

Distribution: GENERAL  
E/ECA/CODI/4/27

26 April 2005

**UNITED NATIONS  
ECONOMIC AND SOCIAL COUNCIL**

**Original: English**

**ECONOMIC COMMISSION FOR AFRICA**

Fourth Meeting of the Committee  
on Development Information (CODI IV)

Addis Ababa, Ethiopia  
23 – 28 April 2005

# The Internet Governance Space: Exploring the Core Issues from Africa's Perspective

April 2005

Paper Commissioned by the Economic Commission for Africa (ECA) and the United Nations ICT Task Force and prepared by Professor Clement Dzidonu, Senior Research Fellow at the International Institute for Information Technology (INIIT), <http://www.iniit.com>

*All opinions expressed herein are those of the author and do not necessarily reflect the views of the Economic Commission for Africa or the UN ICT Task Force*

## Introduction

The digital divide and its impact on the socio-economic developmental outcomes of developing countries and the issue of the deployment and exploitation of information and communication technologies (ICTs) to support the socio-economic development process of these countries has in the last couple of years been a key development agenda at major international fora. Related to this is the question of how best to broaden and enhance the effective participation of these countries in the global ICT policy as part of the efforts to assist their respective ICT for development process at the national level.

There is no doubt that the convergence of information technologies, communication, transmission and multimedia presentation technologies is rapidly having a major social, economic and political impact in both the developing and developed world. Parallel to this development is the rapid growth of the Internet and its widespread use world-wide.

According to [1], the Internet has, in a relatively short time, become an essential instrument for today's society; --- as of early 2005, the Internet is thought to include: an estimated 750 million users worldwide; an estimated electronic commerce turnover of US\$1 billion, which is projected to rise rapidly; a major social impact in education, health, government, and other areas of activity; cybercrime, malicious code and spam. It is argued that: the growing awareness of the social, economic, and political impact of the Internet on society has brought the question of Internet Governance (IG) into sharper focus in recent years..

The debate on issues relating to the governance of global ICT resources like the Internet and on the policy and decision making process that are governing and shaping the development and allocations of the resources of these technologies and related systems is no doubt an outcome of the growing importance of the social, economic, cultural and the political role of the Internet.

For example, the debate surrounding Internet Governance and the questions being raised at a number of international ICT fora on who owns or governs the Internet; who are the key decision makers as per the issues governing the Internet; which aspects of the Internet to govern and by who; the role of specific international bodies and governments in determining the rules governing the operations of the Internet including issues relating to the allocation of its resources can all been seen within context the growing importance of the Internet. In this paper we explore a number of these core issues as they relate to the 'Internet Governance' debate from the perspective of examining Africa's role in the IG space.

### 1.0 The Case for Enhancing Africa's Role in the Global ICT Governance and Policy and Decision Making Space

There is no doubt that on the global level, key ICT governance policies and decisions are being made at various global and international fora, meetings and in global institutions that directly or indirectly have implications on the development, deployment and the exploitation of ICTs in a number of developing countries including those in Africa. Some of these global policy decisions are also having impact on and shaping the direction and the nature of 'ICT for Development' (ICT4D) policies and programmes in these countries.

A number of specific global ICT policy issues can be identified as of particular relevance to developing countries including those of Africa. According, [2] some of the key ones include issues relating to: (i)

WTO negotiations and agreements; for example, those relating telecommunication services and universal service; (ii) accounting rate regimes; (iii) intellectual property rights, (iv) the participation of developing countries in Internet Governance and the International Corporation for Assigned Numbers and Names (ICANN) process; and (v) issues relating ITU standards and international telecommunications regulatory policies and so on.

For example, it is argued that decisions made at ICANN meetings as a global Internet policy and decision making institution and forum are having impact on and shaping national policies on how the resources of the Internet are to be utilized, distributed and owned by various national stakeholders. Also decisions in relation to for example, frequency allocation and management and those relating to the setting of international telecommunications standards made at ITU fora are no doubt being taken into account when national decisions and policies are being made in these areas. Taking another example, global policy decisions made at WTO meetings in the area of trade liberalization in the telecommunication sector to facilitate trade and competition do have some impact on national policies in areas like the liberalization of the sector and the privatization of national communication resources, facilities and assets.

There is therefore no doubt that decisions and policies made at global ICT policy and decision making fora do have some impact on national ICT4D policy making and implementation situations in a number of countries including those of Africa. However despite this, it could be argued that developing countries, most of whom are latecomers to the ICT4D process are the least represented (proportionally) at these global policy and decision making fora and meetings. These countries do face a number of challenges and barriers to their participation at these global fora; the key ones being: financial bottlenecks, lack of the necessary expertise to meaningfully participate and contribute in these fora; and lack of access to timely information on the nature and the occurrence of these global events. Also in some cases the internal structures and institutional arrangements of some of these global institutions and policy making fora do work against the effective participation of developing countries.

A number of these countries including African countries are currently in the process of developing and implementing their ICT4D policies and plans. And it could be argued that their limited participation to-date in some of these important global ICT policy and decision making fora including those related to the governance of the Internet is an obstacle to their policy development and implementation process. This lack of effective participation also place these countries in a position that compromises and undermine their negotiation position when it comes to negotiating for terms within the implementation of these global policy decisions whose outcomes do have implications on the implementation of their national policies and programmes.

Also it is worth noting that: the ongoing debate on Internet Governance and the role of developing countries within the Internet Governance space are also some of the issues that need to be considered within the context of enhancing the participation of these countries in the global decision and policy making sphere.

## 2.0 The Genesis of the Current Round of the Internet Governance Debate

The debate on the issue of Internet Governance with specific reference to the controversy surrounding the issue of who owns or governs the Internet has been around for sometime. This debate gained momentum particularly in the late 1990s when the Internet gained world-wide popularity giving rise to its use beyond the universities campuses and research establishments where it began as a research project of the US

Defense Advanced Research Projects Agency (DARPA) in the early 1970s. The substantive issues of the 'Internet Governance' debate has in fact evolved over the years.

For example, in a 1999 paper on the issue [ref 3], it was pointed out that: 'Lists of websites may quickly leave the impression that the words "Internet governance" are linked today to the environment of domain name administration. Search engines readily refer to the homepages of IANA (Internet Assigned Names Authority), or its substitute ICANN'. Taking another example of the IG issues that were debated in the 1990s, it is reported in [3] that when the CPSR (Computer Professionals for Social Responsibility) launched its "One Planet, One Net" campaign on Internet Governance in December 1997, it argued for a broader examination of issues in standards development, content development and control, and access to the Internet; and pointed out that the principles of Internet Governance should be wider than simply relating them to the issue of domain names and addresses."

The Internet governance issue and debate did in fact predate the World Summit for Information Society (WSIS) process which is the origin of the current on-going debate on the subject. There is however no doubt that the 'Internet Governance' controversy did heightened during the Geneva phase of the WSIS; with a number of developing countries and other key stakeholders arguing for the need to reexamine the issue of who governs the Internet within the context of enhancing the role of all key stakeholders in the governance of the Internet.

### ***Recalling the Genesis of the Geneva Internet Governance Controversy***

According the [4], the discussions during WSIS regarding the 'Internet governance' issue can be summarized as follows:

- Some governments were calling for a role to be played by an inter-governmental organization on "Internet Governance" matters. However, our experience indicated that such governments varied as to what part of "Internet Governance" they felt should be addressed by an inter-governmental organization. Some included ICANN's functions while others did not. It was a confused debate.
- It seems that several of these governments were from countries where government has primary or majority control over many infrastructures, but where teledensity may remain a challenge, and Internet access may be limited.
- Many governments from developing countries are seeking a one-stop-shop for advice on Internet policy matters. Many of these governments believe strongly that such a body should be within the UN framework.
- Some governments raised concerns that ICANN's Governmental Advisory Committee (GAC), as an advisory body, is not an adequate forum for their input into matters related to the technical management of the Internet.
- Other governments opposed the creation of a one-stop-shop under the UN framework; opposed an increased or changing role in these areas by the International Telecommunication Union (ITU), supporting continued private sector leadership particularly on technical; and supported the GAC as an appropriate forum for government advice into matters related to the technical management of the Internet.

On the whole, the Geneva WSIS generated 'Internet Governance' controversy can in the main be attributed to a serious disagreement on what is to be the accepted notion of 'Internet Governance' (IG). – It was mainly about 'What is or what is not IG. A debate on whose definition of IG is better or best-fit. It was therefore not surprising that one of the key mandates given to Working Group for Internet Governance (WGIG) setup by the UN Secretary as a key resolution of the Geneva phase of the WSIS process is to sort out the issue of 'what is or what is not IG'.

The basic text on the Internet Governance issue as contain the WSIS declaration of principles and the plan of action can be summarized as follows:

#### ***Declaration of Principle....***

“International Internet governance issues should be addressed in a coordinated manner. 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.

#### ***Plan of Action...***

‘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.”

In summary, it has been argues that the global debate on the 'Internet Governance' issue in the wake of the Geneva WSIS process portrays a total lack of consensus about how to define 'Internet governance', and about which issues and institutions are and should be involved in what manner. --- Similarly, there is a lack of agreement as to whether there are significant problems with existing governance mechanisms, and whether there are any pressing but unresolved issues that need to be tackled through international cooperation.

### 3.0 Internet Governance (IG): Exploring the Landscape of the 'I' and the 'G' in IG

In the words of Vint Cerf [6], the term 'Internet Governance' begs two questions: 'What is the Internet?' and 'What does it mean to govern the Internet?' To assist in the process of addressing the key issue relating to the definition of what is or what is not 'Internet Governance', as a step towards scoping the key IG issues to assist as in demarcating the role that African countries can or should play in this sphere, it will be necessary as starting point to explore the key elements of the notion of 'Internet Governance' in terms of the I and the G in IG.

#### *What is the 'I' in 'IG'?*

Broadly speaking the **I** (referring to the Internet) in the **IG** can be view from a number of perspectives or angles. The Internet has been variously described as (i) a delivery infrastructure, integrating a number of communications technologies and networks into a seamlessly global network; (ii) a pool of resources for meeting the communications needs of a global user community; -- a community of users made up individuals, governments, businesses among others (the demand-side perspective); or as (iii) a collection of operators, providers and organizations (Internet-related supply-side organizations) using the delivery infrastructure of the Internet to provide and deliver services to Internet user community.

Examining the question of what is the Internet from the perspective of who owns it, Vint Cerf, often referred to as the 'Father of the Internet' pointed out in [6] that: 'the Internet is actually a grand collaboration of hundreds of thousands of network operators. -- Private companies and various branches of the governments of the world, including various local jurisdictions, he argued, may operate Internet Protocol based networks, and to the extent that these are interconnected to the so-called public Internet, they are all part of it and each operator typically owns his or her own piece of the Internet'.

A common definition of the Internet found in the literature relates to that which describes it as a 'network of networks' --- a globally dispersed delivery infrastructure, system or platform consisting of a number of cooperating communications networks and systems. This description of the Internet as an infrastructure dates back to its origin, when according to [6] it was seen as an experiment to explore methods for interconnecting an arbitrary collection of packet-switched networks into an "Internet" in such a way that computers connected to any of the networks could communicate with one another in a transparent, end-to-end fashion.

Recalling one of the earliest definition of the Internet, to confirm the point that the Internet is viewed as an infrastructure, it was pointed out in [6] that: "On October 24, 1995, the body responsible for Internet policy in the United States, the Federal Networking Council (FNC) adopted a definition of the Internet that read as follows: the "Internet" refers to the global information system that – (i) is logically linked together by a globally unique address space based on the Internet Protocol (IP); (ii) is able to support communications using the Transmission Control Protocol/Internet Protocol (TCP/IP) suite and/or other IP-compatible protocols; and (iii) provides, uses or makes accessible, either publicly or privately, high level services layered on the communications and related infrastructure described herein."

Taking a broader 'more than a TCP/IP delivery infrastructure' view, it was pointed out in [7] that the Internet as a global system can be seen as consisting of two 'sub-systems,' one for communications -the "TCP/IP" protocols; and one for addressing – the domain name system DNS - which internally consists of a database and a dynamic lookup service, with the database consisting pairs of domain names and IP numbers. The resolution of these names into their corresponding IP numbers (a process referred to as

names resolution) it is pointed out, enables users to communicate over the Internet by typing in the more user-friendly domain names rather than the IP numbers.

According to [7], at the heart of the DNS is the Internet's *name space* – entries (domain name and corresponding IP number) of all computers connected the Internet. The namespace (which in reality is the Internet) currently has millions of entries --- a figure of over 30 million name-number pairs entries was recorded by 2000. In order to exist on the Internet, a computer must be listed in the name space. Without a listing (domain name and IP number) of a given computer in the name space, it cannot be found by other computers on the Internet wishing to communicate with it. --- The *communication sub-system* is the Internet as we commonly know it and this is extremely a decentralized system —so much so that it is really not a “system” at all but rather just a set of protocols by which independent computer networks can send data packets to each other. On the other hand, the addressing system—the (DNS), which was more or less a single centralized system under the authority of one man and later a one-man organization – IANA, in the 1970s later on rew into a distributed top-down hierarchical system.

As pointed out in [7] in the 1970s the entire namespace was contained in one file called “hosts.txt”, by 1983, however, the continued growth of the Internet had led to the redesigning of the name space into multiple, interconnected pieces serving as a distributed database system distributed among multiple computers to share the workload. Each partial database is called a *zone file* (or *zone*) containing a subset of the total list of name-number pairs. The different zone are linked to each other to form a top-down pyramidal hierarchy or an inverted tree (with its root at the top). At the apex of the hierarchy is a single zone, the *root*.

As explained further in [7], “The root zone file links to multiple zone files just beneath it, and those zones in turn link to multiple zones beneath them, and so on. Subtrees in this distributed database are called *domains*. A domain consists of a zone and all zones beneath it in the hierarchy. Domains beginning at top-level zones are *top-level domains* or TLDs (the gTLDs and the ccTLDs. As one would expect, the administration of the root zone is particularly important. All other hosts on the Internet access the name space only with a delegation of authority directly or indirectly from the root. Policy authority over the root—the power to add or delete top-level domains— confers direct control over all top-level domains and indirect power over all lower level domains. Authority over the root zone extends to the entire Internet”.

By the late 1990s the DNS had come under severe stress from a variety of sources. The Internet had rapidly outgrown its original institutions, most notably the very personal nature of IANA. ICANN was set up in 1999 by the US Department of Commerce as a not-for-profit organization with an international Board of Directors to take over the role of the administration of the DNS system. Like IANA, ICANN exercises policy authority over the root of the DNS. But according to [7], ICANN is however subject to a higher authority: the U.S. government with its Department of Commerce (DOC) still retaining ultimate control of the root, leaving ICANN policy decisions subject to a potential veto. He argued that: despite the setting up of ICANN, the United States never completely ceded its hold over the Internet.

Going beyond the ‘TCP/IP sub-system’ and the ‘DNS sub-system’ view of the Internet and taking a somewhat broader socio-cultural view of what the Internet is; it is argued in [3], that: the Internet is more than wires, computers, networks, software, modems, routers, standards, protocols and the applications that use them. --- It even encompasses more than text and pictures, and the audio and video that are rapidly joining those media. The Internet it is argued is also the collective knowledge and experience of countless communities, each with its own modes of interaction, languages of discourse, and forms of cultural expression.



It is clear from the discussion above that, there is neither a single common view on what the 'Internet' is, nor is there a single perspective from which to describe or define what the Internet constitute for the purpose of scoping the Internet Governance debate. In fact as pointed out in [8], it is therefore misleading to use the term 'Internet Governance' when the 'Internet' is not a single entity to govern. The difficulty in reaching a consensus on the issue of 'what is or what is not the Internet' as a step towards getting an agreement on the core Internet Governance issues to advance agenda is obvious from the discussion above

### ***What about the 'G' in 'IG'?***

The 'G' in 'IG' relates to the notion of 'governance' as it pertains to the Internet. The basic question here relates to whether to consider a broader or a narrower view of 'governance' when it comes to addressing the questions of: what is being governed, by whom and how as it relates to the governance of the Internet. For example, on the question of what is being governed, some may argue that ICANN makes decisions on issues that indirectly translate into the governing of the resources of the Internet; makes policies on how these resources should be allotted and used and as such indirectly governs the action of those who uses the Internet. Also there is the need to address the question of what 'governance' issues (policy, technical standards, resources, people etc) to consider when it comes to mapping out the role of the key stakeholders in the Internet Governance space.

The basic premise is that the notion of 'governance' implies a notion of 'decision making' (either by way of an authority or by consensus), hence a notion of decision maker(s) on one hand and decision recipient(s) on the other hand. Using the 'decision-maker' and 'decision-recipient' dichotomy, some are of the view that: those affected by the governance decisions may or may not have a role in the making of those decisions. For example, some argue that ICANN makes DNS related decisions without the involvement of the ordinary Internet users who could be affected by the decisions as decision recipients

Relating to the 'who' (the decision makers) aspects of the governance issue, according to (8), the notion of governance as it relates to the Internet, implies the existence of some authority able to make globally applicable rules for Internet usage backed up by sanctions. Internet governance, it is argued exists in various partial forms but overall the Internet does not have a coherent and effective system of authoritative rule making and enforcement. The reasons for this it is pointed out lie both in characteristics of the Internet as a system and a technology, which make control difficult, and in the global reach of Internet communications, which creates jurisdictional conflict among government regulators.

Commenting on the 'governance' question of the Internet from the perspective of ethics, it is argued in [4] that certain principles must be understood and respected as we consider questions relating to the administration or governance of the Internet, and these include the principles that:

- The Internet links us all together
- The Internet must be open and available to all
- Internet users have the right to communicate
- Internet users have the right to privacy
- People are the Internet's stewards, not its owners
- Administration of the Internet should be open and inclusive
- The Internet should reflect human diversity, not homogenize it.

Taking a somewhat different view in [1], the 'governance' issue is seen in terms of the need to address among other things issues to relating to:

- preventing or, at least minimizing, the risk of the fragmentation of the Internet;
- maintaining the compatibility and interoperability;

- safeguarding the rights and defining the responsibilities of the various players;
- protecting end users from misuses and abuse; and
- encouraging further development of the Internet

Further examining the ‘governance’ issue from a ‘centralized vs. and ‘decentralized’ perspective, it was pointed out in [1] that: “Internet Governance is a multi-faceted phenomenon involving a wide range of government mechanisms and forums, including international organizations, national governments, as well as professional and private bodies. -- According to the decentralized view, the current governance structure reflects the very nature of the Internet: a network of networks. Such a complex setup, it is argued, cannot be put under a single governance umbrella, such as an international organization. Another argument is that the lack of centralized governance is one of the major factors allowing for fast Internet growth. This view is mainly supported by the Internet’s technical community and developed countries.

----The centralized approach, on the other hand, is partly based on the practical difficulty of countries with limited human and financial resources to follow Internet Governance discussions in a highly decentralized and multi-institutional setting. Such countries find it difficult to attend meetings in the main diplomatic centers (Geneva, New York), let alone to follow the activities of other institutions, such as ICANN, W3C, and IETF. These, mainly developing, countries argue for a “one-stop shop,” preferably within the framework of an international organization.”

It is clear from the above discussion of the various views on the on the ‘governance’ issue that, as with the notion of what is or what is not the ‘Internet’, the ‘governance’ issue is being seen by various authors and stakeholders from a number of different angles and perspectives. Some see the ‘governance’ issue as limited to what ICANN does – the ICANN-centric view of Internet Governance, others see the governance issue in a wider perspective both in terms of a number of governance institutions and in terms of various governance concerns; while others view the governance issue in terms of the need to meet a number of well laid down ‘governance’ principles.

It could be argued that, the lack of a common perspective from which to view the ‘governance’ issue although in itself not a bad thing, do make it difficult to get an agreement on what is or what is not ‘Internet Governance’. The task for composing a commonly acceptable definition of ‘Internet Governance’ to enable us advance on the substantive issues as mandated by the WSIS process is not as straightforward as it was originally envisaged in the WSIS Declaration of Principles and Plan of Action on the Internet Governance issue.

## 4.0 Internet Governance: The Quest for a Working Definition

The difficulty in scoping the ‘Internet Governance’ problem is obvious from the discussions in the previous section. Not only is there no single definition of what is the ‘Internet’ (what is to be governed) but also the ‘governance’ issue can be seen from a number of different perspectives or views.

Commenting on this issue [1] noted: “Each of the terms ‘Internet’ and ‘governance’ is the subject of controversial interpretation. Some authors argue that the first part, “Internet,” does not cover all of the existing aspects of global ICT developments. Two other terms: “Information Society” and “ICTs” are usually put forward as more comprehensive. They include areas that are beyond the Internet domain, such as mobile telephony. The argument for the use of the term “Internet,” however, is enhanced by the rapid transition of global communication towards the use of TCP/IP as the main communications technical standard. The already ubiquitous Internet continues to expand at a rapid rate, not only in terms of the number of users but also in terms of the services that it offers. The second part of the term, “governance,” has been the cause of controversy in recent debates. Misunderstanding primarily stems from the use of the

term governance as a synonym for government. When the term ‘Internet Governance’ was introduced in the WSIS process, many, ...countries linked it to the concept of government. One of the consequences of such an approach was the belief that Internet Governance issues should be addressed at the inter-governmental level with the limited participation of other, mainly non-state, actors”

It is obvious that we cannot have a commonly acceptable definition of what is or what is not ‘Internet Governance’ if no agreement is secured on the definition of its constituents, namely, the ‘Internet’ and ‘governance’. To arrive at a commonly acceptable definition of ‘Internet Governance’, we argue that, beyond settling the issue of what is or what is not the ‘Internet’ or what is or what is not ‘governance’, we need to also address a number of questions including those relating to:

- The question of scope of the definition
- Whether to adopt a broad or narrow (subject focus, or technical) definition and
- The question of definition from whose perspective

On the question of the “Narrow vs. Broad” view of ‘Internet Governance’, it was noted in [1] that these two views has been one of the main issues so far, reflecting the different approaches and interests in the Internet Governance process. The “narrow” approach they pointed out focuses on the Internet infrastructure (Domain Name System, IP numbers, and root servers) and on ICANN’s position as the key actor in this field. And the “broad” approach, sees Internet Governance negotiations as going beyond infrastructural issues to address other legal, economic, developmental, and socio-cultural issues. In their view, the current debate has moved from the either/or stage towards identifying priorities and an appropriate balance between the “narrow” approach (ICANN-related issues) and the “broad” approach (other Internet Governance aspects).

The premise is that without a ‘commonly accepted’ definition of IG no other business can be conducted on the remaining IG agenda. Some are of the view that there is no point further discussing the IG issue if we cannot reach agreement on the definitional issue. ‘We cannot discuss what we don’t agree on’; they argued. A fair comment and position to take; why talk if we don’t agree on what to talk about? The sum total of this line of argument is that: if we by chance we can come to an agreement on what is or what is not IG then it will be easier and straightforward to:

- Demarcate and scope the IG Space
- Decide on what are or what are not an IG issues (policy, technical, and others)
- Identify Who is and Who is not involve in the IG space
- Decide on Who should or Who should not be involve in IG
- Identify Who is excluded and need to be brought in to participate in the IG and in what form
- Decide on What those who are supposed to be involved in the IG space should or should not be doing

## 5.0 The Post Geneva Prognosis

It could be argued that since the WSIS meeting in Geneva in 2003 and despite series of IG workshops and conferences held world-wide and the series of concept, position and discussion papers on the notion and the substance of the IG debate, we are still no where near a ‘commonly accepted definition’ of what is ‘Internet Governance’. While some are of the view that it will still be possible come out with the ultimate IG definition to collectively move the process to the next issue on the IG agenda, others argue that it will be impossible to have a commonly accepted definition for IG, (never mind even a working definition) and that, it is time to take another route and look at the problem from another angle.

Some of the attempts made towards defining and scoping the IG problem, since Geneva can be summarized as follows:

The International Chamber of Commerce (ICC) in its contribution on the subject [4] pointed out that the phrase ‘Internet Governance’ is often mistakenly used to identify only the management of the Internet’s names and numbers system – and that, that system is not one of governance but rather coordination, administration and allocation through ICANN. The ICC disagree with the notion that the phrase “Internet Governance” implies that there is a need for the Internet to be governed in some way, and argue that a broader definition of ‘Internet Governance’ should address three components including:

- (i) the technical engineering function that allows different components of the Internet to interact;
- (ii) the technical coordination of the key protocols and addresses and names that underpin the technical functioning of the Internet, ICANN’s functions, which in shorthand is simply, a sophisticated directory system that allows people to accurately contact a website or other people on the Internet.
- (iii) the handling of public policy matters that should be discussed openly among governments, business and civil society.

The first two components, the ICC paper pointed out: are handled by numerous non-governmental organizations through open and transparent processes that ensure effective coordination and collaboration among the broad set of stakeholders while the third component is the traditional domain of governments through regulatory and legislative processes after effective consultation with all stakeholders.

Taking another view on the ‘Internet Governance’ issue, [9] pointed out that three possible views of Internet governance appear to have emerged as summarized below:

(a) One, which corresponds to the traditional Internet view, is articulated in the WSIS submissions of the Internet Society (ISOC) and ICANN, as well as in the paper on Internet governance published by the International Chamber of Commerce (ref [4]) following the summit. On this view, Internet governance should be limited to three areas: technical standardization, management of the address and domain name systems and some service related issues, and that this should be accomplished through existing mechanisms of Internet self regulation and policy coordination, rather than through harder forms of governance involving the adoption of laws and regulations at the national and international levels.

b) A second view, which could be called the traditional telecommunications viewpoint, was articulated by a number of developing countries during the WSIS process. This view sees a much wider range of issues as requiring global governance, and favours a wider use of both established and new international governance mechanisms at the technical level (e.g. ITU involvement in the governance of the Internet addressing and domain name systems); in relation to financing the deployment of and access to the Internet (e.g. through telecom-style settlement systems, technical cooperation and development assistance programs); and in relation to the international framework for governing the Internet (e.g. through amendments to existing treaties, such as the ITU International Telecommunication Regulations, or the development of a new convention).

c) A third view, which might be called the network transformation view, focuses on the transformation of traditional telecommunication networks that is currently underway through the migration from circuit-switched to IP-based networks, and the progressive convergence of traditional telecommunications, broadcasting, information, entertainment and Internet services in the ubiquitous, broadband, mobile networks of the future. This view sees the need to re-think the governance of the Internet and the governance of other kinds of communication networks in light of these developments.

On the other hand according to [10] the term ‘Internet Governance’ can be define as: a “collective action, by governments and/or the private sector operators of the networks connected by the Internet, to establish agreements about the standards, policies, rules, and enforcement and dispute resolution procedures to apply to global internetworking activities.” The paper argued that the governance issue as it relates the to the Internet can be seen at three levels or functions:

- *technical standardization* --This has to do with how decisions are made regarding the basic networking protocols, software applications, and data format standards that make the Internet work. Organizations that perform these functions define, develop and reach consensus on technical specifications.
- *resource allocation and assignment*, --- Specifically relating to the resources such as the IP address space, radio spectrum or telephone country number codes etc that need to be allocated and/or coordinated by a designated organizations or entities. and
- *policy formulation, policy enforcement, and dispute resolution* -- This refers to the formulation of policy, enforcement and monitoring, and dispute resolution. It involves the development of norms, rules and procedures that govern the conduct of people and organizations, as opposed to the structure and operation of the technology.

The paper pointed out that: each of these governance functions is characterized by different processes and expertise, different methods of “enforcement,” and is often carried out by different organizations.

Apart from the above observations all targeted at scoping and defining the ‘Internet Governance’ space, others have contributed to the debate. And although all these have considerably contributed to our understanding of the various IG issues, the rich debate is yet to come out with what all stakeholders could agreed on as at least an acceptable working definition of ‘Internet Governance’ to move the process forward to the more substantive issues.

However, despite this apparent lack of success on the definition question, the contributions on the Internet Governance issue during and after the Geneva WSIS meeting, irrespective of what perspective from which the governance issue is examined has succeeded in enabling us reaching a consensus on a number of key parameters to advance the ‘Internet Governance’ agenda to the next stage. One key area of consensus is that the notion of ‘governance’ presupposes that:

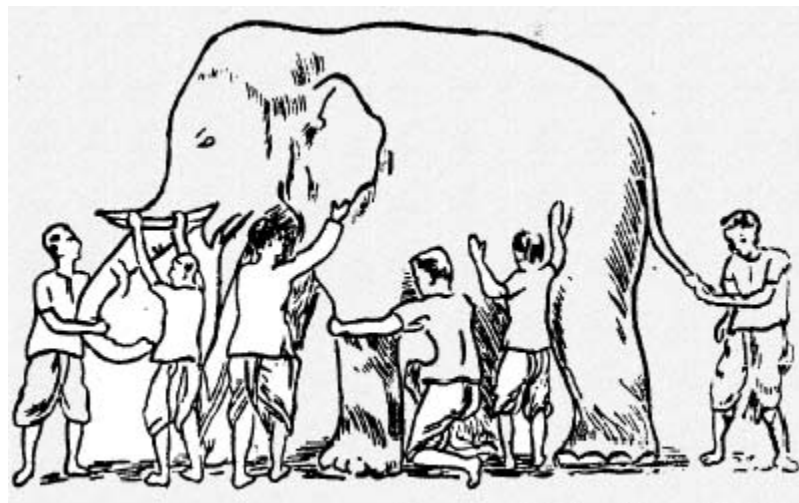
- there is ‘something’ to be governed (what to govern – the object of governance)
- there are governance issues (technical standards, resource allocation and coordination, policy formulation) to be considered (as the subject matter of the governance issue)
- there is a governing entity or entities who performs the act (action) of governance and there are specific governance actions that are taken individually or collectively by the governing entity or entities acting on the basis of an authority or consensus on specific governance issues.

We argue in this paper that, instead of attempting craft a commonly acceptable definition of ‘Internet Governance’, -- an endeavour which has so far proved difficult, we can proceed on the basis of these consensus parameters to unbundle the ‘Internet governance’ issue and propose a workable alternative to the ‘definition approach’.

## 6.0 Internet Governance: The Question of a 'Working Description'

Given the difficulty in coming out with an all inclusive commonly acceptable definition of IG, we advocate in this paper, a *working description* approach as against a *working definition* approach. The premise is that: any working definition however broad will not be all inclusive enough and hence will not be a commonly accepted definition. The proposal is to instead pursue a *working description* approach which in our view, will enable us provide answers to the fundamental IG questions without being constrained by the need to come out with commonly acceptable definition that meets the needs and expectations of all stakeholders in the Internet Governance space.

In our view, a working description of Internet Governance could be aimed at describing the characteristics (topology) of IG (in terms of: *actors*, *objects* and *actions*) to guide us in unbundling the key IG issues in search for an answer to the pertinent IG questions. It is however important to note that, the proposal to go for a working description, is not same as the often quoted exercise involving a number of blind people describing an Africa elephant through touch and ending up having as many different descriptions of what the elephant looks like (or what an elephant is) as there are those doing the description.



c. Lou Rosenfeld and Jess McMullin

The premise is that it will be possible to come out with a 'reasonably acceptable' working description of IG that will serve our purpose with less pain and disagreements on whose definition of IG is the best if such a 'reasonably acceptable' working description can assist us in answering the following core questions:

- Who are the entities (actors) involved in the IG space?
  - who governs the Internet ('what is' -- the status quo)
  - who should be governing the Internet ('what ought to be')
- What do they govern (objects)?
  - what aspects of the Internet (resources, policies rules, people) are they governing ('what is')
  - what aspects of the Internet should they govern or should they be governing ('what ought to be')

- What governance actions to take?
  - what actions are those governing the Internet involved in ('what is')
  - what actions should they be involved in (what they ought to be doing or not to be doing)

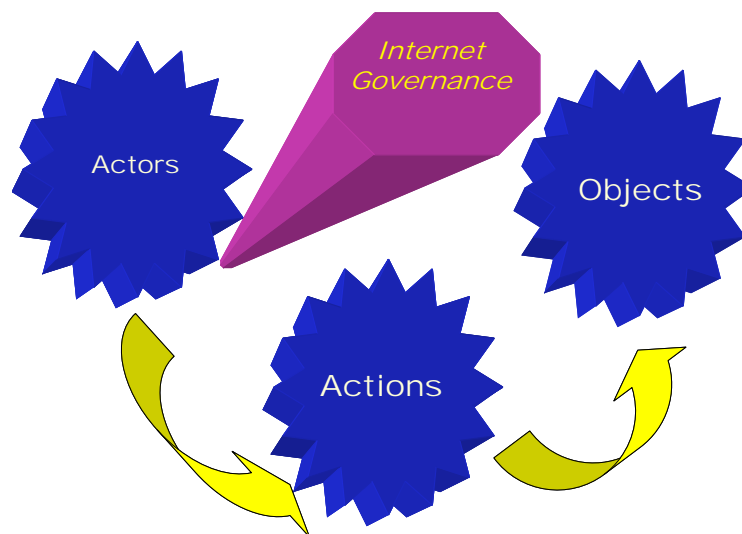
For each of three W's, the *working description* approach as discussed above reduces our task to simply addressing the question: 'what is' and then based on this decide on 'what ought to be or should be' guided by some specific premises and 'accepted rules and principles. For example, looking at the IG issue from Africa's perspective, the 'working description' approach will reduce our task to answering the questions:

- To what extent are African countries key IG player (Actor) – African's representation in the IG entities ('what is', and 'what ought to be')
- What aspects of the governance of the Internet are African countries involved in ('what is, and 'what ought to be')
- What IG actions are African countries involved in ('what is', and 'what ought to be')

## 7.0 Unbundling the IG Issue: The Three Basic Internet Governance Questions to Address

Based on the *working definition* approach, it is now possible to unbundle the Internet Governance issue, as a step towards demarcating Africa's role in the IG space by distinguishing between the three basic Internet Governance questions that need to be addressed and this include:

- What to Govern (The Object)
- Who to do the Governing (The Entity/Actors)
- What Governance Actions to take --- How to Govern (The Actions)



### 7.1 The What to Govern (Object) – The Internet

On the question of ‘what to govern’ within the context of Internet Governance, it is obvious that this relates to the governing the Internet as a system and to the various governance issues and aspects of the Internet as a system. The governance question as it relates to the Internet, can therefore be seen in terms of:

- The governance of the Internet as a system (a collection of cooperating computer/communications networks)
- The governance of the activities of Internet Related Organizations or Structures
- The governance of the Internet as a Resource. For example, management or governance issues relating to the Root Server System as a key Internet resource; or the management or coordination of the DNS as a key resource of the Internet
- The governance of the Internet --- as a community of Internet users. For example, governance issues relating to how the Internet community are involved in the ‘running’ of the Internet in the areas of policy and rule making and enforcement.

On the question of what governance issues to consider, the work of the UN Working Group on Internet Governance (WGIG) and other contributors on the subject has identified the following issues as relevant to the IG space:

- Administration of DNS – The Names Space (Internet names and IP addresses)
- Administration of the Root Server system
- Peering and Interconnection
- Telecommunications infrastructure, broadband access, convergence
- Cyber security, cybercrime
- Competition policy, liberalization, privatization and regulations
- Multilingualization of Internet naming systems
- Spam
- Dispute Resolution
- Security of network and information systems
- Technical Standards
- Affordable and universal access
- Social dimensions and inclusion
- Voice over IP (VoIP)
- E-commerce, E-Government, E-education
- Consumer, user protection and privacy
- Unlawful content and access protection
- Intellectual Property Rights
- Cultural and linguistic diversity
- Education and human capacity building
- National Policies and Regulations

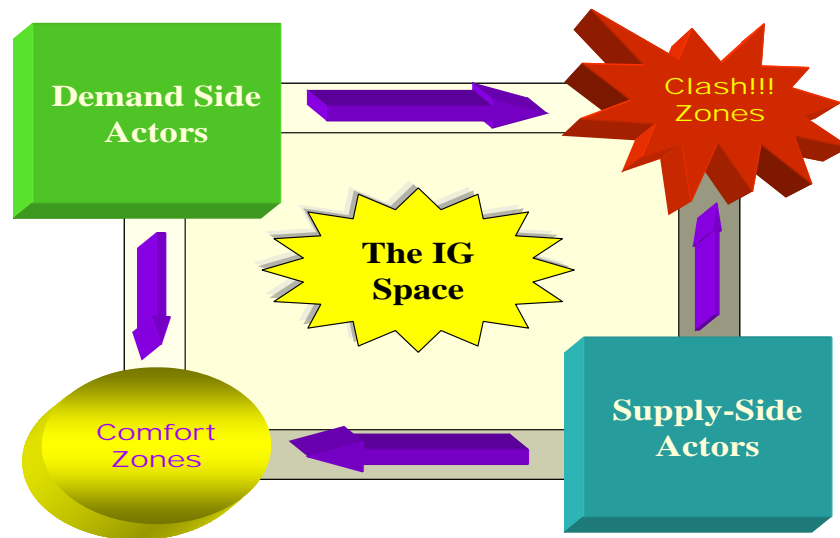
Africa countries and institutions have a role to play in the IG space as key partners in resolving a number the issues and questions discussed above. It is the case that some of these issues are of particular importance to African countries, given their stage of socio-economic development in general and the in particular their level of development as it relates to the development, deployment and the exploitation of ICTs systems and resources in their societies and economies.

## **7.2 Who to do the Governing (The Entities – the IG Actors)**



This relates to providing answers to the question: ‘Who Governs the Internet?’ or ‘Who are the key players when one talks about running the affairs of the Internet as a global resource’. We can distinguish between two broad types of actors: the ‘*Supply-side*’ actors and the ‘*Demand-side*’ actors.

### Internet Governance: The Main Actors



- *Supply-side Actors*

A review of the literature on Internet Governance reveals that a number of ‘supply-side’ actors can be identified. These can be categorized into (i) the *Internet Coordination, Administration, Regulatory and Standards Organizations (ICARSOs)* with responsibilities for: Internet Resource Allocation, Administration and Coordination; Rules and Policy Making, Technical Standards Setting, and (ii) the *Internet Resource Provision Organizations (IRPOs)* with responsibilities for Internet Resource Administration, Managing and Services Provision. Some of the key actors in each of these two categories are identified and described in Table 1 and Table 2 below

**Table 1: The Internet Coordination, Administration, Regulatory and Standards Organizations (ICARSOs)**

ICARSOs	IRPOs
Internet Corporation for Assigned Names and Numbers (ICANN) International Communication Union (ITU) World Intellectual Property Organization (WIPO) Internet Assign Names Authority (IANA) Internet Engineering Task Force (IETF) Internet Society (ISOC) Internet Engineering Steering Group (IESG) Internet Architecture Board (IAB) Internet Research Task Force (IRTF) World Wide Web Consortium (W3C)	Regional Internet Registers (RIR) [LACNIC, AFRINIC, APNIC, ARIN, RIPE] Root Server Organizations Country Code Top Level Domain (ccTLD) organizations Internet Service Providers (ISPs)

**Table 2: Description of the Role of the Key Supply-Side Actors in the IG Space**

<b>Organization</b>	<b>Governance Responsibilities</b>
<b>The Internet Coordinating Regulatory and Standards Organizations (ICRSOs)</b>	
Internet Engineering Task Force (IETF)	The Internet Engineering Task Force (IETF) is the protocol engineering and development arm of the Internet Society (ISOC) formally established by the IAB in 1986.
Internet Architecture Board (IAB)	The Internet Architecture Board (IAB) is responsible for defining the overall architecture of the Internet, providing guidance and broad direction to the IETF. The IAB also serves as the technology advisory group to ISOC, and oversees a number of critical activities in support of the Internet.
Internet Engineering Steering Group (IESG)	The Internet Engineering Steering Group (IESG) is responsible for technical management of IETF activities and the Internet standards process. As part of ISOC, it administers the process according to the rules and procedures which have been ratified by the ISOC Trustees. The IESG is directly responsible for the actions associated with entry into and movement along the Internet "standards track," including final approval of specifications as Internet Standards.
Internet Society - ISOC	The Internet Society (ISOC) is a nonprofit, non-governmental, international, professional membership organization that focuses on standards, education, and policy issues.
Internet Corporation for Assigned Names and Numbers (ICANN)	The Internet Corporation for Assigned Names and Numbers (ICANN) is the nonprofit Californian registered and based corporation that was formed to assume responsibility for the IP address space allocation, protocol parameter assignment, DNS management, and root server system management and other DNS related technical functions.
Internet Research Task Force (IRTF)	The Internet Research Task Force (IRTF) is responsible for promoting research work relevant to the evolution of the Internet by creating focused, long-term and small Research Groups working on topics related to Internet protocols, applications, architecture and technology.
World Wide Web Consortium (W3C)	The World Wide Web Consortium (W3C) was created in 1994 to develop common protocols that promote the Web's evolution and ensure its interoperability. W3C is composed of hundreds of member organizations from around the world.
The Internet Assigned Numbers Authority (IANA)	The Internet Assigned Numbers Authority (IANA) is responsible for various administrative functions associated with management of the Internet's domain-name system root zone.
The International Telecommunications Union (ITU)	The International Telecommunications Union (ITU) is responsible for providing comprehensive telecommunications standards. It also provides international coordination of the allocation and use of the communication frequencies of the electromagnetic spectrum, among many other things.
<b>The Internet Resource Provision Organizations (IRPO)</b>	
The Regional Internet Registries (RIRs)	The RIRs are responsible for the allocation of IP addresses in their regions of responsibility. There is one RIR for each of the 5 regions, namely: Africa (AfriNIC), Europe (RIPE), Asia and Pacific (APNIC), and Latin and Central America (LACNIC) and North America (ARIN)
	The Root Server Organizations are responsible for the technical management and

The Root Server Organizations	administration of the 13 root servers. Of the 13 root servers, 10 are in the US, and the three elsewhere in Europe and Asia. These servers are managed by a diversity of institutions including: academic/public institutions (6 servers), commercial set-ups (3 servers) and government institutions (3 servers)
The Country Code Top Level Domain (ccTLD) Organizations	The Country Code Top Level Domain (ccTLD) Organizations are responsible for the technical management and administration of the country code top level domain system in each of their respective countries. A number of them provide domain name services to end users within their country of operation.
Internet Service Providers (ISPs)	Internet Service Providers (ISPs) focuses mainly on the provision of Internet services to their subscribers which may individuals, businesses or organizations. They provide IP related services to their subscriber base with some also providing second level domain name services to end users.

- ***The Demand Side Actors***

The demand side actors are basically, the wider Internet User Community (IUC), made up of individual Internet subscribers and users, groups, business, public sector organizations that serves as subscribers to the Internet. This demand-side actors to-date played little or no role in the IG space. Some of the key points raise by a number of the stakeholders during the WSIS process relates to the need to re-arrange the IG space to make it possible for the wider user group to play a key role in the governance of the Internet. The Internet Society (ISOC) did made some efforts in the past aimed at mobilizing the ordinary Internet users to get involve in its activities through local ISOC Chapters. This effort has proved not all that successful and ISOC is making efforts at getting these local chapters active and effective.

Also ICANN has made some attempts at getting what it termed the ‘At Large’ Internet community involved in the ICANN process. In 2000 ICANN organized an online election of its At-Large Board members that involve the ordinary Internet users. ICANN has since abandoned the idea of direct election of some of its Board members by the Internet User community. Instead ICANN has set-up the At Large Advisory Committee, as one of the constituencies of ICANN and charge it with the responsibility for setting up Regional At-Large Organizations (RALOs) in each of the five regions of the world. But so far the role of the At-Large in the ICANN process especially from the developing countries like those of Africa has been minimal.

On the whole, the African Internet user community has not been active in the Internet governance space. Apart from a selected few who occasionally attend meetings and fora of some of the Internet Coordinating Regulatory and Standards Organizations (ICRSOs), identified above, the involvement of African countries in the work and activities of the relevant IG organizations and entities has been minimal.

### **7.3 The What Governance Actions to Take --- How to Govern (The Actions) Question**

The Governance question: ‘how to govern’ relates to those *actions* that need to be taken to govern the various aspects of the Internet. The following broad IG action areas can be identified:

- *Internet Resource Governance Actions:* The Governing on the Resources of the Internet
- *Internet Rules Governance Actions:* The Governing (setting) of the Rules/Standards of the Internet
- *Internet Governance Policy and Decision Making Actions:* The Governance Policy Making Processes

- *Internet Users Governance*: The Governing of the User Community of the Internet

Since the majority of African countries play very little in role the key *Internet Coordination, Administration, Regulatory and Standards Organizations (ICARSOs)* which are the main IG action organizations, it could be concluded that these countries and their Internet-related organizations where they exist are not regarded as key players in the IG action space described above. We elaborated on this point in the following sections.

## 8.0 The 'What is' Analysis: The Level of Africa's Participation in the Global Internet Governance (IG) Space

In this section, we carried out an analysis of some of the barriers to Africa's effective participation in relevant Internet Coordination, Administration, Regulatory and Standards Organizations (ICARSOs) and other Global ICT Policy and Decision Making Fora as way of establishing the 'what is' situation as it relates to the level of participation of African countries in these IG institutions and venues

It could be argued that African countries are facing a number of challenges that inhibits their effective participation and influence in the relevant Internet Governance organizations, structures and fora. We can identify some of these challenges to include:

- The limited bargaining power and leverage of African countries as compared to other countries and regional blocs;
- The absence of coherent, consistent position by African countries on major global Internet governance issues;
- The lack of expertise and capacity in relevant Internet governance issues, including IG policy, standards and technical issues;
- The absence of effective cooperation amongst African countries on how to engage in collective negotiation on relevant Internet governance issues for their mutual benefit and
- The effect of some of the extra-regional block alliances that for example some Africa countries enter into --- which in some cases makes it difficult for African countries to act as a group to present a common front on Internet governance issues at global fora.

Specifically on the issue of barriers to participation in the relevant *Internet coordination, administration, regulatory and standards organizations* (ICARSOs) and other global Internet governance and ICT policy and decision making fora and processes, African countries and other developing countries do experience a number of barriers to participation.

Taking for example the case of ICANN, its current structure and mode of operation presents some technical and financial barriers to the effective participation by African countries and other developing countries in the activities and the decision making mechanisms of its constituencies especially the technical ones.

For example, very few African countries do have people with the necessary or requisite technical know-how and expertise to effectively participate in ICANN's technical SOs (supporting organizations) like

the: Address Supporting Organization (ASO), Protocol Supporting Organization (PSO), Domain Name Supporting Organization (DNSO), the Government Advisory Committee (GAC) etc. Even the few that could surmount the technical barriers to participation, not many of them are likely to have the necessary financial resources to attend ICANN meetings on a regular basis.

The record of African countries participation in other ICARSOs is not all that different. Presented in Table 3 below is evidence of the rather low level of participation of African countries in the activities of the relevant IG related organizations.

**Table 3: Past Level of African Countries Participation and Involvement in IG Entities and Fora**

<b>The ICAROSs</b>	<b>Meetings/Events/Fora</b>	<b>Relevant IG Subject Areas of Focus</b>	<b>Membership/ Participating Entities</b>	<b>Past Level of Africa's Participation in the Activities of the IG Entities</b>
<b>ICANN</b>	Regular/Quarterly Event + Regular Technical/Policy Work Group Meetings	Technical Coordination of the DNS [DNS, Technical Issues Policy, Standards]	Individuals, Orgs, Govts	Low (Proportionally)
<b>IANA</b>	Regular Technical Work Meetings	DNS Technical and Admin Issues	Individuals	Low
<b>WTO</b>	Regular/Annual Event + Regular Technical/Policy Work Group Meetings	Trade Policies (e.g. TRIPS)	Member States	Low-to-Medium
<b>ISOC</b>	Regular/Annual Event + Regular Technical/Policy Work Group Meetings	Internet Policy and Standards,	Individuals, Orgs	Low-to-Medium
<b>ITU</b>	Regular/Annual Event + Regular Technical/Policy Work Group Meetings	Regulatory, Telecom Standards	Member States & Organizations	Low-to-Medium
<b>WIPO</b>	Regular Event + Regular Technical/Policy Work Group Meetings & Training Workshops + Briefings	IPR Issues	Member States & Organizations	Low-to-Medium
<b>UNCTAD</b>	Regular & Annually	Trade Policy & Negotiations	Member States & Organizations	Low-to-Medium
<b>IETF</b>	Regular Technical Work Group Meetings	Internet Standards and Protocols Setting	Individuals and Technical Working Groups	Low
<b>IAB</b>	Regular Technical Work Group Meetings	Internet Standards and Protocols Setting	Individuals and Technical Working Groups	Low
<b>IESG</b>	Regular Technical Work Group Meetings	Internet Standards and Protocols Setting	Individuals and Technical Working Groups	Low
	Regular Technical Work	Internet Standards	Individuals and	Low

<b>IRTF</b>	Group Meetings	and Protocols Setting	Technical Working Groups	
<b>W3C</b>	Regular Technical Work Group Meetings	Internet Standards and Protocols Setting	Orgs. Individuals and Technical Working Groups	Low
<b>Root Server Orgs</b>	Scheduled Technical Meetings	Management of the Root Server System	Organizations and Designated Institutions	Low
<b>RIRs</b>	Scheduled Technical Meetings	Regional IP Numbers System Administration	Organizations	Low
<b>TLD R&amp;Rs</b>	Regular/Quarterly Events	TLD Administration	Organizations	Low
<b>ccTLDs</b>	Regular/Quarterly Events (re: ICANN events) + Regular Technical/Policy Work Group Meetings	Country Code Domain Names Administration	Organizations, Institutions, Govts	High

The evidence shows that Africa's involvement in the activities of the relevant IG entities has in the past be very minimal in the majority of the cases. On the whole we can identify the following key barriers to effective participation of African countries in the key activities and processes of the global Internet governance space, entities and fora:

- **Technical Barriers:** This relates to the lack of the necessary know-how, or expertise to: (i) effectively participate in relevant IG organizations, structures and fora; (ii) comprehend the technical details of the deliberations, activities and the outputs of the various IG organizations, structures and fora; (iii) effectively contribute to and make input into the discussions of the relevant IG entities and processes and (iv) learn/benefit from the proceedings and the activities of the various IG organization and fora. On the whole, a number of the African countries lack the necessary know-how, or expertise to effectively: participate in relevant global IG processes, structures, organizations decision/policy making fora; comprehend, contribute learn/benefit from the deliberations, discussions and proceedings of IG fora events technical meetings
- **Informational Barriers:** This relates to the inability of African countries to acquire or have access to the necessary and relevant information about the various IG organizations, activities, fora and events. For example, information like: What the IG organization or fora is all about?, What it does and its impact on African countries? How to get involve in the activities of the relevant IG organizations and fora, and How relevant is the subject matter of these organizations, fora, events and so on
- **Financial Barriers:** This relates the lack of the necessary financial resources to meet the cost of: (i) acquiring the necessary information, about the IG organizations, institutions, fora and events (ii) attending the meetings of the relevant IG organizations and (iii) gaining the necessary know-how and expertise to effectively participate in the deliberations and activities of these institutions and events
- **Institutional Barriers:** A number of institutional barriers to effective participation of African countries in the activities and the relevant IG organizations, institutions, events and fora can be identified. The first relates those barriers posed by the very structure, nature and/or the mode of operations of the IG organizations, structures and processes that could serve as a barrier to

effective participation of African countries. Other institutional barriers to effective participation could arise as a result of absence of effective cooperation amongst African countries (or a group of them) on how to engage in collective negotiation on IG related issues for their mutual benefit. Also extra-African alliances that inhibit Africa's capacity to present a common front, stand or position on global IG issues can be classified as a type of institutional barrier to effective participation.

Other institutional barriers to participation relates to those arising from the selection structures, mechanisms and procedures for determining who should participate in the activities and the processes of the IG organizations, structures and events – which sometimes results in nominating un-qualified people to participate.

These institutional barriers in some cases leads to situations where the wrong people are nominated to participate; for example, heads of institutions because of corrupt practices, either self-select themselves or their favoured staff to attend international meetings, although they are not the best qualified within the institution to effectively participate in the these meetings.

On the whole, from the point of view of African countries, each of the relevant IG global structures and organizations have varying levels of barriers to participation in their activities and processes. For example, the technical nature of a number of the IG technical and standards organizations means that such organizations and fora have a high technical barrier to participation. Also since the majority of the global IG meetings takes place outside Africa, most of the meetings do present a financial barrier to participation for Africans and participants from other developing countries. Table 4 below presents a kind of a 'what is' analysis of each of the identified four barriers to Africa's participation in the global IG space as they relates to each of the global IG structures and institutions we identified earlier.

**Table 4: Barriers of Africa's Participation in the IG Space**

The ICAROSs	Membership/ Participating Entities	Levels of Barriers to Africa's Participation			
		Technical	Informational	Financial	Institutional
<b>ICANN</b>	Individuals, Govts, Orgs	High	L-to-M	High	L-to-M
<b>IANA</b>	Individuals	High	High	High	High
<b>ISOC</b>	Individuals, Orgs	Medium	L-to-M	L-to-M	Low
<b>ITU</b>	Member States & Orgs	High	Low	High	L-to-M
<b>WIPO</b>	Member States & Orgs	High	Low	L-to-M	L-to-M
<b>UNCTAD</b>	Member States & Orgs	L-to-M	Low	L-to-M	L-to-M
<b>IETF</b>	Individuals	High	High	High	High
<b>IAB</b>	Individuals	High	High	High	High
<b>IRTF</b>	Individuals	High	High	High	High
<b>IESG</b>	Individuals	High	High	High	High
<b>W3C</b>	Orgs, Individuals	High	High	High	High



<b>Root Server Orgs</b>	Orgs & Institutions	High	High	High	High
<b>RIR</b>	Organizations	High	Medium	High	M-to-H
<b>TLD Registries and Registrants</b>	Organizations	Low	Low	High	Low
<b>ccTLDs</b>	Orgs, Institutions, Govts	M-to-H	L-to-M	M-to-H	L-to-M
<b>ISPs</b>	Orgs, Institutions	Low	Low	Medium	Low

Considering some examples, the technical nature of ICANN meetings for example, do pose *technical barriers* to effective participation for a number of participants including those from African countries. Most people need to attend a number of ICANN meetings before being able to comprehend the technical details of the meetings and effectively participate in the deliberations.

Also given that ICANN meetings rotate from continent to continent most potential participants from African countries are often not able to surmount the *financial barriers* to regularly attend these meetings. For example, a number of the accredited Africa members of the Governmental Advisory Committee (GAC) of ICAAN hardly attend the face-to-face meetings of GAC organize along-side ICANN meetings simply because of the financial barriers it posed to them.

Also the technical nature of some of the other IG institutions like: IETF, IANA, IAB, IRTF, Root Server Organizations, ITU and the WTO among others raises questions as to the lack of involvement of people from various part of the world in their activities. For example, developing countries including African countries often do make the point that because of the lack of the necessary expertise in these countries to effectively participate in these institutions and structures, compromises their position on key technical IG decisions and outcomes.



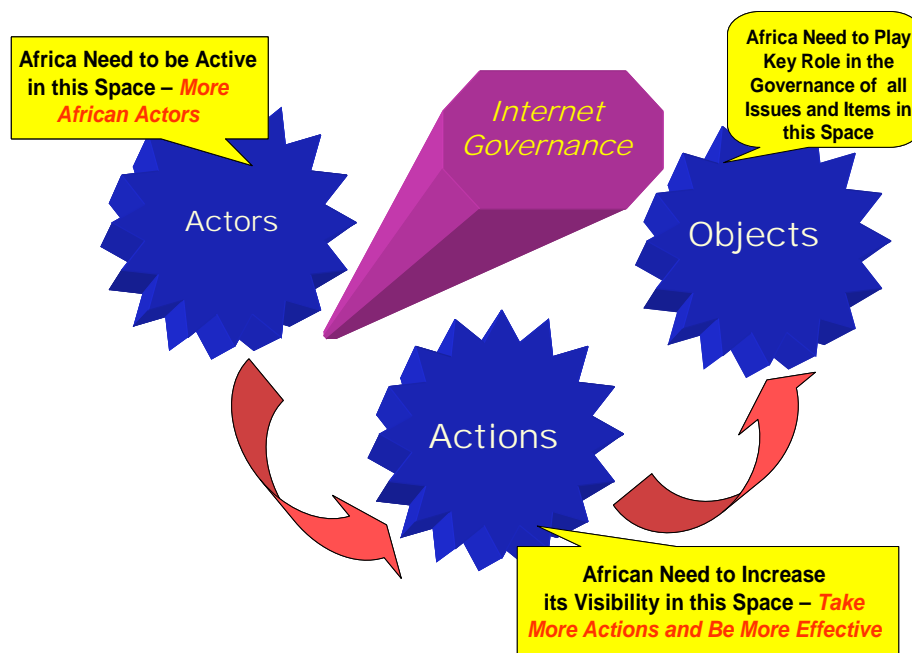
## 9.0 The 'What Ought to-be Analysis': Mapping Africa's Role in the Internet Governance Space

### 9.1 Enhancing Africa's Role in the IG Space

To enhance their role in the Internet governance space, Africa countries will need to play an active role in all the three IG areas we identified, namely in the: *actors*, *actions* and *objects* space.

- ***Africa's Role in the 'Actors' IG Space***

African countries need to be active in the 'actors' space, by actively getting involved in the relevant IG institutions, structures and processes. On the basis that a number of the identified technical, financial and institutional barriers can be overcome, African countries could enhance their role in the global IG space by actively and effectively participating in the activities of IG related institutions like: ICANN, ISOC, IETF, ITU, IAB, IESG, W3C among others.



- ***Africa's Role in the 'Actions' Space***

Also, African countries, individually and collectively will need to increase their visibility in the IG 'actions' space, by taking more IG actions and be more effective, in registering their footprints (by virtue of the effectiveness of their IG participation and actions) on their developmental process and on addressing the numerous digital divide problems they faced.

- ***Africa's Role in the 'Objects' Space***

African countries also have a key role to play in the IG 'objects' space, by either leading on or playing an active role in all key IG issues including those relating to policy, Internet resource allocation and distributional issues.

On the IG issues identified in section 7.1, African countries can lead on or be in the forefront to address some of these issues like those relating to: multi-lingualization of Internet naming systems, spam, dispute resolution, affordable and universal access, social dimensions and inclusion, Voice over IP (VOIP), e-commerce, e-government, e-education, consumer, user protection and privacy, unlawful content and access protection, intellectual property rights, cultural and linguistic diversity, education and human capacity building, national policies and regulations among others.

## **9.2 Analyzing the Impact of Participation: Applying the FootPrint™ Concept<sup>1</sup>**

According to [11], efforts directed at broadening and enhancing the capacity of African countries to effectively participate and contribute to the global ICT policy and decision making fora including IG related institutions and processes, should be judged on the basis of the footprints they made on the development landscape of these countries.

The effective participation of these countries, it is argued, should: (i) lead to these countries registering their position, making their case, and making meaningful inputs and contributions to the global IG policy and decision making process and (ii) result in these countries translating the gains made at these fora into actions on the ground to make meaningful and significant footprints on their national development process.

We argue that it will be necessary to investigate the *footprints* (or the impacts) made by virtue of effective participation of African countries in the IG space. Applying the FootPrint™ concept pioneered by INIIT we can analyze the impact of Africa's participation in the relevant IG institutions, fora processes and structures. According to [12], the FootPrint™ concept is based on the premise that *interventions* into social, economic or political systems are carried out with the intention to bring about a desired change --- *making a footprint* of one sort or another.

For example, participation of African countries in IG processes like those of the WSIS or ICANN should result in some impact --- making some footprints. According to [11], the footprint of a given intervention (e.g. Africa's effective participation in the IG space) could among other things be described in terms of the *width* (broadness) of the footprint, the *length* of the footprint, the *depth* and possibly the *time-span/longevity* of the footprint. Applying this to the footprint made as a result of the effective participation of African countries in a global IG policy fora; we can examine its *width* (e.g. the scope of the impact or how widespread is the impact within African countries), its *depth* (how deep is the impact on the activities, targeted at addressing the digital divide policy issues and programs in African countries) and its *longevity* (e.g. how long will the impact on the ICT4D activities in African countries last).

Participation of African countries in the 'actors', 'actions' and the 'objects' IG spaces should lead to some results – making some footprints at either the individual, organizational, national or at the continental level. An example of a continental level footprint could be measured in terms of the level of

---

<sup>1</sup> Professor Clement Dzidonu and Dr. Nii Narku Quaynor both Senior Research Fellows of INIIT are co-originsators of the FootPrint™ concept.

impact that the participation of African countries in the ICANN and other related IG institutions and fora can make in advancing the development of AfriNIC or advancing the work of the African ICANN Group --- set up to coordinate, promote and advance ICANN related issues in Africa, or impact on the resolution of the numerous ccTLD redelegation disputes currently on-going in a number of African countries.

In the final analysis, efforts directed at addressing the barriers to participation of African countries in the global IG space has to be seen within the context of their likelihood to address the issue of making significant footprints both domestically and externally.

## **Concluding Remarks – Constructing Africa’s Position in the Internet Governance Space**

It has been acknowledged that: the Internet has evolved into a global facility available to the public and its governance should constitute a core issue of the information society agenda. The need to facilitate the effective participation of African countries in the global IG space through their involvement as key actors, and players in number of broad range of IG issues has been established.

To advance on the substantive issues on the ‘Internet Governance’ agenda in general and in particular provide answers to how the role of developing countries including African countries can be enhanced in the IG space, a case was made for the need to adopt a ‘*working description*’ approach rather than the so far difficult to scope inconclusive ‘working definition’ approach being adopted so far to unbundle the IG problem.

The point has also been made to the effect that there is a need to devise and put in place mechanism targeted at addressing the various the technical, financial and the institutional barriers limiting the involvement and the participation of African countries in the IG space, this we argued will be necessary to support the support the development of their information society in these countries.

It is however worth pointing out that efforts directed at tackling the barriers to the effective participation of African countries in the global IG space should be a shared one. Although external assistance could be mobilized to address some of the barriers like the *financial barriers* to participation and to some extent some aspects of the *technical barriers* by funding technical assistance and training programmes to develop the capacity of African countries to effectively participate in the global IG space, the bulk of the responsibility to address these barriers lies with the African countries themselves. For example, a lot can be done by individuals and respective countries to address barriers like: informational barriers, and technical barriers, and to some extent the financial and institutional barriers to participation.

There is no doubt that Africa’s lack of effective participation in the IG space to-date do have implications on the development of Africa’s information society. The key message is that, for the majority of African countries, the enhancement of their role in the Internet Governance space is not an end in itself but rather a means to a bigger end, and that is facilitating (at least not obstructing) Africa’s determination to be part of the information revolution and improve the social and economic outcomes of its people in the information age.

In the final analysis, efforts directed at broadening and enhancing the capacity African countries to effectively participate and contribute to the global IG agenda should be judged on the basis of the footprints they made on the developmental process of these countries. The effective participation of these countries in the global IG space should: (i) make it possible for these countries to register their positions, make their case, and make meaningful inputs and contributions to the global IG agenda and (ii) result in African countries translating the gains made through their effective participation in the IG space into actions on the ground to make meaningful and significant footprints on their national development landscape.

## References

- 1 Gelbstein E. and Kurbalija J (2005), GKP Issues Paper on Internet Governance: Issues, Actors and Divides, Diplo Foundation, 2005
2. Dzidonu C.K., Ó Siochrú S. and Faye M. (2000): Broadening National Information and Communications Policies and Strategies, United Nations Economic Commission for Africa (UNECA) (2000)
3. Jacques Berleur, Penny Duquenoy and Diane Whitehouse, Eds. (1999), Ethics and the Governance of the Internet, IFIP-SIG9.2.2, IFIP Framework for Ethics of Computing September 1999
4. International Chamber of Commerce (ICC), ICC Background Paper on Internet Governance, in Internet Governance: A Grand Collaboration, MacLean D. (eds), UN ICT Task Force Publication (2004)
5. William Drake, (2004), Internet Governance: The State Of Play, Reframing Internet Governance Discourse: Fifteen Baseline Propositions,  
([www.internetgovernance.org](http://www.internetgovernance.org)), [www.citi.columbia.edu/affiliates/wdrake.htm](http://www.citi.columbia.edu/affiliates/wdrake.htm)
6. Vint Cerf (2004), Internet Governance, cerf-internet-publication-28oct04.pdf
7. Klein H. (2002), ICANN and Internet Governance: Leveraging Technical Coordination to Realize Global Policy, The Information Society, 18: 193-207, (2002)
8. Internet Society (ISOC), (2003), Internet Governance: Strength and Stability through Open Consensus, ISOC News
9. Don MacLean (2004), Herding Schrödinger's Cats: Some Conceptual Tools For Thinking About Internet Governance, *Background Paper for the ITU Workshop on Internet Governance, Geneva, 26-27 February 2004* ([www.itu.int/osg/spu/forum/intgov04/contributions/itu-workshop-feb-04-internet-governance-background.pdf](http://www.itu.int/osg/spu/forum/intgov04/contributions/itu-workshop-feb-04-internet-governance-background.pdf)).
10. The Internet Governance Project (2004), **Internet Governance: The State of Play**, ([www.InternetGovernance.org](http://www.InternetGovernance.org))
11. Dzidonu C. K, and Quaynor N. (2002), Broadening and Enhancing the Capacity of Developing Countries to Effectively Participate in the Global ICT Policy Fora and the ICT for Development (ICT4Dev) Process, International Institute for Information Technology (INIIT), Special Working Paper Series No. 5, Markle Foundation
12. Dzidonu C.K and Quaynor N. (2002) The FootPrint<sup>TM</sup> Concept, International Institute for Information Technology (INIIT), Special Working Paper Series No.4 (2002)