



NEXA
Center for Internet & Society

Internet Governance

Analysis of technological and regulatory assumptions, of theoretical principles, of historical development and goals

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Foreword

"Internet Governance" is an expression that has many controversial interpretations. The concept has started to be shaped and becoming popular at least a decade ago, however "Internet" and "governance" are still two words which often sit together in a uncomfortable way. Despite shared definitions are attempted - as assigned below - there is no complete agreement about what Internet Governance implies. In a broad definition, with its width embracing a lot, can define Internet Governance as an the attempt to build a comprehensive coordination and policy-making framework for the Internet, in relation to both the strictly technical and socio-economical issues¹.

Because its history and the Internet origins, as affirmed by Don MacLean, "*the whole question of Internet Governance is very unstable and highly contestable on every dimension, ranging from the definition of key terms to the selection of appropriate forms of governance and institutional arrangements.*"²

Moreover, as many scholars argue and, as shown by the empirical evidence, Governance of the Internet exists *de facto*, so it is necessary to deal with it, bearing in mind the considerations of Lawrence Lessig, who, at the beginning of Internet Governance process, affirmed that since cyberspace is entirely human-made, there are no natural laws to determine its architecture.³ Therefore, we can and must choose which kind of Internet we want, and which kind of regulations. Even if, as Jeanette Hofmann affirmed, coping with Internet Governance could

¹ M. Mueller, J. Mathiason, H. Klein, *The Internet and global governance: principles and norms for a new regime*, Global Governance, Review of Multilateralism and International Organizations, n. 13, 2007, pages 237-254.

² D. MacLean, *Herding Schrödinger's Cats: Some Conceptual Tools for Thinking about Internet Governance*, 2004, available at: www.itu.int/osg/spu/forum/intgov04/contributions/itu-workshop-feb-04-internet-governance-background.pdf, pag. 3.

³ L. Lessig, *Code and Other Laws of Cyberspace*, Basic Books, New York, 1999.

mean having to deal with a "*endlessly winding and intricate path of negotiation*", a continue "*process of searching*"⁴.

We are able to define Internet regarding its technical aspects and their complex interdependence, despite the continuous technical developments. We could also agree about the term "governance". As written below, this term refers to the need to find principles, rules norms, shared between the different social actors, who have to deal with the Internet and ask for a decision-making role regarding its governance.

The Internet, with its complex structure, involves individuals, markets, organizations and associations, academia and researchers' communities together with governments and political institutions. As John Mathiason has written, "*the borderless, multistakeholder nature of the Internet means that it can be governanced, but not governed.*"

In fact, the intrinsic multistakeholder character of the Net makes the Internet Governance that arduous attempt to agree on how to manage and regulate the Net, by governments, private sector, intergovernmental organizations, civil society, academic and technical communities.

The multistakeholderism - as discussed in depth below - could be considered as the fundamental and main element of Internet Governance. Vinton Cerf, one of the fathers of the Internet is so convinced about this principle, to conclude, its foreword of essay "Who rules the net?" answering to the question of the title in this way: "*You and I and 600 millions others, in some measure.*"⁵

The history of the Internet has been determined by a multiplicity of social actors right now. The dynamic and rapid growth of the Net - nowadays Internet users reach more than one billion and seven hundred million around the globe⁶ - has given rise contradictions and problems among existing regulatory regimes, governments interests, business purposes, needs of civil society, concerns of technical communities. Everyone with a specific role in the Net - even if achieved in different times and ways - with a different approaches, actions and expectations. And, above all, with different weights and means to act effectively.

The involvement of this multitude of actors, with their own perspectives, and the global dimension of the Internet has posed caused huge problems and issues to be coped with in a new way, directly proportional to the novelties of the Internet.

In many respects, the governance of the Internet is an entirely new area for global governance and public-international law.

The specific nature of Internet - from its history, to its technical infrastructure and to its pervasiveness and strong impact on every aspects of our life - allows us to compare only partially its governance with the management of the older information and communication technologies. The International Telecommunications Union (ITU) and the Universal Postal Union regulating the nineteenth century's technologies had to strive to balance the service for the

⁴ J. Hofmann, *Internet Governance: A Regulative Idea in Flux*, 2005, available at: regulation.upf.edu/ecpr-05-papers/jhofmann.pdf

⁵ V. Cerf, *Who rules the net?*, in A. D. Thierer, C. Wayne Crews (Eds.), *Who rules the net?: Internet governance and jurisdiction*, Cato Institute, Washington D.C., 2003, pag. XIII

⁶ For Internet usage statistics, see: www.internetworldstats.com/stats.htm

users, the commercial potential of their diffusion and the communication and freedom of expression possibilities. This aspect is remarkably similar to the Internet Governance problems, notwithstanding Internet because of its history and its multi-stakeholder and borderless nature presents some peculiarities.

In 2007, during the Internet Governance Forum (IGF) – the global meeting about Internet Governance issues, established by U.N. in 2006 - in Rio de Janeiro, Vinton Cerf suggested that the closest comparison with the governance of the Internet is the Law of the Sea.⁷

From a legal point of view, the history and the management of the Internet has evolved within self-regulation - the first form that has been historically determined, which has permitted and permits nowadays the development of technical standards - unilateralist temptations; state sovereignties; international law. These different approaches often overlap and contrast.

From a historical point of view, since the mid-1990s efforts have been conducted to construct an international regime for global Internet Governance. Starting with the establishment of some entities and especially the Internet Corporation for Assigned Names and Numbers (ICANN) in 1998 - that will be discussed later -, which are responsible for the technical management of the Internet, these attempts have been highlighted in the World Summit on Information Society (WSIS), the process held, from 2001 to 2005, by United Nations (U.N.). Since 2006, the WSIS has given way to the Internet Governance Forum, the meeting, which meets, annually, all categories of stakeholders from around the world, in order to discuss all aspects of the governance and the management of the Net.

Attempting to gain a general evolution, we may affirm that Internet Governance has been evolving substantially from technical management to social and human rights issues; formally from a small group of institutions to a global dimension.

Even if it is probably possible to delineate these two development directions, Internet Governance has a non-linear shape and it is still too recent and in a fluctuating definition to be understood as an accomplished matter.

Even the judges on the effectiveness of the processes put in place are different and often conflicting. Simplifying, we find at one extreme, those who believe that the workplace by a structured discussion, in particular IGFs, did not produce enough effective results, mainly because they are not decision-making fora. According to this first group, the real and concrete decisions are taken elsewhere, particularly in locations such as ICANN, and are determined by the traditional powers, which take little account of what happens in global fora of the U.N., especially the instances of social subjects and weakest countries.

On the other hand, there are those who argue that IGFs are truly affecting the dynamics of the Internet decision-making, particularly by international pressure groups, which, thanks to the IGF process too, nowadays are more able to realize alliances and work together, at a national level also.

⁷ About U.N. Internet Governance Forum: www.intgovforum.org/cms
The quote of Vint Cerf is available at: www.intgovforum.org/cms/Rio_Meeting/IGF2-EmergingIssues-15NOV07.txt

Fully understanding of what happens is not easy, but there are elements of truth in both sides. Certainly, a difficult mediation about the redistribution of power by various actors is underway: both as regards the power on the Internet and through it.

If it is obviously not easy to trace the map of the re-distribution of power between players on the field, re-defining the concept of power in the network society makes up a further complicating factor.

As Manuel Castells explains in his latest essay,⁸ the major parts of fundamental functions of the networked society (financial markets, trans-national productions, media networks, networked global governance, social and global movements) are organized around networks and through the Internet. And also power is being refocused on the network, assuming its form. The Internet, in fact, is the first product of technology, which is assumed as being a social morphology.⁹

In this framework of deep and wide variation, in the network society, power cannot be reduced to State, the fulcrum of power still being held in modern societies. The globalization, detonated and made irreversible by the Internet, is accelerating the crisis of the nation-state, just previously on. Then, we are in the presence of a growing contradiction between the structure of instrumental relations of the global networks and the relegation of the nation state within its territorial limits. This dynamic is true and recorded for all social contexts and even more strongly in relation to the Internet itself. Regarding Internet Governance, unlike most areas where global institutions have been created, where the role of governments is predominant, the Internet is a field where the private sector and civil society each have an important role, sometimes more important, than governments. At any rate, as the Internet Governance process shows, States are reacting, transforming and adapting to the new environment. So, we witness the efforts of former players to seek new ways of not losing their hegemony; of new players jostling for a place of importance and all social bodies to structure reference points in a fast changing environment.

In all cases, the struggles and conflicts of power are more alive than ever.

In this paper, we seek to shape an Internet Governance map, trying to provide some key definitions for understanding the phenomenon and critically analyse the events that were and are decisive.

In the first part we analyse the Internet Governance under its historical respect. Tracing the history of institutions that have gradually been created to manage it, we try to give a critical reading, attentive to political balances, of dynamics that have brought us up to today.

The second part is about Internet Governance Fora, the main global experiment implemented until now, in order to define global Internet Governance. A special focus is dedicated to the Italian involvement in that process.

The third and last part is about theoretical analysis of different regulatory approaches, involved

⁸ M. Castells, *Communication Power*, Oxford University Press, New York, 2009

⁹ M. Castells, *The Rise of the Network society. The Information Age: Economy, Society and Culture*, Vol. I, Blackwell Publishers, Malden, 1996.

in Internet Governance issues.

A conclusive paragraph tries to tack stock and trace possible developments.

FIRST PART - INTERNET GOVERNANCE: A HISTORICAL DEFINITION

1. From Internet's origins to ICANN

The Internet, as it is well known, started as a governmental project during the cold war period, in the late 1960s, when the U.S. Government sponsored the realization of a resilient and networked communication infrastructure.

ARPANET was the first network developed under the ARPA (Advanced Research Projects Agency) by Bob Taylor and Larry Robert in 1969. This progenitor of the Internet connected for the first time four nodes: the University of California, the Stanford Research Institute, the University of California Santa Barbara, The University of Utah.

From the beginning, university researchers and software programmers worked together, in a collaborative way, sharing their knowledge and ideas, in order to define and develop the Internet technical aspects.

The Request for Comments (RFC) are one of the most relevant testimony of this collaborative method.¹⁰ The RFC is a memorandum that describes: methods, behaviours, research, or innovations applicable to the working of the Internet and Internet-connected systems. This means Internet was designed precisely in order to create a collaborative instrument that allowed the researchers to discuss about the technological solutions and approve protocol standards within the scientific community. Without this shared work would probably not been possible to reach the definition of Internet protocols.¹¹

Few years after the first ARPANET connections, two technological inventions revolutionized the structure of the Internet and determined its openness and its, irreversible, exponential growth. By the mid-1970s, Robert Kahn and Vinton Cerf, at Stanford University created the suite protocol TCP/IP (Transmission Control Protocol and Internet Protocol), that made Internet the network we know today.

The invention of TCP/IP protocol is a fundamental step in Internet history, because it led to an open network: the suite protocol itself gives the possibility to make communicable and compatible different networks, using different data transmission techniques. The other relevant feature of TCP/IP is the packet switching, a data transmission mechanism, by which the data packages take different paths through the network to reach the target.

Because of the TCP/IP suite protocol adoption, the military network was separated from the civilian one and it was called Milnet in 1983. The rest of the network grew rapidly and it becomes Internet in 1990.

TCP is still the fundamental element of the Internet, which, using Milton Mueller, Hans Klein and John Mathiason definition, can be described as: "*[...] the global data communication capability realized by the interconnections of public and private telecommunication networks*

¹⁰ The first RFC 1, entitled "Host Software", was written by Steve Crocker of the University of California, Los Angeles), and published on April 7, 1969.
www.rfc-editor.org/rfc.html

¹¹ A protocol is a set of rules which is used by computers to communicate with each other across a network.

using Internet Protocol (IP), Transmission Control Protocol (TCP), and the other protocols required to implement IP inter-networking on a global scale, such as DNS and packet routing protocols".¹²

The definition of the Domain Names System (DNS) was the second technological innovation that permitted the rapid growth of the Internet.

The DNS system is the prerequisite to guarantee the usability of the web and a universal access system of unique identifiers. Invented in 1983 by Jon Postel, the DNS ensure in fact the punctual identification of an Internet address, the exact match between an IP address and an alphabetic label, the so-called domain name. A domain name is an identification label that defines a realm of administrative autonomy, authority, or control in the Internet.

The domain names are organised in subordinate levels (subdomains) of the DNS root domain, which is nameless. The first-level set of domain names are the top-level domains (TLDs), including the generic top-level domains (gTLDs), such as the prominent domains .com, .net and .org, and the country code top-level domains (ccTLDs), such as .it, .en, .fr and so on. The so-called root authority that runs a top role in the allocation of IP addresses manages these domains.

Below these top-level domains in the DNS hierarchy there are the second-level and third-level domain names that are typically open for reservation by end-users that wish to connect local area networks to the Internet, run web sites, or create other publicly accessible Internet resources. This second level domains is managed by accredited and recognised organizations, called registrars.

The servers that manage and control the IP assignment are organised in a hierarchy, that culminates in so-called root servers legacy, thirteen central servers (ten in U.S. territory, two in Europe, one in Japan) to which all servers in the world refers. Among these servers, the root server A is the authoritative one, able to dominate the others. In a logical order, under the servers' legacy there is the Regional Internet Registries (RIR), which provide and supervise IP addresses assignment in the different world regional areas. There are five RIR: one for the African area, one for the Asian-Pacific network, one for American territory, one for Latin-American and Caribbean area.

This initial phase has played a key role in the establishment of a quasi-informal governance of the technical characteristics of the Internet.¹³ The researchers were naturally entitled to operate, if only for reasons of competence, the control and the management of the network. So, at the beginning, Internet was considered an area of absolute freedom, not subject to State legislation, but to self-regulation. Nevertheless, as stated earlier, in the 1960s and 1970s, the major source of research funding for universities was the United States Department of Defence, which underwrote scientific research that might have defence implications through

¹² M. Mueller, J. Mathiason, H. Klein, work cit. 2007.

¹³ M. Mueller, *Ruling the Root: Internet Governance and the Taming of Cyberspace*, MIT Press, Massachusetts, 2002.

its Defence Advanced Projects Administration (DARPA).

This original libertarian spirit will not abandon the Internet. Nowadays, it is still essential for the technological development of the network (think of the open source communities); it is also a philosophy that animates the relationship among Internet users, in light of the sharing and collaborative practices.

The TCP Internet protocol and the DNS management underlie the need for wider governance and management and the States, starting from the U.S. government, have become to demand an increased role in the governance of the Internet, justified also by a supposed territorial management of domain names.

Therefore, since 1980s, the complex technical structure corresponds to an equally complicated series of entities, established for different reasons, under different pressures and with different purposes, which have accompanied the growth of the Internet and its technical and policy management.¹⁴

In 1983, DARPA perceived a need to develop a stronger coordination of networking development, so it established the Internet Activities Board (IAB). It included, as a self-standing body, the Internet Engineering Task Force (IETF).

The IAB¹⁵ comes from the Internet Configuration Control Board, founded in 1979 by Vint Cerf. This renewal body was structured as an independent committee of researchers and professionals coordinating Internet engineering, design and management. The IAB is framed as a committee of the IETF and as an advisory body to the Board of Trustees of the Internet Society (ISOC) – described below -. Its responsibilities include architectural oversight of IETF activities, Internet Standards Process oversight and appeal, and the appointment of the RFC Editor. The IAB is also responsible for the management of the IETF protocol parameter registries.

The IETF (www.ietf.org) constitutes "*a large open international community of network designers, operators, vendors, and researchers concerned with the evolution of the Internet architecture and its smooth operations. It is open to any interested individual.*"¹⁶ Practically it determines the standards, which allows Internet to work seamlessly.

The IETF membership is completely free and voluntary. Nowadays few hundred individuals, mainly software engineers from private sector, are working on behalf of IETF in order to improve the technical background of the Internet, as protocol application and development, routing, security and so on.

By 1992 DARPA had ended its involvement in Internet Governance and the sponsor of the IAB was moved to the ISOC.

¹⁴ Here we describe the main ones and reserve a more detailed discussion at ICANN: undoubtedly the institution which has the most relevant role internationally and which is, since its establishment, the target of international controversy.

¹⁵ www.iab.org

¹⁶ www.ietf.org/about

After DNS definition, in 1988, the assignment of names to domains in preference to numbers was delegated by the U.S. government to an independent entity: the Internet Assigned names Authority (IANA). *"The Internet Assigned Numbers Authority (IANA) is the body responsible for coordinating some of the key elements that keep the Internet running smoothly. Whilst the Internet is renowned for being a worldwide network free from central coordination, there is a technical need for some key parts of the Internet to be globally coordinated – and this coordination role is undertaken by IANA. Specifically, IANA allocates and maintains unique codes and numbering systems that are used in the technical standards ("protocols") that drive the Internet."*¹⁷

In other words, IANA coordinates the numbering systems needed to ensure the Internet interoperates globally.

Even in the early 1990s, another essential technical innovation has consecrated the explosion of the Internet as we know it today.

Tim Berners Lee, at European Organization for Nuclear Research CERN of Geneva, together with some of his colleagues, developed the World Wide Web (WWW). A system of interlinked hypertext documents contained on the Internet. Berners-Lee's design included the possibility that information could be stored on a computer function as server and could be accessed by particular software called browser. With a web browser, users can view web pages that may contain text, images, videos, multimedia and navigate between them using hyperlinks.

Berners-Lee contributed also to develop the "HyperText Markup Language" (HTML), the language for formatting documents with the capability for hypertext links, that became the primary publishing format for the web.

To manage and drive the development and the improvement of standards for WWW,, Berners-Lee founded the World Wide Web Consortium (W3C) in 1994.

It was founded as an industry consortium, at the Massachusetts Institute of Technology Laboratory for Computer Science, with support from DARPA and the European Commission.

*"The W3C is an international community where member organizations, a full-time staff, and the public work together to develop Web standards. Led by Web inventor Tim Berners Lee, W3C's mission is to lead the Web to its full potential"*¹⁸, by developing, in a multistakeholder approach, protocols and guidelines that ensure the long-term growth of the Web.

The standardization of the web is based on W3C recommendations, defined as a specifications or set of guidelines that, after broad consensus-building, received the endorsement of W3C and recommended for wide application. Since its establishment in 1994, more than ninety recommendations have been produced, including html, xhtml, xml. Currently W3C encompasses over 400 organization members from various sectors and more than forty countries.

¹⁷ www.iana.org/about

¹⁸ www.w3.org/Consortium

When ARPANET has become Internet and the WWW has permitted its wide diffusion e use by no-technical users, U.S. government took steps to define a new approach to government.

As mentioned before, the critical element of the Internet is the addressing system. The five top-level domain existing at the time (.com, .org, .net., .edu, .gov, .mil) were managed by only one registrar, Network Solution Inc. (NSI) a private entity, but due to the sphere of government control. Only .mil was directly controlled by U.S. Department of Defence.

As Internet increased in size, the number of registrations grew enormously. NSI decided to charge for site registration; this initiative was unpopular and opposed by those who considered the Internet as a public good. NSI should become a potential monopoly. The gap widen between those who wanted free Internet, and those, such as NSI, which pointed to the development of business applications.

In order to control U.S. Government interference, researchers and Internet technical communities tried the road of internationalization, promoting the establishment of Internet Society (ISOC) in 1992.

ISOC would be a source of non-governmental funding, as well as, an alternative referent for the development policy of the Network. In order to structure a strong position, ISOC shook strategic alliances, particularly with the lobbying of intellectual property that had a series of ongoing disputes with NSI.

Initially the U.S. Government did not recognise ISOC as a legitimate interlocutor, that would has happen only at the end of the 1990s.

ISOC was founded as a non-profit and non-governmental membership society, with the aim "*to provide leadership in Internet related standards, education, and policy. With offices in Washington D.C., USA, and Geneva, Switzerland, it is dedicated to ensuring the open development, evolution and use of the Internet for the benefit of people throughout the world*".¹⁹ ISOC is the organizational home for entities responsible for Internet infrastructure standards, especially for IEFT, IAB. ISOC is estimated to encompass more than 100 organizations and approximately 30.000 individual members in over 180 countries. Membership in ISOC is open to both individuals and organizations, which are engaged in the evolution of the Internet. Various types of organizations (corporations, non-profit organizations, trade and professional groups, foundations, educational institutions, government agencies and other international entities) can become ISOC members. Its management is provided by a Board of Trustees, which consists of twenty members at most.

Any constituency groups, like ISOC, Internet service providers, telecommunication companies, were concerned about the end of NSI assignment, planned for 1998. Therefore they try to define an alternative to domain registry, so they established an informal governance group, the International Ad Hoc Committee (IAHC), "[...] an international multi-organization effort for specifying and implementing policies and procedures relating to International Top Level

¹⁹ www.isoc.org/isoc

Domains".²⁰

The discussions and confrontation led to the definition of a Memorandum of Understanding (MoU) on top-level domains, a proposal evolved under the "rough consensus" model, that had traditionally governed Internet standards. The MoU included the creation of seven new top-level domains, the establishment of a large number of registrars, the creation of a central registry of names and numbers and of Internet policy institution.

The MoU was the first example of really multistakeholder and multilateral agreement concerned the Internet Governance; its general and primary aims were: to eliminate the monopoly of NSI, make the root authority independent from U.S. government. The effect on the Internet of the MoU would be to internationalize Internet Governance, regarding one of its core functions.

Significantly, the MoU involved the ITU, in order to manage the registrars, and the World Intellectual Property Organization (WIPO), in order to manage intellectual property disputes.

The MoU was signed by 215 parties at ITU headquarters, in May 1997. Seventy percent of the signatories came from outside the U.S., mostly from Western Europe.

In that way, the MoU in an attempt to contain the U.S. supremacy was very confident on the contribution of the ITU, the leading United Nations agency for information and communication technology issues, established in 1865, originally for managing the telegraph technology and then the information and communications technology in general.

The U.S. government, felt bypassed by this initiative, therefore they did not sign the MoU, this created an irreconcilable conflict.

Nevertheless the IACH initiative lost consistency quickly, due to the lack of support from states; support that even the ITU could have provided. Thus ITU was losing the opportunity to be part of those who led the Internet Governance.

In this context, at the beginning of 1998, with extreme effort, Jon Postel tried to demonstrate his authority over the management of the DNS, through the ownership of the root server file. The attempt lasted only a few days, under threat of legal coercion; Postel was forced by the U.S. government to restore the functioning of the file.

During these quick developments the U.S. discussed possible changes of the DNS management, on the basis of "Green Paper" and a subsequent "DNS White Paper".

The first document, published by the U.S. Government in February 1998, affirmed the mastership and the control of DNS by the U.S. Government, also due to the presence on U.S. soil of the authoritative root server and most of the servers of the root legacy.

The Green Paper tried to solve the problems by establishing a new structure, a non-profit corporation, for domain name assignment.

The document did not mention ISOC and did not take into account European requirements.

In order to gauge consensus, U.S. wrote an RFC regarding Green Paper: over 500 comments had been received. Almost two-thirds of the comments came from individuals, and mainly from

²⁰ www.gtld-mou.org/docs/iahc-charter.html

business area.

A major criticism was the U.S.-centric model, European countries, organization and also Union, in particular, judged the document mismatch to the international interests, requiring for a more open and global structure. However the idea of transferring the DNS to private and non-profit control remained.

The U.S. government took into account these comments and, on the subsequent June, modified its proposal and published "DNS White Paper", that moderated the U.S. Government influence compared to the previous one.

According to this new strategy, the organization should be based on the four principles of:

- stability; the U.S. government should end its role in the Internet number and names address system in a way that ensure Internet stability;
- competition; Internet is a decentralized system that encourage innovation and individual freedom;
- private bottom-up coordination; certain management functions required coordination and, in some cases, it would be exercised by private sector better than the governments;
- global representation; the new entity should operate for the benefit of the whole Internet community. A mechanism (this very relevant affirmation and took in accounts Green Paper criticisms) should be established to ensure international participation in decision-making.

Apart from the incorporation under the U.S. law, international interests were assured by constituting the entity's Board of Directors, with members from different part of the world.

The World Intellectual Property Organization (WIPO) was engaged in the process and it was required to support the process and manage the intellectual property aspects.

The advocated multilateralism and international participation was determined not only by Green Paper criticisms, but by more general aims, framed in the U.S. policy issue towards Internet and the global electronic commerce. In years of economic liberalism, the former U.S. President Bill Clinton and his administration, together with some communication and informatics enterprises, as IBM, MCI, AOL, were worried that electronic commerce development was frustrated by territorial jurisdictions and conflicting national laws. The private sector governance was perceived as solution to avoid or limit this problem.

One year before, Bill Clinton and his former Vice-President Al Gore signed a policy document about these issues, entitled "A framework for Global Electronic Commerce"²¹. By this document, they called on governments to "*establish a predictable and simple legal environment based on a decentralized contractual model of law, rather than one based on top-down regulation*"²². Regarding DNS management, the U.S. government proposed that "it may possible to create a contractually based self-regulatory regime that deals with potential conflicts between domain name usage and trademark laws on a global basis without the need

²¹ www.w3.org/TR/NOTE-framework-970706.html

²² Ibidem

to litigate."²³

The U.S. policy-makers were also worried about the exiting international institutions, ITU in particular. The U.S. enterprise and industry sector did not agree with ITU approach, because it was too much bureaucratized and governments-dependent, compared to the aggressive liberalism of business sector, especially in technology production.

The U.S. feared also a European-led intention to define an international treaty or charter for regulation of the Internet, in which ITU or another similar entity, it would have probably played an important role.

According to Internet habits, a so-called "International Forum on the White Paper" (IFWP) was organised on line, with the purpose of drafting a legal framework for the new organization.

The global discussion was limited by the short time due to the announced termination of the contracts between the U.S. Government and IANA, by the end of September 1998.

At the beginning of October, IANA sent the draft constitution of the new organization under the name "Internet Corporation for Assigned Names and Numbers" (ICANN). Since that time, ICANN led the technical management of the Internet, doing essential tasks for its functioning.

²³ Ibidem

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4.1 First Internet Governance Forum: Athens 2006

The first IGF was held in Athens from 30th October to 2nd of November 2006. The invitation issued by Kofi Annan was accepted by 1350 delegates coming from 97 countries. They were representatives of "all stakeholders – governments, the private sector and civil society, including the academic and technical communities",²⁴ for starting a dialogue between the non-governmental Internet community and the formal world of the Governments and intergovernmental organizations. During the IGF, the European attendance was predominant while civil society and governments were the sectors more represented, as we can see in the following figure n. 1:²⁵

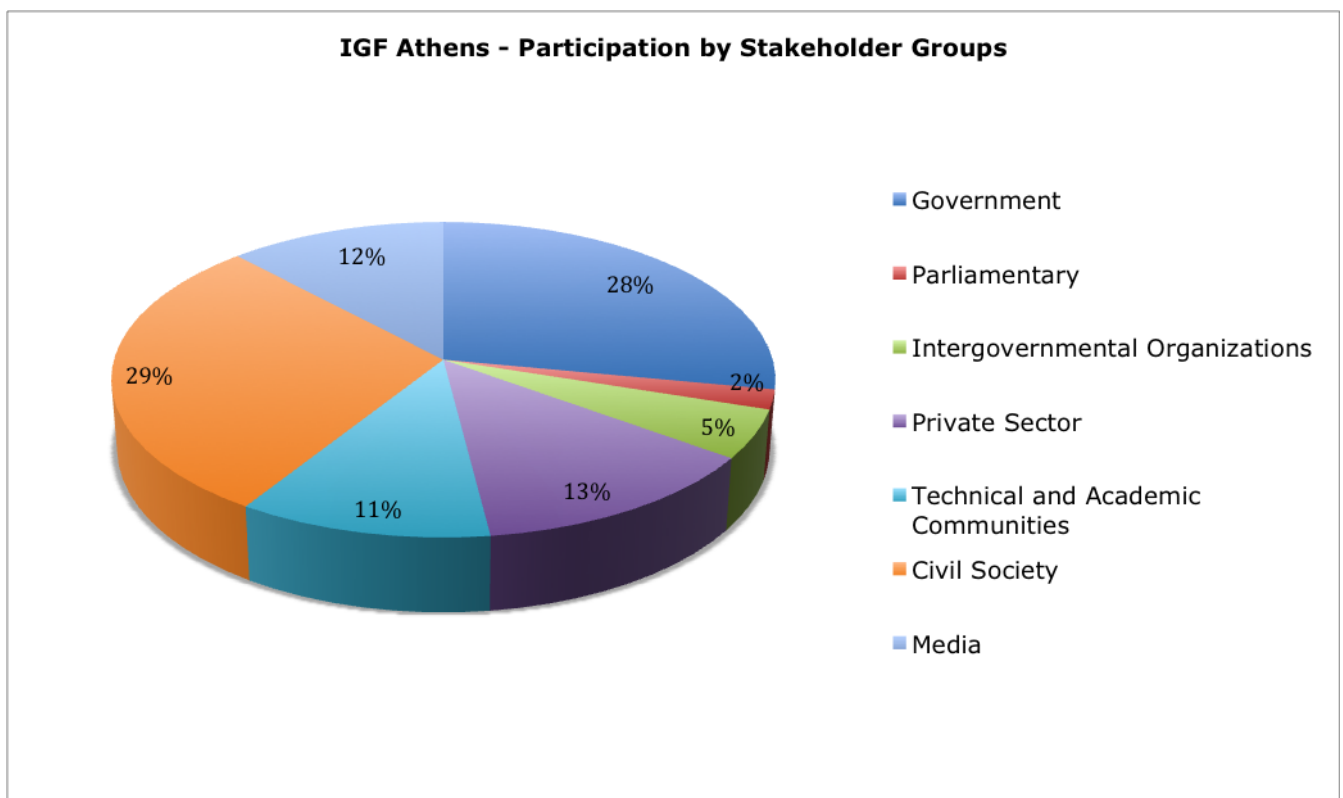


Figure 1

Two different approaches emerged: on one hand the bottom-up decision making process from the technical communities and on the other hand the more structured and top-down process typical of the governmental sector. The hope, as stated by Kofi Annan, was "that the IGF will deepen this dialogue."²⁶

The main theme of the Athens IGF was "Internet Governance for Development", divided, as mentioned before, into four main issues – Openness, Security, Diversity and Access – plus a final session.

The IGF's works were organized in six main sessions, with a multistakeholder panel, for the

²⁴ Message from the United Nations Secretary-General: www.intgovforum.org/sg-letter-en.html

²⁵ U.N. IGF Secretariat elaboration, available at: www.intgovforum.org/Athens_stats_stakeholder.php

²⁶ Ibidem

main issues and two held in the final day on "The Way Forward" and "Emerging Issues". There were also organised 36 workshops, using an interactive approach with questions and comments coming from participants of the Forum and instantly from users online. This allowed to receive messages and blog on the spot. This innovative model has been described as a "breakthrough in multistakeholder co-operation"²⁷.

Openness

In this session the discussion focused on how to equate rights that appears to be in conflict each other. The right of access to information and the intellectual property rights was an issue, but the gain in transparency given by the easier access and flow of information is a valuable asset for the society. In a borderless entity such as Internet is the freedom of expression a right that has to face the responsible use of that freedom, bearing in mind that the definition of freedom of expression has different declinations given by different national regulations.

Security

The topic of this session was about authentication and identification on the Internet and how to balance the need for security and the need for trust. Internet is not a safe environment and is necessary to recognize and manage rapidly mutating threats. Trust is very important for the development of services in the business and governmental sector, not forgetting the privacy rights of users. Hence, a collaboration between the governments and an effort of the global technical community is needed in order to solve the jurisdiction issues and to give the right role to open standard solutions in developing a safer Internet.

In this process the role of the IGF is to provide a way for proceeding with the dialogue and action on these issues. The IGF could foster collaboration between different solutions and help in the dissemination of the best practice and the spread of the information, creating a common ground of understanding in the policy debate.

Diversity

The diversity can be seen from different points of view: multilingualism, persons with disabilities and deficit of literacy. All these points need a multistakeholder cooperation between institutions involved to find viable solutions. The multilingualism and the internationalization of domain names were recognised as the most important issues about the improvement and promotion of diversity on the Internet. Internet access in their own language is important in spreading the fruition of the Net contents and services while the internationalization of domain names is a technical effort that has to be carried on taking care of the stability and security of Internet. Furthermore dealing with the lack of literacy means giving access to contents in audio-visual formats. The difference between creating local contents and providing translations to international ones was also underlined and was acknowledged the importance to

²⁷ www.wsis-si.org/igfgreece2006.html

encouraging both of them.

Access

The digital divide in regard to its different aspects – infrastructural, geographical, social, gender, age – and how to face it, was one of the major issues of the Forum. A precondition for fostering access was recognized in the reform of the telecommunications sector, that involves spectrum regulation and standards on wireless technologies. The "last mile problem" and the connection in rural areas was a major concern. The digital divide can be approached through a confrontation on public policies, supporting policy makers with capacity building in order to help them in taking informed decisions and to improve ICT skills in generally. The relevance of the IGF as a debate within international multistakeholder on these issues was acknowledged.

Emerging Issues

The participation to the Emerging Issues panel was open to attendants from remote locations in Chile, Mexico and Peru, connected online in videoconference. Topics discussed embraced the presence of youngsters online and the importance of involving them in the Internet Governance process; the spreading of Internet accesses among the first billion of users; capacity building and creation of local contents; digital divide and gender divide; finding a way to create a link with business rather than only providing money for innovation.

The overall theme proposed for the IGF in Rio de Janeiro was the digital divide and the issue of "access to access" - economy and access to the skills that permit benefits from Internet access.

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5. The Italian way to the Internet Governance

The history of the Italian Internet Governance is a kind of mosaic which has assumed different configurations and amplitudes over the years, in which a large number of social actors were or are still involved, starting, first of all, from the civil society and from the central state administrations (ministries, presidency of the council) and the government.

Here we are going to examine in particular the role that the government and public institutions have held until now in relation to Internet Governance and the role that Italy has consequently played on these issues in the international context.

The first governmental act that formally recognized the importance of the issues of Internet and information society has been in December 1999, one year after the establishment of ICANN.

That year the Prime Minister Massimo D'Alema had set up a committee of experts, pertaining to the Presidency of the Council, in order to define the strategic policy lines for a comprehensive and systematic approach to the opportunities and challenges related to the spreading and development of Internet. The committee had an advisory role for governmental activities, and in particular it performed study and monitoring tasks related to issues and changes brought by the widespread diffusion of digital technologies and of Internet, that was less pervasive in that time.

Following D'Alema's initiative was the Ministry of innovation and technologies, Mr. Lucio Stanca (XIV Legislature) to take over the information society issues, bringing the Italian demands in the international debate.

In 2004, after the first WSIS – where the civil society had a more relevant role compared with the government – and in preparation for the second one, Minister Stanca established a Consultation table with the civil society: the first Italian example of multistakeholder consultation on the issues of Internet Governance.

On October 18, 2005, in preparation for the second WSIS in Tunis, a meeting of the consultation table was held in Rome, where the Minister Stanca highlighted the governmental position, which was sustained a month after at the Forum in Tunis:

"It is not up to governments to manage the Internet. However, it is clear that more and more in the development of Internet we will face issues and problems affecting the public interests where the governments have the responsibility to be involved. In the coming months, the negotiations will present us the difficult task to find a balance that safeguards the freedom, the spontaneous self-development and the self-management of the Net, with the responsibility of governments towards sensitive issues arising from the tumultuous development of this critical infrastructure of our time. In my view the role of governments should be clearly defined and includes: the ability to intervene in the operation of the Net only in case that the self-regulation, now in place, would not work; take measures to curb the pathologies related to the misuse of the Net; facilitate the growth of the market and help the development of Information

The second WSIS meeting, in Tunis, in addition to establishing the process of IGF, has also played a specific importance for the Italian process.

Some Italian politicians and intellectuals, among others Professor and former chair of the European Data Protection Agencies Council Stefano Rodotà and former Senator Fiorello Cortiana, proposed a *manifesto* called "*Tunis mon amour*", asking international community acknowledging the essential role on the Net for the future of global citizenship.

This document, for the first time, recognized and underlined the importance to safeguard the Internet rights, as fundamental rights for the coming society. At the beginning, the *manifesto* highlights the potential of the Internet:

*"The Internet is the widest public space that mankind has ever known. A space where everybody can have their say, acquire knowledge, create ideas and not just information, exercise their right to criticize, to discuss, to take part in the broader political life, and thus to build a different world of which everybody can claim to be an equal citizen."*²⁹

Following it describes the dangers that are immanent in a powerful new infrastructure like the Internet:

*"In the name of security, liberties are restricted. In the name of a short-sighted market approach, chances of a fair access to knowledge are limited. Alliances between corporations and authoritarian states try to impose new forms of censorship. The Internet must not become an instrument to better control the millions of people who use it, to grab personal information from people against their will, to seal the new forms of knowledge behind proprietary fences."*³⁰

Then it proposes actions to be done:

*"It's time to assert certain principles as part of the new planetary citizenship: freedom of access, freedom to use, right to information, privacy, recognition of new common goods. Only the full respect for these constitutional principles will find the right democratic balance with the needs of security, of the market, of the intellectual property. It's time for these principles to be recognized by a Bill of Rights. We ask all the people of the Net, women and men who form it, to cooperate with their freedom and creativity to this project and to make their voices heard to the governments of each country to support it."*³¹

This document was endorsed by many important intellectuals and Internet experts and researchers, national (like Walter Veltroni, Nicola Piovani, Michelangelo Pistoletto) and international (like Lawrence Lessig, Gilberto Gil, Richard Stallman), and it represented the first

²⁸ The whole speech is available at: www.quadernonline.it/igf_2008/stanca.html

²⁹ The Manifesto is available at: www.pro-digi.org/notizie/wsistun/mon.html

³⁰ Ibidem

³¹ Ibidem

step about the Internet rights project, that would have been so relevant for the future Italian initiatives about IGF.

After WSIS and the successive governmental legislature, interest in Internet and its governance was reaffirmed by the new Minister for reforms and innovation in public administration, Mr. Luigi Nicolais. He established an advisory board specifically on Internet Governance, to support the Minister in defining governmental policy on Internet and ICT. This board was directed by Undersecretary of State, Ms. Beatrice Magnolfi, coordinated by Prof. Stefano Rodotà.³²

The advisory board has worked both independently and in collaboration with other ministries and central government administrations, speaking on topics such as: network security, child pornography, copyright on the Internet, access to the Net, digital content, the law on publishing.

Besides providing a valuable monitoring activities on complex issues and characterized by very rapid changes, the advisory board has facilitated the connection between the various central government administrations, showing often their lack in the ability to communicate and coordinate their own actions and initiatives. But the most important role played by the advisory board has been that of linking together the Italian stakeholders of the Net, laying the groundwork for a joint dialogue in preparation for the first Internet Governance Forum of the United Nations that was to be held in October 2006 in Athens.

Just in preparation of this Forum that the Minister Nicolais and Undersecretary Magnolfi gave to the advisory board the mandate to organize the first "National Public Consultation on Internet Governance". Such consultation was held in Rome on 12 October 2006, and saw the participation of many representatives of all stakeholders of the national Net; a total of about 200 people.

In addition to the debate on the fundamental issues of IGF (openness, security, diversity, access), during the consultation was reaffirmed the resolution to present the project of the Internet Bill of Right (IBR) to the international community of the IGF.

³² The board's members were: Laura Abba (National Research Council), Vittorio Bertola (At-large Committee ICANN), Fiorello Cortiana (Province of Milano), Matilde Ferraro (Italian NGOs), Joy Marino (MIX Milano), Antonino Mazzeo (University of Naples, Federico II), Stefano Trumpy (National Research Council), and on behalf of Government, Diplomatic Adviser Gianluigi Benedetti and Scientific Adviser Antonella Giulia Pizzaleo.

5.1 First U.N. Internet Governance Forum

*"We are ready. Italy is expecting quite a lot from the Forum in Athens. After the work of the previous editions of the World Summit on the Information Society in Geneva and Tunis, we are ready – affirmed Beatrice Magnolfi, Undesecretary of state for reforms and innovation in public administration - to work towards implementing the action lines for Internet Governance. Our country was one among few to prepare itself for Athens, organizing a public consultation, which is also open to the whole civil society. [...] We sincerely believe in the multistakeholder approach. Internet would belong to everyone and the definition of its governance is not possible without a democratic, inclusive method, focused on its users."*³³

It was in this way that Beatrice Magnolfi started her own statement at the Internet Governance Forum in Athens (30 October - 2 November 2006), strongly underlining Italian adhesion to the United Nations process.

As has been mentioned before, the Athens IGF was also the place where the official and formal presentation of the Internet Bill of Rights project by the Italian government was held.

Once again, Ms. Beatrice Magnolfi presented the project to the international IGF's community. Many participants at the Forum received the proposal with great interest and some countries expressed their willingness to join the Italian initiative.

Due to this interest, the Italian government, together with the Italian chapter of Internet Society (ISOC Italy), IP Justice (U.S.A), the Centre for Technology and Society, Getulio Vargas, (Brazil) successfully proposed the establishment of a dedicated Dynamic Coalition, that assumed the name of *"Internet Bill of Rights"*. According to John Mathiason: *"Most were relatively passive during the transition to Rio, but at least one under-took a significant activity. This was the Dynamic Coalition on the Internet Bill of Rights."*³⁴

and now, after a merge with another coalition, it is called "Internet Rights and Principles."³⁵

The Internet Bill of Rights project, led by Italian Professor Stefano Rodotà, aims to define in a bottom-up and multistakeholder process, a set of principles for the democratic development of the Internet and the protection of the rights of its users. The definition of these principle would be started by Human Rights Declaration of U.N., declining existing rights and making it real for the Internet Society.

This Charter, although not binding, should be driving a kind of moral suasion and moral obligation for those operating on the Internet, starting from States.

³³ Reserved acts from Ministry Cabinet Office.

³⁴ J. Mathiason, work cit. 2009.

³⁵ internetrightsandprinciples.org

5.2 Dialogue Forum on Internet Rights

To follow up the proposal on the Internet Bill of Rights made by the Italian government during the first IGF in Athens and in preparation for the next IGF in Rio de Janeiro, the Italian government organized in Rome, on 27 September 2007, the "Dialogue Forum on Internet Rights" (DFIR).³⁶

The event was organized by the Italian Council Presidency together with the United Nations and in collaboration with ISOC Italy. The latter also organized an online international consultation.

DFIR convened international representatives of governments, civil society, enterprise and business, university and technical communities (were represented 70 countries and 53 governmental delegations), in order to try to find some answers to questions not only about the rights of Internet users, but also related to democracy, social and economical development for a global society.

Minister Luigi Nicolais identified Internet Governance, both at a local and an international level, as a:

*"[...] long and complex process, because we have to define principles and also management rules of the largest public space and the most powerful means of power re-distribution we have ever had. In order to achieve these results, we probably need a stronger role within the United Nations in this process: it is not why they take charge of Internet [...], but why this is the only way through which we can clarify the relationship between Internet development and the respect for universal rights."*³⁷

With this point, the main focus shifted on a stronger role of the United Nations about Internet Governance and in particular the rights of its users. Professor Rodotà, i.e., affirmed:

"We are facing a new era with a world-people protagonist, which by itself identifies and forms protection for the relative rights, in a new alliance with a variety of subjects, primarily with public institutions, national and supranational, which help to change the logic and way of action. [...] As protagonist U.N. must act with more conviction, without precluding the presence of regional legislators and the impetus of national authorities".³⁸

Finally, once again regarding the U.N. role, Undesecretary Beatrice Magnolfi expressed her hope about the establishment of a High Guarantor for Internet Rights within the U.N.:

"It could be followed the way through which U.N. has come to be a global referent for other collective issues of a universal character, such as the environment or the same human rights. The conduct for the establishment of a High Guarantor of Internet Rights would ideally start from broad mandate and international support. It could be able to build consensus around Internet rights and, in the future, promotes the adoption and enforcement of those rights. A

³⁶ www.dfiritaly2007.it

³⁷ The whole speech is available here: www.quadernionline.it/igf_2008/nicolais.html

³⁸ The whole speech is available here: www.quadernionline.it/igf_2008/rodota.html

legitimate way of exercising the powerful weapon of moral suasion would mean that the democratic development of Internet or its users' rights might be at risk."³⁹

³⁹ The speech is available here: www.quadernonline.it/igf_2008/magnolfi.html

5.3 Second U.N. Internet Governance Forum

After the success and large participation at DFIR, an Italian delegation composed of members of Italian government, members of advisory committee and representatives of civil society took part in the second Internet Governance Forum in Rio de Janeiro (12-15 November 2007). Also in Rio, the Italian proposal about Internet Governance was focused on the Internet Bill of Rights project.

At the opening of the Forum, the Italian government represented by Mr. Luigi Vimercati, Undersecretary for Communications, intervened with a speech on the question of Internet principles, affirming the need to strengthen the rules for Internet operation.

He also explained what, according to Italian proposal, could be the way to define the Internet Bill of Rights: it could not follow a traditional legislative way, a vertical process, but it needs a multistakeholder and ascending approach. Mr. Vimercati also remarked the importance to establish a High Guarantor for Internet Rights at the United Nations.

During the third IGF the Internet Bill of Right process achieved important results, primarily the signature of a Joint Declaration on Internet Rights, between Italy, represented by Mr. Luigi Vimercati, and Brazil, represented by the Minister of Culture, Mr. Gilberto Gil.⁴⁰

By this declaration, signed on 13 November, Italy and Brazil teamed up to support the Internet Bill of Rights process.

After the agreement between Italy and Brazil, some others Countries, including Mexico, India, France, Argentina, expressed their willingness to support the project by signing the Declaration.

A strong support emanated also from civil society, and because of this, during the last day of IGF, Markus Kummer, Executive Coordinator to the U.N. Secretary General for the WSIS and IGF, expressed a positive opinion on the Internet Bill of Rights, especially about its multistakeholder methodology and multilevel by which it is produced. Kummer's words were the following:

*"How to regulate a global medium in a society which is not yet global seems to be an issue which I believe will remain with us for many years to come. There are different ways how to present different proposals of how to deal with it. Do we need regulations? Is it enough if you have self-regulations? Or do we need something in between, like what I would call some soft Internet Governance, a collaborative, multistakeholder effort. The law of the sea was mentioned. A word of caution. It took about 20 years to negotiate the treaty. I think we don't have the time. I think we need something more urgent. Maybe the initiative of the Internet Bill of Rights will bring us further in this regard."*⁴¹

⁴⁰ The Joint Declaration is available here: internetrighsandprinciples.org/documents/Joint%20Declaration%20Brazil-Italy.pdf

⁴¹ The speech is available here: www.intgovforum.org/cms/Rio_Meeting/IGF2-EmergingIssues-15NOV07.txt

5.4 Towards the constitution of the Italian Internet Governance Forum

After the second Internet Governance Forum, in May 2008, the governmental Legislature ended before its legal time and a new Government was established. On 19 May ISOC Italy, together with the National Research Council and its Institute of Informatics and Telematics, organized a meeting, entitled "Towards the constitution of the Italian Internet Governance Forum". That was the first meeting explicitly devoted to the possibility of organizing an Italian IGF. The conference was composed of a civil society, business area and institutional representatives, including the new Minister for public administration and innovation, Mr. Renato Brunetta.

The issues addressed focused on the importance of the IGF process, both at international and national level, and on defining a set of principles for Internet development and rights of users. Minister Brunetta, opening the conference, affirmed:

*"I can only give full supportive collaboration to IGF process and Internet Bill of Rights project. [...] Together we are doing what Napoleon did about the navigation code, entrusting the task to Prof. Atzeni, a Sardinian Professor, who wrote the first navigation code. [...] Before this code rules were different from each other and because of this there were inefficiencies and conflicts among systems. The navigation code, unifying the system rules and also the governance, made navigation efficient, especially in commercial exchanges. Two centuries after, we are doing the same."*⁴²

The most important issue discussed during the conference, was the possibility of establishing a national Internet Governance Forum, in order to define a shared governance for the Net, comparing the largest numbers of stakeholders, and to enforce Italian position in European and international Internet Governance debate. The establishment of an Italian IGF was also supported by European recommendation.

In fact, last January the European Parliament issued a Resolution⁴³ on the second Internet Governance Forum, that, given the importance of the Internet for the equal, democratic and inclusive development of the future society, expressed a strong support for the IGF process and its multistakeholder approach and encouraged the EU members states to organize a national IGF, with the aim of also organizing a European IGF in the future.

And at the end of the meeting in Rome, there was a broad consensus about the opportunity to organize the first Italian IGF, following the UK example that had organized the first national IGF.⁴⁴

⁴² The whole speech is available here:

www.isoc.it/index.php?option=com_content&task=view&id=383&Itemid=499

⁴³ www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P6-TA-2008-0020+0+DOC+XML+V0//EN

⁴⁴ www.nominet.org.uk/about/events/UKIGF

5.5 First Italian Internet Governance Forum

The first Italian Internet Governance Forum (IGF Italia)⁴⁵ took place on 22 and 23 October in Cagliari. The event was organized by Minister for public administration and innovation of the Italian Republic, Mr. Renato Brunetta, together with the President of the Autonomous Region of Sardinia Mr. Renato Soru, in collaboration with the ISOC Italy.

The first IGF was intended to convene the representatives of the Italian Internet community to discuss and define a common position on the issues to be dealt with at the successive international IGF: access, openness, diversity, security, critical resources, emerging issues.

The two IGF days were organized in parallel thematic workshops and round tables. In particular there were two workshops for each thematic area, organized as follows:

- access: status of networks in Italy; access of the users to the Net.
- diversity: another gender for Internet, cultural diversity.
- openness: contents control; knowledge as commons.
- security: users' trust on Internet; security and the social-environmental impact.
- critical resources: the management of Internet Protocol addresses; the transition from IPv4 to IPv6.

After these thematic sessions there were two rounded tables about two arguments identified as emerging issues:

- best practices of local government by Internet,
- Internet and politics.

All the themes were treated by a multistakeholder approach. Below lies a brief summary, containing the main emergent concepts from the discussion of the thematic sessions.

About the Internet access, the broad opinion was that it is necessary to quickly define and adopt some solutions to make the Net more inclusive, fighting against both infrastructural and cultural digital division.

The cultural diversity should be considered richness and not an obstacle to the development of society. In particular it is needed to overcome the gender division that is still deeply present in the Italian society, also related to Internet and technology use. These partitions, related also to working and economic conditions, are essentially the strongest impediments to equal opportunity between women and men.

The openness and freedom of contents is strictly related to some concepts that are re-actualized by Internet diffusion, such as: commons, knowledge as sharing process, free culture, transparency and free exchange of ideas. To realize a real free production, exchange and sharing of knowledge, two issues, at least, are needed to be coped with: reform of copyrights and development of free software.

⁴⁵ www.igf-italia.it/index.php/igf-italia08
and: www.towardsg8-2009.org/index.php?xsl=765&s=27&v=9&c=5483&nodesc=1

Internet security is a prerequisite for the functioning of the web, at the infrastructural level, for the protection of the users' rights, especially of the weakest users (privacy, digital identity, phishing and so on) and for the full realization of e-government. It was conveyed how the problems related to security are in need of a complex and non-linear approach, from the national to the international dimension.

Critical internet resources were related, specifically, to the transition from the IPv4 (Internet Protocols Version 4) to IPv6 (Internet Protocols Version 6): the first one is nearly not enough to sustain the actual number of IP addresses, so we need a new protocol, able to support the Internet growth and its increasing number of users.

Minister Renato Brunetta, who was not present in Cagliari, sent a written message in which he summarized, according to him, what the meaning and the relevance of the first IGF are:

*"Due to the enormous relevance and pervasiveness of the Internet, it is essential to address its governance. Not in order to fetter the Internet, a hopeless endeavour at all events, but to preserve its plurality and enable all stakeholders to benefit from it. In short, dealing with Internet Governance means ensuring its ongoing, democratic development and ensuring the full unfolding of the economic and democratic growth potential linked to it."*⁴⁶

So, with this strong support to Internet Governance process, the first Italian IGF was closed, on the threshold of the successive global IGF in Hyderabad.

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⁴⁶ Reserved acts from Ministry Cabinet Office.

THIRD PART - INTERNET GOVERNANCE: DIFFERENT REGULATORY APPROACHES

6. Governance instead of government

After the Internet Governance history, including relating entities and international initiatives, assigned in the previous paragraphs, in this chapter we faced the Internet Governance under a theoretical point of view, particularly relating to legal and regulatory issues that affect it. Once again, the Internet Governance emerge as a very innovative experiment that requires new solutions and procedures, but also new conceptual tools.

Before analysing some elements of political scientists and legal aspects, we summarize the terms of Internet Governance. Its set-up according to WSIS is the following one:⁴⁷

Internet Governance Institutional Framework	Internet Governance Policy Framework	Information Society Governance Issues
<p>"The international (governance) of the Internet should be:</p> <ul style="list-style-type: none"> • multilateral • transparent • democratic • with the full involvement of governments, the private sector, civil society and international organizations" 	<p>Goals:</p> <ul style="list-style-type: none"> • An equilibrate distribution of resources • Facilitate access for all • Ensure a stable and secure functioning of the Internet, with multilingualism <p>Roles:</p> <ul style="list-style-type: none"> • States: public policy • Private Sector: technical & economic development • Civil Society: community development • Intergovernmental Orgs: facilitating coordination of public policy issues • International Orgs: development technical standards and relevant policies 	<ul style="list-style-type: none"> • Partnership among all stakeholders • Access to infrastructure and services • Access to information and knowledge • Capacity building • Confidence and security in the use of ICTs • Enabling environment • Social and economic applications • Cultural and linguistic diversity • Freedom of communication media • Ethical dimension • International and regional cooperation

Figure 6, The Internet Governance Universe, according to WSIS

Regarding the main Internet Governance issues, from the hard to soft tools and from narrow to broad arrangements, they can be summarized in this way:⁴⁸

⁴⁷ From Don MacLean, *Herding Schrodinger's Cats: Some Conceptual Tools for Thinking about Internet Governance*, 2004, available at: www.itu.int/osg/spu/forum/intgov04/contributions/itu-workshop-feb-04-internet-governance-background.pdf

⁴⁸ Ibidem

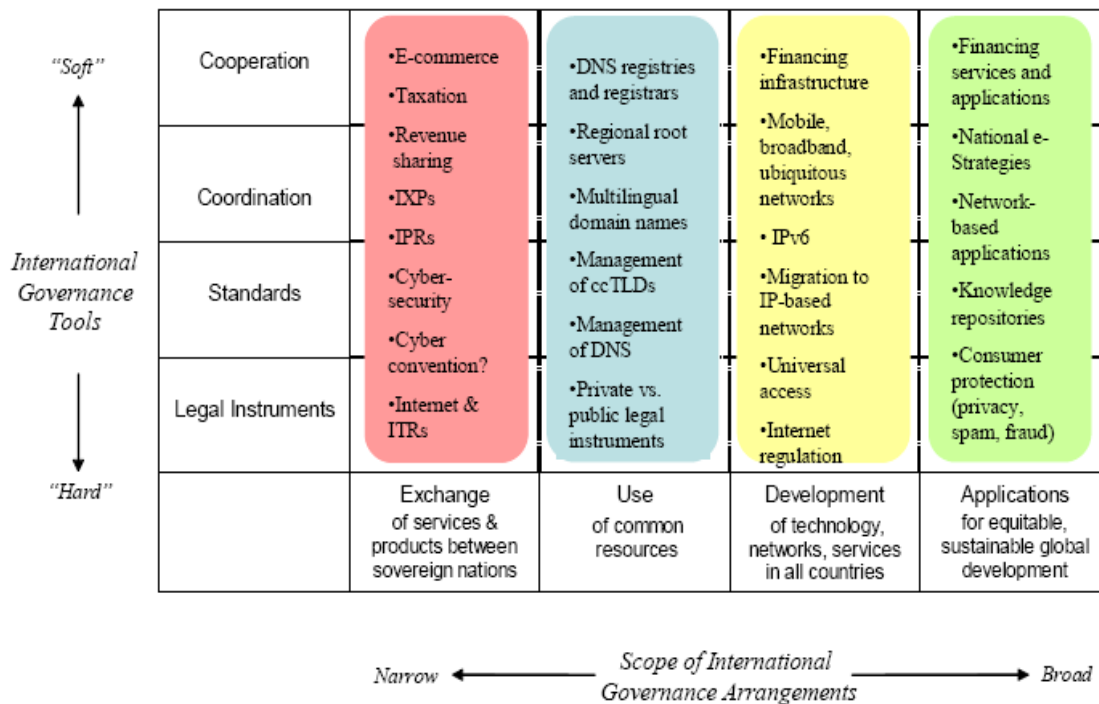


Figure 7, Internet Governance: main issues

As affirmed in the previous paragraphs, the multistakeholderism is posed, since the beginning, as fundamental issue for the Internet Governance: and the term governance refers precisely to this point.

Nowadays the term "governance" is quite used and known among political scientists and international relationship scholars, relating to many issues and policy areas, especially, but not only, relating to global level.

The first general aim using governance instead of government is the need to exceed the standard model of the public administration managements.

The term "government" in fact refers to formal institutions, in hierarchical systems, that produce norms and rules and a control system to monitor them. The governments have the power to decide and to impose their decisions in an authoritative way, while respecting objectives and means, national and international laws.⁴⁹

This state government model, over the past thirty years, has increasingly proved to be ineffective and, in a global context, the state power is reduced and less efficient than before. Nowadays, especially in mature capitalist societies, the state-centric model is therefore in a radical and deep transformation.

Edgar Morin has described this phenomenon as the substitution of centralist "mega-machine", represented by national state and inspired by Thomas Hobbes, Leviathan, with a more agile, pluralistic and multicentric model, from government to governance.⁵⁰

According to James Rosenau definition:

⁴⁹ G. Stoker, *Governance as theory: five propositions*, in *International Journal of Social Sciences*, 1, 1998, pag. 17–28.

⁵⁰ E. Morin, *Dialogo. L'identità umana e la sfida della convivenza*, Scheiwiller, Milano, 2003.

*"Governance is not synonymous with government [...] governance is a broader phenomenon of government, which embraces governmental institutions but also subsumes the informal and non-governmental mechanisms."*⁵¹

Rosenau affirms also that governance is the only way we have to cope with trans-national questions. They require shared solutions that are based on collaboration among states and non-state systems and organizations. Hence in the near future, according to Rosenau, we will have a fragmentary system composed by different supra-national collectivity: a multicentric world that represents the coming new global order, so decentralized that it is not possible reduce it to one hierarchy or coordination, under one hegemonic leadership.

So the governance shapes a flexible model, defined by means of systemic pictures (the topology of networks, the multilevel and multilayered system, etc..). Governance is a set of *"interactions, complex and diverse to form a hybrid structure in which the dynamics governance intersect at various levels to form a network process, such as the Möbius ring that does not begin or end at any level or at some point."*⁵²

If the market principle is procedural, the state principle sovereign and substantial, the principle that seems leading the governance is reflexive and adaptive: the governance grows on the reflexive auto-organization of different kind of social actor in a interdependent relationship among themselves. And policy and rules decided through governance model are based on flexible and evolving forms of negotiated consensus.

The governance dynamics have developed and become necessary due to phenomenon of globalization. Saskia Sassen has provided an effective definition of globalization:

*"A good part of globalization consists of an enormous variety of micro-processes that begin to denationalize what had been constructed as national— whether policies, capital, political subjectivities, urban spaces, temporal frames, or any other of a variety of dynamics and domains."*⁵³

In brief, globalization was both caused and triggered by the deregulation of financial markets and the possibility to move quickly capital across the globe; the derivative interdependency of states; the progressive strengthening of the multinational, supra-national, non governmental and non-political and non-profit organizations and also engaged citizens; the increasing need of supra-national rules; the overlap, match and re-combination of culture and of the membership idea; the stronger individual and social awareness of human rights and their progressive affirmation.

According to Saskia Sassen, three elements, territory, authority and rights, merged one each

⁵¹ J.N. Rosenau, *Governance, Order, and Change in World Politics*, in J. N. Rosenau, E. O. Cziempiel (eds.), *Governance without Government: Order and Change in World Politics*, Cambridge, Cambridge University Press, 2000.

⁵² J.N. Rosenau, *Governance in a New Global Order*, in D. Held, A. McGrew (eds.), *Governing Globalization: Power, Authority, and Global Governance*, Polity Press, Cambridge, 2002, p. 81.

⁵³ S. Sassen, *Territory, Authority, Rights: From Medieval to Global Assemblages*, Princeton University Press, 2006.

other, define the various phases of globalization process.

Internet has represented the detonator, the enabling lever of this process. The development of Internet thus challenges the model of traditional state government. Internet, with its borderless nature, has made possible the emergence of new forms of governmental hierarchies no fully formalized and structured and has caused the destabilization of the oldest formal hierarchies.

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9. Taking stock and the way forward

The Internet Governance process is a new frontier for global institutions and global governance. It involves both substantial and formal issues.

Undoubtedly, traditional forms of regulation are not enough by themselves and we need a new model of international regulations, able to transcend geographical boundaries and involve in a bottom-up approach of all stakeholders, in relation to the many Internet Governance issues, which are evolving constantly.

The IGFs are trying to define this new model. As discussed above, they are unique experiments in the tradition of international and intergovernmental environment essentially for two reasons: the variety of stakeholders involved and the broad range of issues treated.

It is not the only meeting devoted to Internet Governance issue, but it is the biggest one and the only that involve freely all stakeholders.

If this element is broadly acknowledged, there are instead different opinions about IGF process effectiveness.

Generally, the IGF experiment is perceived as a success, because of its ability to allow a broad comparison among the different stakeholders.

Diplo Foundation, a non-profit organization based in Malta, conducted, in 2009, a survey on the effects and results of IGF's process.⁵⁴ It is entitled "Internet Governance Forum: identifying the impact" and tries to define and identify systemic and structural impacts related to the creation of a framework on Internet Governance. In addition to an online questionnaire about IGF impact on specific Internet Governance issues, the survey interviewed 30 of the most active IGF contributors and policy makers.

All of them declared the difficulty to identify and measure the impact of such a complex phenomenon as the IGF: the IGF overlaps with many other policy process about Internet Governance issue and its non decision-making nature make hard to measure the real impact.

⁵⁴ The research was undertaken in partnership with AT&T (U.S. telephone company), Arab Republic of Egypt Ministry of Communications and Information Technology and Commonwealth Internet Governance Forum (an international initiative that seeks to encourage greater involvement of Commonwealth member states in Internet governance issues). The document is available at: www.diplomacy.edu/ig/impact

Thus, even if many interviewed argued that the IGF has contributed to the new form of the agreement between ICANN and the U.S. Department of Commerce, this contribution is difficult to verify. All of interviewed are agree about the IGF support open discussion in areas that were previously insufficiently addressed. It helps to raise awareness on a broad range of issues and the fact that people from all stakeholder groups and from all word countries can share their ideas, on equal footing, is a unique opportunity that cannot be quantified but has a real impact. We may see the fruits of this impact gradually, over the time.

IGF has also the merit of having shifted the debate from the technical aspects of Internet Governance to the social and rights ones.

Another important results can be considered the spread of the IGF related knowledge on local, national and global level. IGF infact helps to synchronize global policy processes with developments on the other levels.

In addition to these positive perceptions, there are negative judgements also. Some argue that IGF process is weak, at lest an-useful and without concrete results. According to Milton Mueller,⁵⁵ a confused process that has reached few and little real results, because it focused on specific policy issues and on rethinking and organizational patterns, instead having achieved first an agreement on the underlying principles.

It is not easy to give a definitive opinion: IGF perhaps not produced "measurable" results and, but certainly its aspects of novelty having effects.

The multistakeholder approach underlying the IGF is the main innovative element of the whole Internet Governance process.

Even if States are trying to exercise their regulation power and right, the private sector tries to oppose any regulations. Civil society is approaching Internet Governance in too many different perspectives, being sometimes fragmented, even if these trends are real, anyway, the multistakeholder approach is evolving from its beginnings.

Albeit very slowly and with non-linear processes, the need for a consensus-based process, first about principles and then, eventually, about rules has been gradually recognized and endorsed by all actors. This practice, used since the beginning even for institutions that have dealt with technical standards, is the most significant result of the multistakeholderism practice.

Despite all, the contradictions and tests of strength that still characterize the Internet Governance process, and all the players require increasingly mutual approval in order to grow. All entities must cope with transparency, trust and legitimacy, in order to be acknowledged: in one word with the accountability issue. Using Rolf Weber's definition:

"Accountability is the acknowledgement and assumption of responsibility for actions, products, decisions and policies within the scope of the designated role".⁵⁶

The origin of "plurality of authorities"⁵⁷ we assist, produce new, non-formalized, mechanisms of

⁵⁵ M. Mueller, J. Mathiason, H. Klein, cit. work, 2007.

⁵⁶ R. Weber, *Shaping Internet governance: regulatory challenges*, Springer, Zurich, 2009, pag. 133.

⁵⁷ Z. Bauman, *A sociological theory of postmodernity*, in P. Beilharz, G. Robinson, J. Rundel (Eds.), *Between totalitarianism and postmodernity*, Mit Press, Cambridge, 1992, pag. 160.

checks and balance which act irregularly in different world segments. On one hand they balance some power excesses by traditional agencies, on the other, bring about the need for a deeper recognition and authority. *"Accountability of Internet governing bodies is not only important for the public to oversee the organizations' activities, but also serves the self-interest of the respective entities"*.⁵⁸

Even for the non-linear Internet history, now it seems clear how the various actors are bound together by mutual interdependence. As Vint Cerf affirmed, during ICANN annual meeting, in Porto Rico, in 2007, "Internet is an ecosystem", a place where the interests, actions and feedback of all stakeholders become inextricably linked.

Even if this factor greatly complicates the picture, moreover it makes the multistakeholderism and consensus dynamics increasingly needed.

This makes the IGF, however, a first result in itself. And each IGF leads to the consolidation of international networks that are being created, so important in the context of the International Law, strengthening the principle of multistakeholderism. The decision to create and maintain the IGF as a decision shaping instead of decision-making environment seems, in this direction, necessary.

A decision-making set-up would probably have blocked the process in its tracks because of conflicts.

Although the reasons for the initial settings can be shared, as being partly unavoidable, the Internet Governance process and the IGF process must still evolve.

As explained before, many problematic issues and constraints are still on the floor and need a solution as soon as possible. For instance, the showdown between China and the United States is not easy to reconcile. But, demonstrating the interdependence mentioned earlier, China needs a close collaboration with ICANN and IETF, because of the management of Chinese ideograms DNS. And even if during the last IGF this Country expressed very strongly against the IGF, and ICANN indirectly, however, it has recently joined the ICANN GAC. Maybe the real problems and concerns of Countries as China and Saudi Arabia are related more than technical management to fundamental rights (as freedom of expression). And about these latter issues, the international pressure is increasing.

The IANA contract renewal is the core problem, relating to still undeniably U.N. strongest position. How we will arrive to the contract term in 2011, it will determine deeply the future of the Internet Governance process and the relationship among States actors and the other stakeholders.

Probably, the GAC of ICANN, enforced by the new role defined in AoC, will press in order to make IANA control and management multilateral and more transparent. Also civil society would be more part of the process, and it will try to press through other linked organization, as IETF and ISOC.

⁵⁸ R. Weber, cit. work, 2009.

However, in order to preserve the free and democratic Internet development and make IGF real effective something would need to be changed.

The rhetoric of strengthening the multistakeholderism participation, especially of end users and developing countries representatives, is important, true, but not enough.

The measure that seems more convincing is the one suggested by Milton Mueller, John Mathiason and Hans Klein: define a "framework convention"⁵⁹ for Internet Governance. Such as the one on climate change set-up by U.N. in 1980, involving all stakeholders, a U.N. framework convention on Internet Governance should define clearly the governance problems and its boundaries. It should have shared and agreed definition for key principles about the Internet, and, then, the norms that should be applied on Internet Governance, including the role of stakeholders.

The Mueller and colleagues position is shareable and supported by many interventions during the IGF, including the one in Sharm, which called for a kind of shared position as outcomes of the Fora.

As also advocated in the section on future prospects for international regulation, a real intergovernmental rules process could take the start, only if the IGF process, while remaining a non-decision forum, will be able to find a shared consensus about basic principles of Internet Governance.

Also the consensus-making process would be more enforced and verifiable, e.g. through a kind of voting or ballot process.

Probably only anchoring processes at a defined framework, we can try to draft a direction for future developments of Internet Governance and to make IGFs more effective. Thus, no need to start from scratch every time in dealing with specific issues problems.

Above all a shared principles framework should be a first step in order to make multistakeholderism process substantial, reducing the still strong disparities between the powers of the different stakeholders and giving real chance to democratic future for Internet.

In this way IGF might also represent a new global governance model, which, as the world is increasingly global, now it is required in many other policy issues - as terrorism, environmental pollution, climate change, financial crises, drugs traffic, renewable energy resources and so on - that need a new global solution.

⁵⁹ M. Mueller, J. Mathiason, H. Klein, work cit., 2007.

10. Essential bibliography

- W.S. Baer, *Will the Global Information Infrastructure Need Transnational (or Any) Governance?*, RAND/RP-603, reprinted from National Information Infrastructure Initiatives: Visions and Policy Design, 1996
- A. L. Barabási, *Link. The new science of networks*, Perseus Publishing, Cambridge, Ma, 2002
- Z. Bauman, *A sociological theory of postmodernity*, in P. Beilharz, G. Robinson, J. Rundel (Eds.), *Between totalitarianism and postmodernity*, Mit Press, Cambridge, 1992
- M. Castells, *Communication Power*, Oxford University Press, New York, 2009
- M. Castells, *The Rise of the Network society. The Information Age: Economy, Society and Culture*, Vol. I, Blackwell Publishers, Malden, 1996.
- V. Cerf, *Who rules the net?*, in A. D. Thierer, C. Wayne Crews (Eds.), *Who rules the net?: Internet governance and jurisdiction*, Cato Institute, Washington D.C., 2003, pag. XIII
- W.J. Drake, *Reframing Internet Governance Discourse: Fifteen Baseline Propositions*, in: Don MacLean (Ed.), *Internet Governance: A Grand Collaboration*, ICT Task Force Series 5, New York, 2004
- M. Gell-Mann, *The Quark and the Jaguar*, Abacus, London, 1994
- J. Holland, *Emergence. From chaos to order*, Addison-Wesley, Reading, Ma, 1998
- S. Johnson, *Emergence. The Connected Lives of Ants, Brains, Cities, and Software*, Scribner, New York, 2001
- S. Kauffman, *At Home in the Universe*, Oxford University Press, New York, 1995
- W. Kleinwächter, *Beyond ICANN vs. ITU: Will WSIS Open New Territory for Internet Governance?*, in: Don MacLean (Ed.) *Internet Governance: A Grand Collaboration*, ICT Task Force Series 5, New York, 2004
- W. Kleinwächter (Ed.), *The power of idea: Internet Governance in a global multistakeholder environment*, Germany Land of Ideas, Berlin, 2007
- J. Kooiman, *Governing as Governance*, Sage, London, 2003
- G. Kowack, *Internet Governance and the Emergence of Global Civil Society* IEEE Communications Magazine, May 1997
- L. Lessig, *Code and Other Laws of Cyberspace*, Basic Books, New York, 1999
- J. Mathiason, *Internet Governance. The new frontier of global institutions*, Routledge, New York, 2009
- E. Morin, *Dialogo. L'identità umana e la sfida della convivenza*, Scheiwiller, Milano, 2003
- E. Morin, *Introduction à la pensée complexe*, Esf, 1990, Paris
- M. Mueller, *Ruling the Root: Internet Governance and the Taming of Cyberspace*, MIT Press, Massachusetts, 2002
- M. Mueller, J. Mathiason, H. Klein, *The Internet and global governance: principles and norms for a new regime*, Global Governance, Review of Multilateralism and International Organizations, n. 13, 2007

C. Padovani, E. Pavan, *Governare le reti di informazione*, ne *Quaderni di sociologia*, Vol.LIII, 49, Rosenberg & Sellier, Torino, 2009

J.N. Rosenau, *Governance in a New Global Order*, in D. Held, A. McGrew (eds.), *Governing Globalization: Power, Authority, and Global Governance*, Polity Press, Cambridge, 2002

J.N. Rosenau, *Governance, Order, and Change in World Politics*, in J. N. Rosenau, E. O. Cziempiel (Eds.), *Governance without Government: Order and Change in World Politics*, Cambridge, Cambridge University Press, 2000

J.N. Rosenau, *Fragmentative challenges to national security*, in T. Heyns (Ed.), *Understanding US strategy*, National Defence U.P., Washington, 1983

J.N. Rosenau, *Many damn things simultaneously: complexity theory and world affairs*, in D.S. Albert, T. J. Czerwinnski (Eds.), *Complexity global politics and national security*, National Defence U.P., Washington, 1997

S. Sassen, *Territory, Authority, Rights: From Medieval to Global Assemblages*, Princeton University Press, 2006

R. Weber, *Shaping Internet governance: regulatory challenges*, Springer, Zurich, 2009

11. Main online resources

Y. Bar-Yam, *General Features of complex systems*, New England Complex Systems Institute, Cambridge, MA, USA, available at: www.sci.unich.it/~aroli/dida/iasc/articoli/EOLSSBriefIntrotoCX.pdf

J.P. Barlow, *A Declaration of the Independence of Cyberspace*, 1996, available at: homes.eff.org/~barlow/Declaration-Final.html

A. Doria, W. Kleinwächter, *Internet Governance Forum (IGF) The First Two Years*, 2008, Ed. in cooperation with the IGF Secretariat, available at: www.intgovforum.org/cms/hydera/IGFBook_the_first_two_years.pdf

J. Hofmann, *Internet Governance: A Regulative Idea in Flux*, 2005, available at: regulation.upf.edu/ecpr-05-papers/jhofmann.pdf

W. Kleinwächter, *Internet Co-Governance – Towards a Multilayer Multiplayer Mechanism of Consultation, Coordination and Cooperation*, paper presented at the Informal Consultation of the Working Group on Internet Governance (WGIG), Geneva, September 20–21, 2004, available at: www.itu.int/wsis/preparatory2/wgig/kleinwachter.doc

L. Lessig, *Governance*, Keynote speech at CPSR Conference on Internet Governance, October 10, 1998, available at: cyber.harvard.edu/works/lessig/cpsr.pdf

S. Lynn, *President's Report: ICANN – The Case for Reform*, 2002, available at: www.icann.org/general/lynn-reform-proposal-24feb02.htm

D. MacLean, *Herding Schrodinger's Cats: Some Conceptual Tools for Thinking about Internet Governance*, 2004, available at: www.itu.int/osg/spu/forum/intgov04/contributions/itu-workshop-feb-04-internet-governance-background.pdf

J. Walker, *The Digital Imprimatur: How Big brother and Big Media Can Put the Internet Genie*

Back in the Bottle, 2003, available at:
www.fourmilab.ch/documents/digital-imprimatur

12. Main websites

Generic Top Level Domain Memorandum of Understanding
www.gtld-mou.org

ICANN At-Large Membership Study Committee
www.atlargestudy.org

International Court of Justice
www.icj-cij.org

International Telecommunication Union (ITU)
www.itu.int

Internet Architecture Board
www.iab.org

Internet Assigned Numbers Authority (IANA)
www.iana.org

Internet Corporation for Assigned Names and Numbers (ICANN)
www.icann.org

Internet Engineering Task Force (IETF)
www.ietf.org

Internet Governance Forum (IGF) – U.N. official web site
www.intgovforum.org

Internet Society
www.isoc.org

Internet World Stats – Usage and Population Statistics
www.internetworldstats.com

National Telecommunications and Information Administration
www.ntia.doc.gov

RFC Editor
www.rfc-editor.org

United Nations Development Programme (UNDP)
www.undp.org

United Nations Treaty Collection
untreaty.un.org

Working Group on Internet Governance
igf.wgig.org
www.wgig.org

World Summit on Information Society – Civil Society Working Group on Scientific Information
www.wsis-si.org

World Wide Web Consortium (W3C)

