Internet Governance Project.

Vittorio Bertola, *Internet Steering-Coordination Group*, WGIG, April 2005. Available in the proposals repository of the Internet Governance Project.

David Bollier, *Silent Theft – The Private Plunder of our Common Wealth*, New York, Routledge, 2003.

Center for Democracy and Technology, *ICANN and Internet Governance: Getting Back to Basics*, Washington, DC, July 2004 (<http://www.cdt.org>).

William J. Drake, *Reframing Internet Governance Discourse: Fifteen Baseline Propositions*, Workshop on Internet Governance, UN ICT Task Force, New York, March 25-26, 2004.

Raul Echeberria, *Possible Changes to the Internet Governance Systems: Root Servers, IP Addresses and Domain Names (Working Document)*, WGIG, May 2005. Available in the proposals repository of the Internet Governance Project.

Hans Klein and Milton Mueller, *What to do About ICANN: A Proposal for Structural Reform*, Internet Governance Project, April 2005.

Wolfgang Kleinwächter, *Internet Co-Governance - Towards a Multilayer Multiplayer Mechanism of Consultation, Coordination and Cooperation (M3C3)*, WGIG, September, 2004.

Marcel Machill, *Who Controls the Internet? The Bertelsmann's Foundation Recommendations for Internet Governance*, Bertelsmann Foundation, Berlin, April, 2001.

Don MacLean (ed.), *Internet Governance: A Grand Collaboration*, UN ICT Task Force, New York, September, 2004.

Don MacLean et al., *Louder Voices: Strengthening Developing Country Participation in International ICT Decision-Making*, Commonwealth Telecommunications Organisation and the Panos Institute, June 2002.

John Mathiason et al., *Internet Governance: The State of Play*, Internet Governance Project, September, 2004.

NGO and Academic ICANN Study (NAIS) Report, *ICANN, Legitimacy, and the Public Voice: Making Global Participation and Representation Work*, Executive Summary, August, 2001.

Adam Peake, *Internet Governance and WSIS*, GLOCOM, Tokyo: July, 2004.

Relevant URLs:

ICANN Watch – <http://www.icannwatch.org>

Internet Governance Project – <http://www.internetgovernance.org>

Internet/ICT governance caucus mailing list – <https://ssl.cpsr.org/mailman/listinfo/governance>

ITU – <http://www.itu.int>

NAIS – <http://www.naisproject.org>

UN ICT Task Force – <http://www.unictf.org>

WGIG – <http://www.wgig.org>

WSIS – <http://www.wsis.org>

Appendix IV – Glossary

This is a combination of some glossaries available in several publications on the Internet, including the glossary presented as an appendix to the WGIG Report as well.

ADB	Asian Development Bank
AFDB	African Development Bank
AfriNIC	Africa Network Information Centre – the Regional Internet Registry for Africa
ALAC	At-Large Advisory Committee. Responsible for considering and providing advice on ICANN's activities, as they relate to the interests of individual Internet users (the "At-Large" community)
Anycast	A network addressing and routing scheme in which data is routed to the "nearest" or "best" destination as viewed by the routing topology.
APC	Association for Progressive Communications
APEC	Asia-Pacific Economic Cooperation
APNIC	Asia Pacific Network Information Centre – the Regional Internet Registry for Asia and the Pacific regions
APT	Asia-Pacific Telecommunity
ARIN	American Registry for Internet Numbers – the Regional Internet Registry for North America
ASEAN	Association of Southeast Asian Nations
ASO	Address Supporting Organization – its purpose is to review and develop recommendations on Internet Protocol (IP) address policy and to advise the ICANN Board
ASTA	Anti-Spam Technical Alliance
ccNSO	Country Code Domain Name Supporting Organization. This is the policy development body for a narrow range of global ccTLD issues within the ICANN structure
ccTLD	Country-code top-level domain, such as .br (Brazil), .iq (Iraq) or .st (São Tomé e Príncipe)
CENTR	Conference of European National Top Level Domain Registries
CEPT	European Conference of Postal and Telecommunications Administrations
CERT	Computer Emergency Response Team
CERT/CC	CERT Coordination Center at Carnegie-Mellon University
CIS	Center for Internet Security
CITEL	Inter-American Telecommunication Commission (Organization of American States)
COE	Council of Europe
CompTIA	Computing Technology Industry Association
CRIS	Communication Rights in the Information Society
DISA	Data Interchange Standards Association
DNS	Domain name system: translates domain names into IP addresses
EDIFICE	European B2B Forum for the Electronic Industry
ENISA	European Network and Information Security Agency
ETNO	European Telecommunications Network Operators' Association
ETSI	European Telecommunications Standardization Institute
EU	European Union
FIRST	Forum of Incident Response and Security Teams
GAC	Governmental Advisory Committee. The GAC's key role is to provide advice to ICANN on issues of public policy
GBDe	Global Business Dialogue on Electronic Commerce

GNSO	Generic Names Supporting Organization. This is the successor to the responsibilities of ICANN's Domain Name Supporting Organization that relate to the generic top-level domains
gTLD	Generic top-level domain, such as .com, .int, .net, .org, .info
HRIS	Human Rights in the Information Society
IAB	Internet Architecture Board
IADB	Inter-American Development Bank
IANA	Internet Assigned Numbers Authority
ICANN	Internet Corporation for Assigned Names and Numbers
ICC	International Chamber of Commerce
ICPEN	International Consumer Protection and Enforcement Network
ICRA	Internet Content Rating Association
ICT	Information and communication technology
ICT4D	Information and communication technology for development
IDN	Internationalized domain names: Web addresses using a non-ASCII character set
IEEE	Institute of Electrical and Electronics Engineers
IETF	Internet Engineering Task Force
IGO	Intergovernmental organization
ILETS	International Law Enforcement Telecommunications Seminar
IP	Internet Protocol
IP Address	Internet Protocol address: a unique identifier corresponding to each computer or device on an IP network. Currently there are two types of IP addresses in active use. IP version 4 (IPv4) and IP version 6 (IPv6). IPv4 (which uses 32-bit numbers) has been used since used 1983 and is still the most commonly used version. Deployment of the IPv6 protocol began in 1999. IPv6 addresses are 128-bit numbers
IPRs	Intellectual property rights
IPv4	Version 4 of the Internet Protocol
IPv6	Version 6 of the Internet Protocol.
ISC2	International Systems Security Certification Consortium Inc.
ISO	International Organization for Standardization
ISOC	Internet Society
ISSA	Information Systems Security Association
ITA	International Trademark Association
ITAA	Information Technology Association of America
ITU	International Telecommunication Union
IXP	Internet Exchange Point
LACNIC	Latin American and Caribbean Internet Addresses Registry – the Regional Internet Registry for Latin America and the Caribbean
MDGs	United Nations Millennium Development Goals
MNC	Multilingual Names Consortium
MPAA	Motion Picture Association of America
NAFTA	North American Free Trade Agreement
NAIS	NGO and Academic ICANN Study
NAP	Network access point
NATIA	National Technical Investigators' Association
NATLD	North America Top-Level Domain Organization
NCUC	Non-Commercial Users Constituency. This is the ICANN constituency of non-profit organizations advising GNSO
NGN	Next generation network
NGO	Non-governmental organization

NIC	Network Information Center
NIR	National Internet Registry
NRO	Number Resource Organization – a consortium of the regional Internet registries (RIRs)
OAS	Organization of American States
OASIS	Organization for the Advancement of Structured Information Standards
OECD	Organization for Economic Cooperation and Development
ORDIG	Open Regional Dialogue on Internet Governance, an initiative launched by the UNDP's Asia-Pacific Development Information Programme (APDIP)
PCTs	Patents, copyrights and trademarks
Phishing	The act of using the Internet, usually through a website, to fraudulently attempt to obtain sensitive personal information such as passwords, personal identification numbers etc
PIR	Public Internet Registry. The non-profit organization which is the registry for the .org gTLD on behalf of ISOC
PKI	Public key infrastructure
PPP	Private-public partnership
PRSP	Poverty Reduction Strategy Papers
Registrar	A body approved ("accredited") by a registry to sell/register domain names on its behalf
Registry	A company or organization which maintains a centralized registry database for the TLDs or for IP address blocks (e.g. the RIRs). Some registries operate without registrars at all and some operate with registrars but also allow direct registrations via the registry
Regulatel	Latin-American Forum of Telecommunication Regulators
RIAA	Recording Industry Association of America
RIPE/NCC	Réseaux IP Européens/Network Coordination Center – the Regional Internet Registry for Europe
RIRs	Not-for-profit organizations responsible for distributing IP addresses on a regional level to Internet service providers and local registries – current RIRs are AfriNIC, APNIC, ARIN, LACNIC, and RIPE/NCC
Root server	Server which contains pointers to the authoritative name servers for all TLDs. In addition to the 'original' 13 root servers carrying the IANA managed root zone file, there are now several Anycast servers that provide identical information and which have been deployed worldwide by some of the original 12 operators.
Root zone file	Master file containing pointers to name servers for all TLDs
SISs	Small Island States
SMEs	Small and medium-sized enterprises
sTLD	Sponsored top-level domain
TECF	Trusted Electronic Communication Forum
TIA	Telecommunications Industry Association
TLD	Top-level domain (see also ccTLD, gTLD, and sTLD)
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UDRP	Universal Domain Name Dispute Resolution Policy. It was initially developed by WIPO and implemented by ICANN as the key dispute resolution procedure for domain names
UN/CEFACT	United Nations Centre for Trade Facilitation and Electronic Business
UNCITRAL	United Nations Commission on International Trade-Related Law
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organisation

Unicode	Standard intended to provide a unique number for every character, independent of computing platform, program, or language
UNIDROIT	International Institute for the Unification of Private Law
UNICTTF	United Nations Information and Communication Technologies Task Force
UUCP	Unix-to-Unix Copy Protocol
VoIP	Telephony over an IP network
W3C	World Wide Web Consortium
WAI	W3C Web Accessibility Initiative
WATTC	World Administrative Telephone and Telegraph Conference
WCIT	World Conference on International Telecommunication
WCO	World Customs Organization
WGIG	Working Group on Internet Governance
WHOIS	WHOIS is a transaction oriented query/response protocol that is widely used to provide information services to Internet users. While originally used by most (but not all) TLD registry operators to provide “white pages” services and information about registered domain names, current deployments cover a much broader range of information services, including RIR WHOIS look-ups for IP address allocation information
Wi-Fi	Broadband wireless access technology
Wi-Max	Long-range broadband wireless access technology
WIPO	World Intellectual Property Organization
WITSA	World Information Technology Services Alliance
WSIS	World Summit on the Information Society
WTO	World Trade Organization
WTPF	World Telecommunication Policy Forum